

The Egyptian Economy, 1952–2000

Performance Policies and Issues

Khalid Ikram

Routledge studies in Middle Eastern economies

The Egyptian Economy, 1952–2000

The Egyptian Economy describes developments in the Egyptian economy and examines the dynamics of economic policymaking during 1952–2000. This book analyzes the structural changes that occurred and the main thematic issues that policymakers confronted, in particular those relating to investment and productivity, the balance of payments, external debt management, fiscal policy, the financial sector and monetary policy, the labor force and employment, and poverty. It also discusses in detail the strategic and institutional issues that Egypt must address in order to sustain rapid growth in the future. This discussion covers:

- Bureaucracy
- Judicial system
- System of taxation
- Education and training
- Planning and economic management
- Constraints imposed by the availability of water
- Costs of economic growth on the environment.

The book has been written from the point of view of a “participant–observer,” who has provided advice on economic policymaking both to Egyptian officials and to international organizations. Khalid Ikram – a former Director of the World Bank’s Egypt Department and the author of a previous book on the Egyptian economy – has interviewed many leading policymakers of the period, whose insights are discussed in the text. The book benefits from access to the databases of the World Bank, the International Monetary Fund, and the Central Bank of Egypt, and draws on studies conducted by these organizations, bilateral and multilateral aid institutions, and Egyptian ministries and think tanks, in addition to published sources.

Khalid Ikram has worked within the Pakistan Government, World Bank, and more recently as an international consultant for the UNCTAD, OECD, GTZ, and the Asian Development Bank. His main research interests include development strategy, policies, trade, and finance. He is the author of *Egypt: Economic Management in a Period of Transition* (Johns Hopkins University Press).

Routledge studies in Middle Eastern economies

1 The Egyptian Economy, 1952–2000

Performance, policies, and issues

Khalid Ikram

The Egyptian Economy, 1952–2000

Performance, policies, and issues

Khalid Ikram

First published 2006
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Ave, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group

© 2006 Khalid Ikram

Typeset in Baskerville by Wearset Ltd, Boldon, Tyne and Wear
Printed and bound in Great Britain by MPG Books Ltd, Bodmin

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication Data

A catalog record for this book has been requested

ISBN 0-415-36342-X

Contents

<i>List of figures</i>	vi
<i>List of tables</i>	viii
<i>Preface</i>	x
<i>Acknowledgments</i>	xii
<i>Abbreviations and acronyms</i>	xv
1 Economic development and policymaking, 1952–73	1
2 Economic development and policymaking, 1973–87	24
3 Economic development and policymaking, 1987–2000	57
4 Growth, productivity, and structural change, 1960–2000	85
5 The external sector	117
6 The public finances	155
7 The financial sector and monetary policy	180
8 Labor force and employment	210
9 Poverty and income distribution	247
10 Toward sustainable growth: strategic and institutional issues	277
<i>Notes</i>	318
<i>Bibliography</i>	330
<i>Name index</i>	351
<i>Subject index</i>	354

Figures

3.1	Budget deficit, 1988–97	66
3.2	Seigniorage and the inflation tax, 1988–97	69
3.3	Liquidity growth and inflation, 1988–97	70
3.4	Dollarization ratio, 1985–97	70
4.1	Average growth rates of GDP at 1992 market prices, 1965–2000	87
4.2	Structure of GDP, 1965–2000	88
4.3	GDP growth and oil prices, 1974–2000	89
4.4	Investment and savings, 1965–2000	91
4.5	Public and private investment, 1965–2000	92
4.6	Unemployment as percent of labor force, 1960–2000	95
4.7	Structure of employment, 1960–2000	96
4.8	Unemployment and inflation in Egypt (The Phillips Curve), 1982–2002	98
5.1	Current account balance, 1965–2000	119
5.2	Merchandise exports and imports, 1965–2000	120
5.3	Composition of imports, 1965–2000	122
5.4	Egypt's share of world exports, 1965–2000	122
5.5	Oil and non-oil exports, 1975–2000	124
5.6	Main contributors to foreign exchange earnings, 1975–2000	125
5.7	Composition of foreign exchange earnings, 1975–2000	126
5.8	Debt service due and paid as percent of foreign exchange earnings, 1970–2000	148
5.9	Total debt outstanding and share of concessional debt, 1970–2000	153
6.1	Revenue, expenditure, and budget deficit, 1965–2000	158
6.2	External and domestic financing of fiscal deficit, 1965–2000	161
6.3	Bank financing of budget deficit, 1965–2000	162
6.4	Composition of revenues, 1965–2000	164
6.5	Development of major taxes, 1965–2000	165
6.6	Composition of tax revenues, 1965–2000	167

6.7	Composition of expenditures, 1965–2000	172
6.8	Development of government expenditures, 1965–2000	173
6.9	Domestic debt as percent of total debt, 1987–2000	175
8.1a	LFSS reported unemployment rates, 1988–95	225
8.1b	LFSS adjusted unemployment rates, 1988–93	225
8.2	Unemployment rates by age, 1986 and 1995	228
8.3	Unemployment rate by educational attainment, 1986 and 1995	230
8.4	Employment growth by sector, 1960–96	236
8.5	Employment by economic activity, LFSS 1995	238
9.1	Incidence of urban poverty, 1975–96	249
9.2	Incidence of rural poverty, 1975–96	250
9.3	Lorenz curves by urban/rural classification, 1982–96	252
9.4	Regional poverty, 1982–96	255
9.5	Regional poverty, 1991–2000	271
10.1	Unemployment and shortfall between potential and actual GDP, 1992–2002	280
10.2	Gross domestic fixed and public investment, 1965–2000	282
10.3	Chance of being poor by level of education, 2000	305

Tables

3.1	Development of privatization, 1993–2000	83
4.1	Population and urbanization, census years 1947–96	86
4.2	Demand decomposition of growth, 1965–2000	90
4.3	Labor force and employment, 1960–2000	94
4.4	Investment and savings ratios, 1965–2000	101
4.5	Factors' contribution to GDP growth, 1965–2000	105
5.1	Summary balance of payments: selected years, 1965–2000	121
5.2	Composition of merchandise exports, 1965–2000	123
5.3	Revealed comparative advantage by product groups, 1970, 1980, 1992	128
5.4	Egypt's Trade Positioning Matrix, 1990–2000	130
5.5	Indexes of nominal and real effective exchange rates, and international competitiveness, 1980–2000	133
5.6	Balance of payments, 1965–2000	146–7
5.7	External debt and debt servicing, 1970–2000	149
6.1	Summary of fiscal performance: selected years, 1965–2000	160
6.2	Buoyancy of major revenue sources, 1965–2000	166
6.3	Structure of taxes, 1965–2000	167
6.4	Buoyancy of major expenditures, 1965–2000	173
7.1	Measures of bank performance, 1991–2000	183
7.2	Summary stock exchange statistics, 1961–2001	201
8.1	Labor force growth, employment, and unemployment, 1986–96	211–12
8.2	Population, labor force, and economic activity, 1977–98	220–1
8.3	Participation rates by data source, ages 15–64	221
8.4	Unemployment level and rate, population censuses, 1960–96	224
8.5	Unemployment by age categories, LFSS 1995	229
8.6	Unemployment by educational attainment (ages 12–64), 1986–95	230
8.7	Underemployment ratio by gender, urban/rural residence, 1988 and 1998	232
8.8	Sectoral structure of employment, 1977–92, ages 12–64	240

8.9	Sectoral distribution of employment growth by gender, 1988–98	242
9.1	Estimates of poverty in Egypt, 1959–96	249
9.2	Poverty measurements, 1982–96	250
9.3	Capability poverty and income poverty, 1995	254
9.4	Regional incidence of poverty (P_0), 1982–96	256
9.5	Households by chronic, transitory, and total poverty status, 1999	268
10.1	Annual cost of environmental degradation, 1999	309
10.2	Precision of plan forecasts, 1983–2002	311

Preface

This book describes the development of the Egyptian economy and provides an analysis of policymaking from 1952 to 2000. The emphasis is on the more durable, structural issues that Egyptian policymakers confronted, rather than on a year-to-year chronology or on quotidian details. I have also tried to identify the crucial questions that Egypt will have to address in order to sustain rapid growth in the future. The book has been written from the point of view of a “participant-observer,” who was privileged to witness at close hand the dynamics of policymaking by Egypt’s economic managers, and to engage in some measure in the shaping of decisions by major donor agencies at critical periods in the country’s history.

I should like to draw attention to five points:

- 1 My earlier book, Ikram (1980), was conceived of partly as a work of reference, since at the time there were few comprehensive studies of the Egyptian economy. In keeping with its reference function, that work contained a very large number of data tables. However, data series are now available in the World Bank’s Live Data Base, the IMF’s *International Financial Statistics*, the Penn World Tables, and the web sites of Egyptian ministries and of the Central Bank of Egypt. There is little point in duplicating this information. In order to discuss issues in sufficient depth and yet keep the book to a reasonable size, the amount of tables and graphs has been restricted to that necessary to develop the argument.

My reliance on the sources mentioned above will be obvious. I am also indebted to the generosity of successive Ministers of Planning, Presidents of CAPMAS, and Governors of the Central Bank of Egypt for providing me with liberal access to their information bases and for having their research departments perform special studies at my request.

- 2 The earlier work included a discussion of sectors such as agriculture and industry. With the appearance of a number of publications in these fields, it seemed more worthwhile to focus attention in the

present book on areas such as the labor market, employment, poverty, the environment, privatization, the financial sector, and issues facing the system of planning and economic management, in which the available research is scattered or for other reasons difficult to access.

- 3 In line with contemporary thinking on long-term development, this book takes into account the vital role of institutions. It therefore discusses critical questions relating to the commercial judicial system, the apparatus of taxation, the education and training systems, and the bureaucracy, in order to identify what would be required to make Egypt more competitive in the world economy and to provide a firmer base for launching the country on the path of sustainable growth.
- 4 In the preparation of this book, I interviewed many of the leading policymakers so as to better understand how they approached their tasks and reacted to the constraints under which their assignments had to be performed. I was overwhelmed by the candor and the detail with which they responded, frequently agreeing to multiple interviews. Many of their perceptions have been directly quoted in the book, and are referenced. However, there were occasions when the insight was important but identification might have embarrassed the source; such comments have been paraphrased without attribution. I am aware that respondents in an interview tend to offer the most favorable interpretation of their actions; therefore, wherever possible I cross-checked with those who might hold different views or possess additional information.
- 5 The book contains a detailed set of references. During the last 25 years, a considerable amount of research has been conducted on the Egyptian economy. However, much of this work is not known outside specialized research centers or institutions such as the World Bank, the IMF, the European Union, and the USAID. I hope that the bibliography will increase awareness of at least the non-confidential part of this research. I also point out areas in which research has lagged, with the hope that this will stimulate efforts to fill in the lacunae.

Acknowledgments

Anyone who has worked on Egypt will recognize how quickly he incurs debts that beggar his ability to repay them adequately. I am acutely conscious of the impossibility of providing due acknowledgment to all the scholars, policymakers, government officials, businessmen, bankers, lawyers, journalists, colleagues, friends and others who provided advice, information, hospitality, and support during my association with Egypt over a period of nearly 30 years.

Nevertheless, an attempt must be made. My thinking on the Egyptian economy has been much influenced by discussions with scholars who generously shared their time and insights. My biggest debts are to Robert Mabro, Heba Handoussa, Hanaa Kheir El Din, Samir Radwan, the late Bent Hansen, and to Mahmoud Abdel Fadil, Adel Bishai, Gouda Abdel Khalek, Ragui Assaad, Nader Fergany, Ahmed Galal, Galal Amin, Mahmoud Mohieldin, Heba Nassar, Heba El Leithy, Karima Korayem, William Mikhail, Lance Taylor, and John Waterbury.

I am grateful for the openness with which leading policymakers discussed their successes and failures, and elaborated the pressures under which their policies were formulated. For many hours of fascinating discussions, I am indebted to Abdel Aziz Hegay, Kemal El Ganzoury, Atef Ebeid, the late Abdel Razzaq Abdel Meguid, the late Hilmy Abdel Rahman, Ismail Sabri Abdullah, the late Hamed El Sayeh, Youssef Boutros-Ghali, Sultan Abu Ali, Ahmed Abou Ismail, the late Zaki Shafei, Zafer El Bishry, Osman Mohamed Osman, Fouad Sultan, Hilal El Dasouki, Mahmoud El Imam, Ahmed El Dersh, Hassan Khedr, Nawal El Tatawy, Ahmed Goueili, the late Waguih Shindy, Ali Negm, Salah Hamed, Ismail Hassan, and Mahmoud Abul-Eyoum.

Among government officials, I should particularly like to acknowledge the help I received from Ehab Elwy, Ismail Bedawy, Asma Thabet, Saad Barghout, Samir Koraiem, Gamal Bayoumi, Hussein El Gamal, Nadia El Tatawy, and Rafik Sowelem.

I received a great deal of information about the practical impact of policies from the business, financial, legal, and NGO community. For sharing their special experience, I should like to express my thanks to Taher

Helmy, Moataz El Alfy, Said El Alfy, Yehyia El Gamal, Ahmed Ezz, Shafik Gabr, Ibrahim Kamel, Farid Khamis, Sameh Sawiris, Hisham Fahmy, Mohammed Taymour, Omar Mohanna, Mohammed Ozalp, Mona Makram Ebeid, Maisa El Gamal, and Magdi Tolba.

From the media, I am particularly grateful to Galal Dowidar and Essam Rifaat for sharing their knowledge of events in Egypt.

From the donor community, I profited from the sagacity of Herman Eilts, Roy Atherton, Edward Walker, Daniel Kurtzer, Sir Nigel Barrington, Sir David Blatherwick, the late Don Brown, Toni Wagner, John Westley, Christian Voigt, Edward Peck, and Henry Mattox.

My debt to my former colleagues in the international agencies is particularly heavy. From the World Bank, I benefited enormously from discussions over many years with Kemal Dervis, Martijn Pajmans, Atilla Karaosmanoglu, the late Ibrahim Shihata, the late Wafik Hosni, Mohammed Kamel Amr, Vinod Dubey, Ismail Serageldin, John Page, Nemat Shafik, Sven Burmester, Marcelo Giugale, Shahid Amjad Chaudhry, John Wall, Sadiq Ahmed, Mustapha Nabli, Christian Petersen, Nadir Mohammed, Sarosh Sattar, Chang-Po Yang, Wafik Grais, Sherif Arif, Zafiriz Tzannatos, Nabil Shehadeh, David Grey, Christina Leb, Malvina Pollock, Shaha Riza, and Farrukh Iqbal. I am also indebted to the staff and archivists of the World Bank/IMF Joint Library – especially Lachance Ntonme, Chet Nonoo-Quarcoo, and Southamini Borlo – for providing a congenial environment for work, and for tracking down and obtaining publications and papers that otherwise might have been impossible to find.

From the IMF, I have had the benefit of extended discussions with Shakoor Shalaan, Andrew Crocket, Paul Dickie, Mohammed El Erian, Arvind Subramaniam, Mario Mecagni, Azizali F. Mohammad, and Nadeem ul Haque.

My colleagues in the Cairo office of the World Bank provided indispensable advice and support. For making my stay in Egypt both professionally and personally rewarding, my warm thanks to Mahmoud Gamal El Din, Nadir Mohammed, Alaa El Shazly, Rouchdy Saleh, Badr Kamel, Alaa Hamed, Hisham Waly, Nagwa Riad, H el ene Cottenet, Sherine Al-Shawarby, Sahar Nasr, Ayyat Soliman, Ahmed Abdel Aziz, Amira Kazem, Nahed El Hussein, Nehal El Kouesny, Nadia Kira, Georgette Mounir, Dalia Ramzi, Inas El Gamal, Sahar Mohamed Hegazy, Noha Abdel Gawad, and Maya El Azzazi.

In the preparation of this book, I should especially like to acknowledge the help of Nadir Mohammed, Nagwa Riad, Sarosh Sattar, Alaa El Shazly, Nadeem ul Haque, and Farrukh Iqbal, who were generous with material and helped to elucidate several issues.

The thrust of this book is on policymaking in an increasingly market-led economy and its impact on poverty alleviation. My biggest intellectual debts are to the late Mahbub ul Haq, who for many years in the Pakistan

Planning Commission and the World Bank was my mentor in the formulation and analysis of economic policies; to Gustav Papanek, my thesis advisor, who has written eloquently about harnessing the “social utility of greed”; and to Amartya Sen, whose writings on poverty and the purpose of development have done so much to shape contemporary attitudes towards these subjects, and who has been teacher and friend from my student days at Cambridge and Harvard.

My deepest debt of all is to my family, who for years have put up with my preoccupations and absences. What may have helped them is their profound attachment to Egypt, which quite rivals my own. To Shirin, Salima, Aden, and Nicholas this book is dedicated, with inexpressible gratitude and affection.

Needless to say, none of those mentioned is responsible for any errors of fact or interpretation in this book, which remain my responsibility.

Abbreviations and acronyms

CAPMAS	Central Agency for Public Mobilization and Statistics
CASE	Cairo and Alexandria Stock Exchange
CBE	Central Bank of Egypt
CMA	Capital Markets Authority
EGP	Employment Guarantee Program
EGPC	Egyptian General Petroleum Company
EHDR	Egypt Human Development Report
ELMS	Egyptian Labor Market Survey
GASI	General Authority for Social Insurance
GDP	Gross Domestic Product
GNP	Gross National Product
GODE	Gulf Organization for the Development of Egypt
HDI	Human Development Index
HDR	Human Development Report
HIES	Household Income and Expenditure Survey
HPI	Human Poverty Index
IBRD	International Bank for Reconstruction and Development
IFIs	International Financial Institutions
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
LDB	Live Data Base
LE	Egyptian pound
LFSS	Labor Force Sample Survey
LIBOR	London Inter-Bank Offered Rate
M/SMEs	Micro and Small and Medium Enterprises
MLEs	Medium and Large Enterprises
MOF	Ministry of Finance
MOP	Ministry of Planning
NIB	National Investment Bank
NOIP	National Organization for Insurance and Pensions
PBDAC	Principal Bank for Development and Agricultural Credit
PC	Population Census
PEIC	Public Enterprise Information Center

PRIDE	Project in Development and the Environment
RCA	Revealed Comparative Advantage
REER	Real Effective Exchange Rate
SCA	Suez Canal Authority
SIS	Social Insurance System
SMEs	Small and Medium Enterprises
TFP	Total Factor Productivity
UNDP	United Nations Development Program
USAID	United States Agency for International Development
WB	World Bank

1 Economic development and policymaking, 1952–73

In July 1952, the Egyptian monarchy was overthrown, and the contemporary phase of Egypt's history began. The Free Officers, who led the revolution, came into power without a clear political agenda. "It has often been said," wrote Roussillon in the *Cambridge History of Egypt* (1998, vol. 2: 338), "that the ... officers forming the Revolutionary Command Council had no program, almost no ideology, and barely any 'philosophy.'" Similarly, Vatikiotis (1961: 67–8) observed that "One finds few indications of any political program or plan of action. ... There were perhaps as many shades of political belief as there were members of the Free Officers Executive." And Baker (1978: 101) commented that "They [The Free Officers] had no action program that would have provided some conception of the society their revolution aimed at creating." Such views were not confined to foreign commentators; Mohamed Heikal wrote that "This movement ... did not have an exact vision of the import and the profundity of the enterprise which it had undertaken."¹ The revolution was instigated principally by resentment against the corruption of the monarchy and frustration with the failure of the political process to rid the country of British occupation.

Nor was the new regime wedded to a particular economic philosophy. In any case, Egypt's recent history did not provide a model that had proved unambiguously superior to all the alternatives. Since the nineteenth century Egypt had known, sometimes through choice and sometimes by accident, a variety of economic systems. Under Muhammad Ali, the ruler was identified with the state as the major economic agent. Government monopolies were set up in agriculture, industry, and foreign trade, while import substitution was attempted under the aegis of the state. Muhammad Ali's grants of lands to members of his family, senior government officials, and high army officials led to the creation of large private estates in agriculture. Land privatization continued under his successors, particularly the Khedive Ismail. Muhammad Ali's defeat in 1839 by the Ottoman rulers and the European powers ended the import-substitution strategy and started a process of free trade. The period of free trade and laissez-faire reached its apex from the 1880s to the 1930s. The

government still played a major role in economic development because of its special responsibilities for irrigation, but economic activity was overwhelmingly conducted by the private sector.

The government's direct involvement with other sectors of the economy began to grow from the 1930s, when an escalating tariff structure intended to favor industry was adopted. During World War II, controls were introduced on foreign trade, supplies of necessities, prices, rents, and foreign exchange. After the war some controls were dismantled, but liberalization remained incomplete. The government continued to fix prices of basic consumer goods, using subsidies in an attempt to keep down the cost of living. Tariff levels were raised in the late 1940s and again in the 1950s in furtherance of specific import-substitution objectives. Yet private enterprises continued to operate in a relatively free environment, deriving benefits from protectionist policies which probably outweighed the cost of the price controls.

Predominance of the private sector, 1952–56

In 1952, the economic role of the state was virtually confined to investment in infrastructure (chiefly in the irrigation system) and social services. The main productive sectors – agriculture and industry, internal and foreign trade, banking, insurance, urban transport, and even a number of utilities, such as electricity and water – were in private hands. Mead (1967: 272–3) estimates that the public sector accounted for only 13 percent of the Gross Domestic Product.²

In view of what transpired subsequently, it may be surprising that the architects of the 1952 revolution initially were favorable to private enterprise. During the first four years of the new regime, the government's pronouncements on economic ideology emphasized the importance of the private sector. Official policies were also intended to reassure private enterprise. The government, for example, consulted regularly with the Federation of Egyptian Industries, and agreed to the Federation's demand for lower taxes and higher protection by lowering customs duties on raw materials and capital goods and by raising tariffs on items produced domestically. Taxes on profits and undistributed dividends were also reduced. The government insisted that it would act as the partner of private enterprise and confine itself to heavy, or basic, industry. The rest of the manufacturing sector was explicitly reserved for private enterprise. Government investment continued to be directed largely toward the traditional areas of irrigation, drainage, and land reclamation. The main theme of the economic policy debate during this period was not the respective responsibilities of the public and private sectors, but rather the role of foreign investment. In this area, too, the authorities proceeded cautiously. Until 1957 the state continued to woo foreign capital through laws providing tax holidays and generous provisions for the repatriation of

profits. The government also partially reversed the Egyptianization policy of the former regime by allowing foreign shareholders to hold a majority interest and control in any domestic company.³

Perhaps the most significant restraint imposed on the private sector was the agrarian reform of September 1952, which limited individual ownership to a maximum of 200 feddans. The main purpose was not to attack the principle of private ownership – the excess feddans were distributed to landless peasants. “The most immediate objective of the land reform law,” wrote Abdel-Faddil (1975: 7), “was to break the power of the old ruling oligarchy, with its roots in big estates.” The most radical component of the agrarian reform was the introduction of agricultural cooperatives. To obtain inputs or agricultural credit, a farmer had to become a member of a cooperative and abide by its rules concerning crop rotation, output pricing, marketing, and so forth. Since the cooperatives were directed by the government, this was an effective, if indirect, method of control.

Decisions in 1952–54 did not attack private enterprise, but merely revealed the government’s intention to engage more actively in the economy. It was decided to build the Aswan High Dam at about this time (though the execution was much delayed) and the government engaged immediately in ambitious land reclamation projects. Some partial planning was introduced in 1953 through the creation of the Permanent Council for the Development of National Production, comprising representatives of both the government and the private sector. The Council studied projects, coordinated the public works program and the state investment budget, and paved the way for the government to participate as an equity owner in new industries for the first time since the 1860s.

Growing government intervention, 1957–60

The transition from a free, private enterprise system to a planned economy with a dominant public sector took place between 1954 and the early 1960s. The first small step was the government’s decision to take an equity stake in two new industrial companies established in 1954. The public sector then expanded in 1957 through the nationalization of British and French economic interests after the Suez Canal war, and through public investment in industry.

International developments also prompted increased government intervention. In the years following 1956, Egypt lost much of its access to Western sources of finance. This inevitably included countries such as Britain and France, which had participated in the Suez Canal war of that year. However, with Egypt turning to the Eastern bloc for arms and diplomatic support, finance from major Western-dominated international development agencies, especially the World Bank, also evaporated. The chief bone of contention between the Bank and Egypt was the Aswan High Dam.

The story of the Aswan High Dam project and the relations between Egypt, the World Bank, and the Bank's principal shareholders was a complex interaction of politics and economics and, at times, of politics masquerading as economics. The United States and the United Kingdom had agreed to seek approval from their legislatures for providing \$70 million (\$54.6 million from the United States and £5.5 million from the United Kingdom) to cover the foreign exchange costs of the first phase of the project. The two governments also stated that they would be prepared to consider, in the light of then existing circumstances, providing additional resources to supplement the World Bank's financing of later stages. The Bank was expected to participate in the foreign exchange financing of the project, which Mason and Asher (1973: 638) report as amounting to \$200 million out of a total foreign exchange requirement of \$390 million.

Waterbury (1979: 105) lists a number of conditions that were attached to the financial offer. Thus, for example, Egypt would have to allocate one-third of its internal revenues to the High Dam project; contracts would have to be awarded through international bidding with communist countries excluded; Egypt would have to avoid incurring additional foreign debt without the approval of the World Bank; disbursements would begin only after Egypt and the Sudan reached a new accord on the sharing of the Nile waters, and so on.

These conditions aroused considerable resentment in Egypt. The greatest unease arose from the division of the financing into two phases. The qualified nature of the offer of finance by the United States and the United Kingdom for the second phase was disturbing, because it provided a lever by which the Western countries could press Egypt to settle the Arab–Israeli dispute on possibly unfavorable terms. And, indeed, Mason and Asher (1973: 642) in the World Bank's authorized history of its first 25 years of operation concede that, "They [the Western powers] may have thought of it as potentially useful in this regard."

In July 1956, the US and UK governments decided to withdraw from the financing of the Aswan High Dam. The World Bank's offer then lapsed, because the financing for the project was left with a gap. In the Bank's view, it would be a waste to commit its resources to a project that was incompletely funded and therefore might never be implemented. However, there is little doubt that the political views of the Bank's principal shareholders swayed its decision. The cancellation of the financing led Egypt to nationalize the Suez Canal, in order to use the revenue from transit tolls to finance the construction of the High Dam. The nationalization was offered as a pretext by Britain, France, and Israel for invading Egypt.

Subsequent to the Suez Canal war, the phase of government policy in 1957–60 was aptly described by President Abd el-Nasser as "controlled capitalistic economy."⁴ The government intervened vigorously in economic activity along four major paths.

First, although private sector activity was still encouraged, the new Constitution of 1956 set out an ideological framework within which such activity was to be conducted.

Second, the Suez Canal war of 1956 led to the sequestration of British and French assets, much of which were concentrated in banking and insurance. A special state Economic Organization was set up in early 1957 to manage these and other assets in which the government already had a share. This agency thus acquired considerable influence as a vehicle for promoting the government's economic policies. By 1958 the Economic Organization controlled all the specialist banks in Egypt, seven commercial banks which accounted for nearly half of all commercial bank loans, and five insurance companies responsible for 68 percent of all insurance business transacted in Egypt. O'Brien (1966: 90, 95) estimates it to have been responsible for roughly a third of aggregate output produced by the organized industrial sector, and to have employed about 20 percent of the labor force in that sector.

Third, a move to rapidly "Egyptianize" the main arteries of the national economy was put into effect. All foreign banks, insurance companies, and commercial agencies were required to be converted into domestically-owned joint stock companies within five years. The major banks and insurance companies were put under the control of the Economic Organization.

Fourth, comprehensive economic planning was introduced. In January 1957, a National Planning Committee was set up to prepare a long-term plan for social and economic development that was to come into effect from July 1, 1960. In 1958, however, a five-year plan for industry was launched, in which the state was to provide 60 percent of the finance, mainly for heavy industry. The industrial plan required a rapid acceleration in investment from the annual average of LE 34 million of gross investment in the previous quinquennium to an annual average of LE 45 million of net investment between 1957 and 1961.

Thus, in this phase of economic management, the government moved away from relying on the private sector as the main engine of growth, and state intervention and influence became increasingly important. This was most apparent in the area of capital formation. In 1952, the public sector accounted for about 13 percent of GDP and 28 percent of gross capital formation; by 1960, while still accounting for only 18 percent of GDP, the public sector undertook nearly 74 percent of gross investment.⁵ The share of government both in investment and in economic activity generally continued to rise; Hansen (1975: 203) estimated that in 1973 perhaps 90 percent of investment and 63–70 percent of the total availability of resources was accounted for by the public sector.⁶ However, Amin (1968: 41) points out that although the authorities had started to invoke a socialistic ideology, most nationalization was still ad hoc and was justified on a variety of non-ideological grounds.

Perhaps the biggest indicator of the change in the government attitude toward the private sector was the introduction of wide-ranging economic planning. The restrictions placed on private economic activity appear to be closely related to successive efforts to make the planning process more comprehensive. Although the biggest waves of nationalization did not occur until 1961, even during the late 1950s the government began to feel that a high rate of planned investment could not be attained with a predominantly private sector economy. Moreover, as O'Brien (1966: 103) suggests, the introduction of a comprehensive five-year plan in 1960 compelled the policymakers to become much more specific about the kind of economic system they wished to create. All in all, looking at the fundamental changes that followed in the wake of the Suez war, it can be argued that 1956, the year of the Suez Canal war, was more of a turning point for Egypt's economy than was 1952, the year of the Revolution.

Nationalization and increasing government control, 1961–73

The first harbinger of the government's new direction in policy came on February 13, 1960, when Bank Misr and the National Bank were taken into public ownership. The step was significant because, whereas previous nationalizations had been of foreign firms, these banks were owned chiefly by Egyptian nationals. The National Bank, although privately owned, performed all the normal functions of a central bank; for example, it had a monopoly of the note issue, it was the lender of last resort, and it had control of the bank rate.

Bank Misr was not only the largest commercial bank left in the private sector, but also a most important holding company, whose 29 affiliated companies accounted for an estimated 20 percent of Egypt's industrial output, including half of all textile production. The precise reasons for the nationalization are not clear – some of the explanations provided by officials and reported in Wahba (1994: 80–1) are convoluted and self-contradictory. At issue appear to have been differences between the government and the Bank Misr group concerning the targets allocated to Misr companies under the first industrial plan. The Misr group wanted to focus largely on the textile industry, while the government wanted it to invest in other sectors. Given the importance of the group (it had been made responsible for nearly half of all activity undertaken by private enterprises), possibly the government felt more secure about attaining its economic targets if it directly controlled the Misr enterprises; see Hansen and Marzouk (1965: 171), O'Brien (1966: 92–3, 125), and Amin (1968: 41).

The biggest waves of nationalization occurred in June and July 1961 in what has come to be called in Egypt the "Socialist Revolution." First, the Alexandria cotton futures market was closed and the state Cotton Authority given the exclusive right to purchase cotton; subsequent laws Egyptian-

ized all companies dealing with the cotton trade and brought all firms engaged in external trade under state control. Second, in the most wide-ranging of the nationalization measures, the remaining banks and insurance companies were taken over, as were 44 companies in basic industries (such as cement, electricity, and copper); half the capital of 86 firms, mainly in commerce and light manufacturing, was expropriated; and the shareholders of another 147 firms were dispossessed of a large part of their assets by a law that limited individual holdings to a market value of LE 10,000 – all shares in excess of that amount passed into public ownership. According to Issawi (1963: 60), O'Brien (1966: 130–1, 153), the nominal capital of the companies affected by the nationalization laws of 1961 was put at LE 258 million (about two-thirds of the total share capital of companies then registered in Egypt), of which the state acquired LE 124 million. Third, after the secession of Syria from the United Arab Republic, in October the property of 167 wealthy Egyptians was sequestered for political reasons, and in November that of about 500 others.

After the 1961 nationalizations, the private sector was relegated to a relatively minor role. Private property was not abolished, but the opportunities for private economic activity and decision-making, especially in investment and production, were severely circumscribed. The takeovers were later justified as part of the “Arab Socialism” that was a cardinal element of the *National Charter (al-Mithaq al-Watany)* presented by President Abd el-Nasser in May 1962 to the National Congress of the Popular Powers.⁷

According to the *Charter*, economic development could not be left to individual efforts motivated by private profit, but must be based on socialism. The *Charter* outlined the framework for the conduct of economic activity. The main provisions were the following:

- The economic infrastructure should be publicly owned, as should the majority of heavy and medium industries and mining.
- Banks and insurance companies should be only in the public sector.
- The entire import trade should be in the public sector, as should three-quarters of the export trade; the private sector could be responsible for the rest.
- The ownership and control of internal trade could be in the private sector, but the public sector should take charge of at least one-quarter of internal trade over the following eight years.
- Apart from internal trade, the sphere of private ownership and control was defined as land, buildings, construction, and light industry. The application of land reforms, rent control legislation, and taxation measures would help to prevent any “exploitation.”
- The *Charter* also spelled out the “basic rights” of citizens to social welfare that the state would provide. The framework included medical care, education, employment, minimum wages, and insurance benefits in old age and sickness.

Thus, in the decade after assuming power, the Egyptian government moved successively from encouragement of the private sector, to a gradual increase in restrictions and controls, and finally to massive nationalizations and state intervention throughout the economy. Although this was later justified as “Arab Socialism,” the ideological basis was rather tenuous. The process was frequently hesitant and often *ad hoc*; in the words of Hansen and Marzouk (1965: 169), much of it “just happened.” The *National Charter* did, however, fix the main lines of economic structure and policy direction until the next major turning, the *infitah* of President Sadat.

These years also saw the first efforts at central planning in Egypt. In the First Five-Year General Plan, the public sector accounted for some 90 percent of total monetized investment throughout the 1960s and until 1973. This proportion did not decline very significantly, even after the liberalization measures of 1974, until the early 1990s. From 1965, annual investment programs became increasingly important as the main public investment planning instrument. The public sector continued to own most of modern industry; all banks, insurance companies, and financial intermediaries; and a large proportion of construction firms, modern transport, and wholesale trade. The bulk of foreign trade operations remained in the public sector. In agriculture, old land remained privately owned within the ceilings defined by the agrarian reform laws, but the new land was largely in public ownership.

This chapter does not attempt to give a comprehensive description of developments during 1952–73; rather, it aims only to provide a background, concentrating on issues that continued to resonate beyond that period. In this spirit, an overall view of the years 1952–73 would highlight the following features of the economic system:

- 1 The state maintained considerable influence in agriculture, not only because of its traditional responsibilities for the hydraulic system, but also because of the cooperative system and the control it exercised in selling inputs and buying the major crops. In the 1960s, the private sector also retained ownership of both rural and urban dwellings, small-scale industry, most of the retail trade, certain transport, construction, and manufacturing activities, and part of wholesale trade. In petroleum, the state continued for some time in partnership with foreign oil companies.
- 2 An important feature of the economic system was an extensive system of cost and price controls. Price control originated during World War II but covered few commodities; it became extensive in the 1960s. Thereafter, price administration affected all the major sectors of the economy, such as agriculture, housing, and industry. The stated objectives of price administration were to improve income distribution and resource mobilization. But these goals were sometimes

contradictory. Price controls and subsidies were used to check possible rises in the cost of living, but price administration was also used as a form of excise on certain necessities to raise revenues for the Treasury. In the industrial public sector, prices were usually calculated on a cost-plus basis, but they were varied for many reasons – to increase revenues, to clear stocks, or to depress demand. Price administration had important implications for both the budget and the balance of payments.

- 3 The welfare-oriented policies of the first two decades of the revolution had two broad aims: greater equity in the distribution of income and wealth, and increased consumption of goods and services. The principal measure for redistributing wealth was the land reform law of September 1952. President Sadat (1977: 130) later described the land reform as the measure which, more than any other, gave the Free Officers' movement the character of a genuine revolution rather than a mere *coup d'état*. Just before the reform, approximately 2,000 owners (out of a total of about 2.8 million) held nearly 20 percent of the land; at the other end of the spectrum, more than 2.6 million owners (about 94 percent of the total) held 36 percent of the land. In 1965, at the highest end of the scale, about 4,000 owners (out of 3.2 million) held about 7 percent of the land, while at the lowest end about three million (about 95 percent of the total) held 57 percent of the land.

The land reform achieved a number of results. The average size of small properties increased from 0.8 to 1.2 feddans in 1965; the very large estates (which had covered about 20 percent of the area in 1952) disappeared; and the medium-size landowners retained their share of the cultivated area. However, Mabro (1974: 72–3) points out that reform did not aim to satisfy the land hunger of all tenants and landless workers. The scarcity of land, and the rather limited amounts involved in the redistribution, would have made such an aim impracticable. Waterbury (1983: 266–7) estimates that the various land reforms involved at most 16 percent of Egypt's cultivated land, leading to the distribution of 13 percent of that land to about 10 percent of the country's rural families. He calculates that if every rural family had received an equal share of Egypt's cultivated land in 1965, its plot would have amounted to 1.8 feddans, a holding well below that required for subsistence. And with population growth and the inheritance laws, even this size would quickly be diminished. Mabro (1974: 73) argues similarly that: "The Egyptian land reform sought limited improvements in the distribution of wealth, and benefited the upper section of the low-income group." Baker (1978: 205) concurs, saying that Egyptian land reform primarily benefited those who already had a stake in village society.

The other major factor in improving the distribution of wealth was

the nationalization of the large industrial enterprises. Nationalization did not, in itself, increase the wealth of the poorer groups; in Mabro's (1974: 222) phrase, the measure was "privative rather than distributive." However, it reduced the concentration at the upper end of the spectrum, opened up opportunities for promotion, and allowed wider participation by those who had hitherto been excluded. Nationalization also enabled the government to legislate substantial benefits to workers and to police the legislation.

Most commentators agree that the reforms contributed to equity. Hansen (1975: 210–11) concludes that the reforms succeeded in cutting off the upper tail of the distribution of both income and wealth, but the equalization of personal distribution was far from complete. Even by 1973, large differences existed between the incomes of landless laborers and owner-cultivators with the maximum holding of 50 feddans, and "a certain exploitation of the peasants in favor of workers in modern enterprises had taken place." Moreover, several writers – for example, Nutting (1972), Mabro (1974), Waterbury (1983) – argue that the primary reason for the reforms was to undermine the power of groups that might have opposed the revolutionary regime. Hansen (1991: 250) sums up this view as follows: "Important though they were from an equity point of view, land reform, nationalizations, and sequestrations were primarily actions aimed at neutralizing or destroying actual or potential, real or imagined, political opponents or power contenders."

- 4 Other socialist reforms of the government were in labor legislation, education, health, and employment. The minimum wage in industry was raised from LE 0.125 a day to LE 0.250 in 1953, but it was seriously enforced only from the early 1960s; until then real wages were raised mainly by increasing fringe benefits. Strikes were made illegal, but labor conditions were improved by an insurance scheme for industrial workers financed by contributions from the employer, profit-sharing schemes whereby 25 percent of the net profit was distributed among the workers and employees, increased sickness leave and higher sick pay, and constraints on the employer's ability to dismiss workers.

Public education expanded rapidly after the revolution. Government expenditure on education rose from about 3 percent of GDP in 1953 to about 5 percent in 1970, despite the increased diversion of resources to defense following the 1967 war. Public investment in education increased from approximately 2 percent of total investment in 1953 to about 6 percent in 1973.

With these increased expenditures the number of students rose sharply. Twenty years after the revolution, the number of primary and preparatory students had tripled, secondary students had increased by about 165 percent, and the number of university students had more

than quadrupled. (The population increase during this period was about 62 percent.) The expansion of the student body, however, led to significantly increased pupil:teacher and pupil:classroom ratios and a worsening of educational quality.

Expenditures on health rose from about 0.5 percent of GDP in 1953 to about 1.9 percent in 1975. The number of hospital beds more than doubled, from a little less than 36,000 in 1952 to about 77,000 in 1975; the ratio of beds to a thousand of the population thus increased from about 1.7 to nearly 2.1 over the period. The availability of medicine at subsidized prices and the number of pharmacies and public health centers steadily increased, but all these were far more accessible in urban than in rural areas.

Westley (1999) estimates that real GDP during 1952–74 grew at a rate of about 3.5 percent a year, with per capita income rising by a little over 1 percent annually. The rate of economic growth coupled with the distributive policies permitted the per capita consumption of the main staples to increase. Thus, the per capita consumption of calories increased from about 2,300 a day in 1952 to nearly 2,600 20 years later; that of protein from 35 to 45 grams a day; and of cotton textiles from 2 kg to 3 kg a year.

- 5 For most of the two decades, the economy faced a shortage of foreign exchange and an insufficiency of domestic resources with which to finance its policy goals. Since the end of World War II, Egypt more or less continuously ran a deficit in its balance of payments. This deficit was financed at first by drawing down sterling reserves accumulated during the war. After the reserves had been spent, Egypt began to accumulate foreign debt.

The foreign exchange problem was made worse by the cessation of assistance from the West. Aid from the United States was subject to fluctuations and was discontinued in June 1966. Problems of compensation for the nationalized foreign enterprises stood in the way of assistance from the World Bank after 1959. Similar problems arose with most of the potential aid-giving countries of Western Europe. Egypt came to rely increasingly on supplier credits, so that annual debt service payments rose rapidly. Egypt's foreign exchange problem essentially arose from the attempt to run a balance of payments deficit in excess of the available foreign aid.

The foreign exchange situation deteriorated further after the war with Israel in 1967. In general, the government attempted to deal with balance of payments difficulties by restricting imports; there was no systematic attempt to increase exports. At times the compression of imports could be quite drastic – for example, imports were reduced by nearly 20 percent between 1966 and 1967, and in the first six months after the war they were another 17 percent less than in the corresponding period a year earlier. Such fluctuations played havoc with

capacity utilization and were a major reason for increasing unit costs in industry.

- 6 The pressure on domestic savings arose from the budget deficits. During the 1960s the deficit arose because, although revenue growth outpaced that of nominal GDP, current expenditures grew even faster. The rise in expenditure was greatly influenced by expenditure on defense, which according to the published figures increased from 27 to 35 percent of total current expenditure. These figures, no doubt, understated the true position. But even non-defense expenditures grew significantly faster than revenues, owing principally to the larger provisions for the social services. The decline in savings impacted chiefly on public investment, which dropped by one-third between 1964 and 1968.
- 7 The economic system was characterized by increasing inefficiency. Examining the agricultural sector, Hansen and Nashashibi (1975: 158–94; Appendix A) estimated the separate impact of price distortions, of direct government intervention with acreages, and of the imperfection of market forces for 1962–68 on the deviation of actual acreage from optimal acreage of the main crops. They found that, overall, 7.9 percent of the total acreage was planted with the wrong crops. Of this, 3.5 percentage points were attributable to farmers' imperfect response to prices and 4.4 points to government interference. In manufacturing, Hansen and Nashashibi (1975: 203–316) found that resource use in the ten major industries showed increasing effective rates of protection and rising domestic resource costs of earning/saving a unit of foreign exchange. Moreover, from a social point of view, investment in many of these activities was inefficiently allocated. Large amounts of investment had been channeled into branches of manufacturing industry with low social profitability, while at the same time activities with higher social profitabilities had been denied the necessary capital for investment.
- 8 As Wahba (1994: 97) argues, a major source of the difficulties faced by the state in the implementation of its economic, and particularly industrialization, policies was the schizophrenic strategy concerning development. On the one hand, the state's goal of rapid economic growth necessitated a high level of investment, and therefore of savings. However, this was contradicted by the simultaneous pursuit of another goal, namely, increasing the consumption level of the population. This latter goal was supported by a policy of guaranteed employment and rising wages, which worked against the pursuit of the first goal. These inconsistencies became especially critical when resources were straitened because of decreasing foreign inflows and increasing military expenditures.

By the end of the period, it was clear that Egypt's aims greatly exceeded its means. It could not afford to maintain a military con-

frontation with Israel, to prosecute a war in Yemen, to act as a leader of the “nonaligned” group of countries, to champion the anti-colonial movement in Africa, to set up a welfare state with guaranteed employment and free access to education and healthcare, and at the same time to antagonize the Western countries and the West-dominated international financial institutions that were the chief sources of concessional capital and of modern technology.

Something would have to give. The economic situation did not allow much room for maneuver. Even before the October 1973 war with Israel, President Sadat had graphically spelled out the seriousness of Egypt’s economic plight:

Let me tell you that our economy has fallen below zero. We have commitments (to the banks, and so on), which we should but cannot meet by the end of the year. In three months’ time, by, say, 1974 we shan’t have enough bread in the pantry!⁸

and:

I wanted to tell them [the National Security Council] that we had reached the “zero stage” economically (*marhalat alsifr*) in every sense of the term. . . . I could not have paid a penny toward our debt installments falling due on January 1, 1974, nor could I have bought a grain of wheat in 1974. There would not have been bread for the people.⁹

In the event, Egypt jettisoned the philosophy of a centralized economy and political dependence on the communist bloc.

The economic situation in 1974

In order to understand the impetus behind the *infitah*, it would be useful to consider how the economic situation in 1974 and the immediate economic future appeared to Egypt’s policymakers after the 1973 war.

The picture in 1974 was of a general slowdown in the economy. The constant price GDP series showed that after two years of expanding at roughly 4 percent annually, the growth rate dropped to about 3 percent in 1973. The deceleration was brought about by a fall in value-added in the mining sector of 9.8 percent (caused largely by a drop in crude oil extraction) and a decrease of nearly 15 percent in construction. Industrial growth in 1973 was estimated at 3 percent, agricultural growth at 2.4 percent, i.e. just about in line with the increase in population.

The civilian labor force numbered about ten million in 1973, of which 89 percent was officially estimated to be employed. The actual extent of unemployment and underemployment is difficult to quantify. World Bank

missions of that period judged that there did not appear to be any appreciable degree of open unemployment in rural areas during peak seasons, but seasonal *underemployment* might be quite significant. In urban areas, and particularly in the services sector, there appeared to be a considerable amount of underemployment and low productivity employment. The drift of labor towards the towns accentuated this tendency. The touchy problem of “educated unemployment” had been partially defused by automatically providing jobs in the government sector to all graduates. Other measures that had eased the employment problem in the short-run were the expansion of the defense forces and a much more liberal attitude towards emigration.

An issue that was becoming politically important was that of inflation. Largely as a result of controls, Egypt had experienced stable prices for many years. However, the situation began to change rapidly in 1973, chiefly because of rising import prices for food and other items, and the dislocations caused by the October war. The official consumer price index rose by 7 percent, the food and beverages component increasing 11 percent. The authorities sought to damp down the increases by reducing the size of the subsidized loaf of bread and by adopting a “two-tier” price system for some commodities; for example, the price of sugar in excess of the basic ration was raised from 15 piasters to 25 piasters per kilogram.¹⁰ However, the cost of maintaining a stable domestic price level for the basic commodities in the face of rising import prices increased substantially: the General Authority for Supply Commodities registered a trading loss of \$228 million in 1973, over eight times the loss of \$28 million incurred in 1972.¹¹

This trend intensified in 1974. The consumer price index rose by 10 percent, with the food and beverage sub-index increasing by about 15 percent. Much of the increase in the latter was caused by the spurt in prices of the non-controlled items, such as vegetables, fruits, and livestock products. Moreover, the official price indices greatly understated the degree of inflation; unofficial estimates put the general price rise in 1974 at between 20 and 25 percent.¹²

The cost of subsidizing domestic prices again rose sharply: the trading loss of the General Authority for Supply Commodities almost quadrupled, rising to \$845 million (27 percent of total current expenditures in the budget), while for 1975 it was projected to increase by another 50 percent, to \$1.26 billion (29 percent of budgetary current expenditures). The foregoing refers only to the cost of living subsidies; the total subsidy bill was larger. Figures for earlier years are not readily available, but the consolidated amount for 1974 was estimated at \$890 million and for the following year at \$1.64 billion. And even these figures do not include the “implicit subsidies” provided by selling items, for example gasoline, at well below international prices. These subsidies could be very considerable: the weighted average of domestic Egyptian prices for petroleum products in

1979 was less than 20 percent of world prices. The World Bank estimated the implicit subsidy in 1979 to users of petroleum products at LE 1.5 billion, which was as large as the *combined* subsidy bill arising out of all explicit consumer subsidies and public authority deficits. This fact tended to be overlooked since the low energy prices did not imply any explicit transfer payment, because Egypt produced its own petroleum and prices, low as they were, did cover production costs as conventionally measured.

Even the explicit subsidy increases translated into substantial pressure on the budget. The overall budgetary deficit in 1974 was estimated at 17 percent of GNP at market prices (substantially up from 11 percent in the previous year) and for 1975 it was projected at 22 percent. This resulted from expenditures rising distinctly faster than resources: total receipts in 1974 were 12 percent higher than in 1973, while total expenditures had risen by 28 percent.

The drag on revenues came essentially from two sources: a lack of buoyancy in a group of taxes, such as the property tax, the personal income tax, and especially customs duties, in all of which collections grew proportionately slower than the growth in the tax base, and the relatively low level of transfers to the budget from profits of the public enterprises. The low transfers resulted largely from price controls and also from misdirected investments. The World Bank (1975: 124) estimated the rate of return on assets for the public sector industrial units as a whole in 1973 at only 11 percent, and remarked that international data would indicate something of the order of 20 percent as more appropriate.

The increasing budget deficits inevitably raised problems of financing. In 1974 the authorities resorted to substantial amounts of borrowing, both from abroad and from the domestic banking system; these amounted to respectively 12 percent and 48 percent of the overall deficit (the bulk of the remaining amount was borrowed from social insurance and pension funds). This method of financing impacted on the money supply. Money and quasi-money rose by 29 percent in 1974 when output in real terms increased by only 4 percent. This increase in domestic liquidity, following an increase of approximately 40 percent in 1973, built up severe inflationary pressures.

The squeeze on the budget, the mode of financing the deficit, and the resultant inflationary pressures had consequences for real wages. The Egyptian wage structure rested on legislated minimum wage rates – at that time about LE 12 (approximately \$31) per month – in both the public and private sectors. These wages were supplemented by fringe benefits, bonuses, and profit sharing, which were particularly important in the public industrial sector. Wage increases were not formally linked to increases in productivity, but were generally awarded to help keep up with the rising cost of living. Thus, in 1972–74, when price rises had accelerated, wage increases were more readily granted. The rise was especially large in 1974, and was particularly marked in some sectors, such as

construction. However, if the more realistic estimates of inflation are considered, there is little doubt that real wages in Egypt were being squeezed during this period.

In 1974, Egypt's balance of payments came under even greater pressure from sharp increases in the international prices of Egypt's imports, particularly foodstuffs; depressed demand for Egypt's imports in Western countries; and slow disbursement of foreign assistance. The deficit on commodity trade amounted to \$1.75 billion in 1974 (more than twice that in 1973). Exports increased to \$1.67 billion, but fell far short of the increase in imports. Even substantially increased Arab grants, amounting to \$1.2 billion, did not suffice to fill the gap and a shortfall of \$510 million emerged, which was met chiefly through the use of bank credit facilities (with an average maturity of 180 days).

The balance of payments projected for 1975 indicated a further deterioration – a current account deficit of about \$1.4 billion (compared with \$326 million in 1974). The higher gap resulted largely from the worsening of the merchandise trade deficit, from \$1.75 billion in 1974 to an estimated \$2.5 billion in 1975. The gap on the balance of payments indicates the magnitude of resources required for Egypt to balance its external accounts. The amount of resources was only one aspect of the problem. The other, and more urgent, was that a large part of these resources was required in the form of cash to repay the considerable amount of short-term bankers' facilities that were falling due and to service the remainder of the debt.

The heavy use of these bankers' facilities created acute problems of liquidity, which reached crisis proportions in late 1974 and early 1975. The government's 1974 foreign exchange budget projected total debt servicing falling due in 1975 at LE 1,036 million (\$2,650 million, of which short-term bank credit facilities amounted to \$2,050 million). Foreign debt liabilities expected to mature in 1975 were so large that the entire proceeds of Egypt's estimated exports and "normal" grant aid expected from Arab countries (about \$1 billion) were deemed inadequate to service these obligations; the resources needed to finance imports would be an *additional* requirement.¹³

The pressures created by the large volume of short-term debt had bedeviled Egypt's balance of payments for several years, and it was clear that the country's own efforts would not suffice to deal with this problem. To run a little ahead of the story, the crisis was resolved in 1976–77 only by the intervention of a *deus ex machina* in the form of a newly created Gulf Organization for the Development of Egypt (GODE) set up by Saudi Arabia, Kuwait, Abu Dhabi, and Qatar. This body quickly disbursed sufficient amounts (in the form of grants) to pay off the short-term debt, and also to permit the freer import of vital intermediate goods.

The position of the major sectors was somber. Agriculture had been losing ground in the planners' priorities; investment in the sector since

1970 averaged only 14 percent of total public investment, compared with 18–20 percent in the late 1960s. Cotton output had leveled off since 1970 and there had been little improvement in cotton yields since that time. Wheat output was increasing as a result of a combination of higher acreage and the introduction of higher-yielding varieties. However, wheat yields were still significantly lower than international levels and wheat and flour imports provided nearly 60 percent of current consumption.

Industrial production was plagued by capacity underutilization, which was getting worse. The extent and distribution of capacity underutilization among industry groups was evaluated in July 1973 and February 1974 by the government, and reviewed in May 1974 by the World Bank. The studies estimated capacity underutilization in 1973 at 14 percent, rising sharply to 32 percent in 1974; in fact, underutilization was probably even higher, because “capacity” had been rather conservatively estimated.

In sum, the economic situation in 1974 was bleak. The growth of GDP had slowed; the budget was under pressure and the deficit was increasingly being financed through borrowing from the banking system; the money supply was increasing much faster than the real output of goods and services; inflation was rising; real wages were being squeezed; the deficit on the current account of the balance of payments was rising; the external debt was increasing; the composition of this debt meant that Egypt required large and immediate cash resources in order to service it, and the country was becoming more vulnerable to external events.

At the same time, it was also clear to policymakers that the political and economic milieu – within Egypt, in the region, and internationally – had changed sharply after the October war. In order to take advantage of the altered environment, a new economic approach had to be articulated.

The *infitah*

President Sadat offered such an approach in the *October Paper*, which was presented to the People’s Assembly in April 1974 and approved in May. It outlined the case for a major redirection of policies in both political and economic spheres. The argument was essentially as follows:¹⁴

- After the war of October 1973, Egypt had to gird itself for the “construction battle,” which had as its aim the modernization of Egyptian society by the year 2000. The basic element in the modernization process was an acceleration of economic growth. This would require considerable assistance from abroad, and Egypt would have to adopt an “outward looking” economic policy.
- The role of the sectors would have to change. In the future, the public sector would serve as the primary instrument for carrying out the development plan; undertake basic projects which other sectors would not or could not; and provide essential services to private and foreign

investment. The private sector had been neutralized as a productive agent owing to a number of “contradictory policies” in the past. It was now time to discard those conditions, and to provide the private sector with stability and encourage it to maximize production.

- The changed conditions in the world made it extremely likely that, given a proper response, the necessary amounts of external capital would be forthcoming, especially from the vast increase in the financial power of the Arab world. To avail of this opportunity, Egypt was prepared to provide foreign investors with all the necessary legislative guarantees.

The *infitah* or “open-door strategy” enunciated in the *October Paper* has attracted much attention as representing a decisive break with the Egyptian economy’s public-sector-dominated past and providing a comprehensive guide to the future direction of the economy. While it did give a signal that henceforth the private sector would be a much more active participant in the economic process and that foreign investment would be welcomed, the actual impact in terms of a significant change in the structure of the economy remained limited.

For more than a decade and a half after the pronouncement of the new direction, few ancillary actions were taken to buttress the new approach. Public enterprises continued to dominate the commanding heights of the economy – in manufacturing, petroleum production, imports, exports, infrastructure, as well as in large areas of distribution and other services. Their viability remained assured through the retention of officially-sanctioned monopoly power. The government did not attempt a serious move towards privatization of these enterprises until the 1990s, nor did it pass any legislation to create more competition. The banking sector continued to be dominated by the big four public sector banks; even at the beginning of the Third Millennium, 25 years after the pronouncement of the *infitah*, they provided nearly 60 percent of total credit from the banking system. The policy of guaranteed employment in the government sector to graduates of universities and other institutions continued and, if anything, expanded – Commander (1987: 26) estimated that the portion of the labor force in government employment rose from 9 percent in the early 1960s to 27 percent in 1976 to about 32 percent in 1981. In a comment on the *infitah* Owen and Pamuk (1998: 137) claimed, with some justice, that “economists remain puzzled about the basic thrust of Egypt’s liberalization.”

But perhaps they should not be. I.A. Richards famously cautioned critics not to beat the cat for being the wrong sort of dog. Discussions with some of the policymakers who were in key positions at the time of the *infitah* suggest that one should not assess the *infitah* as if it had been designed to provoke a tectonic shift in Egyptian economic policy. The motivation behind the “opening” was considerably more modest than its

rather grandiose billing might suggest. These policymakers argued that the *infitah* was not in fact a strategy, if by “strategy” is meant a coherent plan of action, including the passage of suitable legislation, the restructuring of institutions, and the adoption of integrated policies. The *infitah* was principally an opportunistic tactic intended to facilitate the inflow of Arab funds.

The story of the movement towards economic reform appears to be as follows. The first stirrings in favor of reexamining Egypt’s economic strategy came after the military defeat of 1967. President Abd el-Nasser asked some of his advisors to put forward their ideas on the long-term direction of the economy. According to Ismail Sabri Abdallah (Deputy Minister of Planning 1971, Minister of Planning 1972–75), a paper on a new approach was presented by Abdel Moneim El Kaissouni, the Minister of Planning. This favored a larger role for the private sector and greater facilities for investment by Arab countries.¹⁵ Advisors from different parts of the economic and political spectrum commented upon the paper, for example, Ismail Sabri Abdallah, Hassan Abbas Zaki (the Minister of Economy and Foreign Trade), and Fuad Morsi (Minister of Supply and Internal Trade 1972–73) provided comments as “socialist economists” and were critical of the Kaissouni approach.

After reviewing all the (inevitably somewhat conflicting) advice, President Abd el-Nasser decided that he was not prepared to undertake a fundamental change of direction on the economic front, particularly as he was fully engrossed in rebuilding the armed forces after the defeat of 1967. He would, however, present his own views on economic strategy.

The President’s response was conveyed in the *30 March 1968 Paper*, which sketched out the principles of his economic strategy for the immediate future. This strategy rested on three pillars: (a) resource allocation would give priority to defense; (b) development would be maintained at a reasonable rate; and (c) subsidies and the policy of guaranteeing government employment to graduates would continue. The economic team was changed in March 1968, with Said Gaballah being brought in as the Minister of Planning. However, Dr Abdel Aziz Hegazy stressed that President Nasser did not close the door to a policy shift; from 1969, in particular, he began asking serious questions about the performance of the public sector.¹⁶

After the 1973 war, President Sadat asked his economic advisors to prepare a paper on prospects for the future and the options open to Egypt. By this time the consensus among the counselors was that Egypt needed a more mixed economy. There were, of course, some dissenting voices; for example, Aziz Sidqi (Minister of Industry, Petroleum and Minerals) was one of the prominent opponents of the “opening.” Comments trickled in in a desultory manner; and according to both Dr Hegazy and Ismail Sabri Abdallah, the Cabinet held no systematic discussion of major changes in economic strategy.

Dr Hegazy maintains that the open-door policy was intended more as an “investment promotion program” than as a blue-print for a free economy. Sentiment for a modification of the socialistic economic policies had increased among President Sadat’s advisors, but Cabinet discussions of reform remained perfunctory. However, a number of important arguments had surfaced in Cabinet briefs and in Ministerial meetings. Dr Hegazy identified the following as having carried the most weight:

- 1 Most Egyptian exports were to Eastern Europe, while most imports (including wheat and other food items) were from the West. This imbalance created a serious shortage of hard currency, and had to be redressed if Egypt was not to continually suffer from balance of payments pressures, and thus be vulnerable to external events.
- 2 The technology that Egypt obtained from the Soviet bloc was mediocre. In order to become internationally competitive, Egypt would have to procure more technology from the West. Unless financing were obtained from somewhere on suitable terms, obtaining these imports would further exacerbate the hard currency problem.
- 3 After the Nixon–Brezhnev meeting of May 1972, it appeared that the Soviets were opening up to Western investment and there was the possibility that this might lead to a political rapprochement between the two superpowers. Egyptian policymakers feared that a casualty of this detente might be the strength of Soviet support for Egypt. “You must not put all your eggs in one basket” was the advisors’ sentiment, and they recommended that Egypt make its own opening towards the West. In pursuit of this diversification, Egypt canceled two significant projects with the Soviet Union (import of 500,000 textile looms and a phosphate project) and attempted to acquire the capital equipment from Western sources.
- 4 Egypt was now more prepared for trade with the West since, perhaps somewhat paradoxically, commercial dealings with the Soviet bloc had created a new generation of entrepreneurs who had made money and acquired a measure of business skills from the export–import trade with the Soviet Union. This new generation would step into the shoes of the former entrepreneurs, who had largely been eliminated during the nationalization period.
- 5 After the oil price increase of 1973, many Arab countries had acquired a considerable amount of wealth. In view of the sacrifices that Egypt had made for the Arab cause, it should be possible to find ways in which some of this additional wealth could be translated into investment in Egypt. Moreover, an estimated two million Egyptians were working in these Arab countries, but the larger part of their savings was deposited in the West rather than repatriated to Egypt. This potential resource could also be tapped.

The immediate aim of the *October Paper* was to set up a mechanism that would encourage an inflow of capital from the Arab countries and the repatriation of additional amounts of the savings of Egyptians working in those countries into Egypt. These considerations provided the stimuli for enacting Law 43 of 1974, which eased the path for Arab and other foreign investment.

As a measure of the success of the policies in attracting funds, Dr Hegazy cited studies for the Cabinet which calculated that between 1974 and 1990 capital transfers attributable to the open-door policy increased by about 65 percent. These studies further estimated that about 75 percent of these transfers came from Egyptians who had invested their money abroad and were now repatriating it to Egypt; 15 percent from Arab countries (the expectation had been higher, but between 1979–89 Egypt had been boycotted as a result of its peace agreement with Israel); and about 10 percent from European countries.

The implementation of the “open-door” strategy was in part watered down because key Ministers remained opposed to the new direction or were only half-hearted converts. This lack of clarity within the Cabinet concerning the vigor with which the new route ought to be followed is reflected in the manner in which for several years the policy was portrayed in official pronouncements as being compatible with socialism. The discussion in Ministry of Planning (1977b: 7–13) offers a good example, and Dessouki (1982: 75) reminds us that it was only in 1979 that President Sadat felt able to tell representatives of industry and commerce that capitalism was no longer a crime in Egypt. These facts perhaps also elucidate why the other measures that would have been required to support a full-fledged strategy for liberalizing the economy were not developed.

There is further evidence that the country’s economic managers considered the ills of the economy to be short-term and not structural, and as such could speedily be cured by an infusion of financial resources. This also explains the emphasis on aiming for Arab funds. Such funds were likely to be mobilized more quickly than those from other sources, and were less likely to require institutional and other changes by Egypt. Thus, in spite of the strategic rhetoric attending upon the *infatih* strategy, policy-makers actually thought:

[I]n early 1975 that the crisis of the Egyptian economy was temporary, resulting from insufficient liquidity and a temporary deficit in the balance of payments. . . . From this point of view it was logical that efforts should be concentrated on seeking liquid resources from abroad without changes in domestic economic structure and general policy.¹⁷

It is therefore not surprising that in the years immediately following the *October Paper*, the economic problem was viewed principally as a stabilization issue to be addressed through demand-management procedures.

It was not until deficits continued to mount, debt to increase, and inflation to soar that the imperative of structural reform began to be recognized. As the *Five-Year Plan for 1978–82* put it:

Until recently, economic policies have emphasized foreign aid and the reduction of spending instead of regulating and reorganizing the economic structure of the society.¹⁸

The immediate results of the open-door policy probably dismayed even its staunchest supporters. The first and most visible result was the rapid expansion in consumption, which increased from 63 percent of GDP in 1973 to 75 percent in 1975. Between the same years imports almost quadrupled, rising from about 10 percent of GDP to over 30 percent. The biggest increases in imports came in consumer goods (largely because both the price of wheat and the quantities imported increased sharply) and consumer durables. The latter increased from 0.3 percent of GDP to 1.3 percent; Cooper (1982: 115) observed that more cars, televisions, and refrigerators were imported into Egypt in 1975 than in the previous four years, and he commented that “commerce had truly become the focal point of liberalization.” Weinbaum (1986: 40–1) saw Egypt’s foreign exchange earnings “severely drained for imports, much of it for luxury items,” and reported that a large share of US-supplied low-interest business loans went to Egyptian importers, “many of whom were unnecessary middlemen, reselling the goods they purchased to the Egyptian government.”

It was not that President Sadat had not been cautioned about the consequences of too rapid a liberalization. Several quarters, private and official, had expressed apprehension about the manner in which the open door policy was being implemented. Ahmed Baha El Din, a well-known writer, had dismissed the policy as “*infitah sadah madah*” – a play on words that, in addition to its dictionary meaning of a state of utter confusion, suggests not only an open door, but also no windows, walls, or any boundaries whatever. President Sadat’s own Prime Minister, Dr Hegazy, had drawn attention to the experience of the United Kingdom immediately after World War II and explained in some detail to the President how carefully a post-war economy had to be eased back towards normality.

Dr Hegazy felt that the situation in Egypt after the October 1973 war needed a cautious loosening of restrictions on consumption while at the same time encouraging the movement of resources towards civilian investment and increasing productivity. However, another group in the Cabinet demanded an immediate increase in consumption to compensate the population for the years of privation before the October war. Dr Hegazy said that whenever he tried to apply the brakes on consumption increases, rivals within the Cabinet created street demonstrations against the proposed measures.¹⁹ President Sadat was unwilling to risk any possibility of

political disquiet, and sided with the “immediate peace dividend” faction in the Cabinet. Thus, at a critical juncture in Egypt’s economic history, the internal dynamics of the Cabinet, coupled with the President’s preference for the soft option, made it impossible to limit the consumption binge, particularly by the higher income groups (as they were the ones with the purchasing power).

2 Economic development and policymaking, 1973–87

What was the impact of the new economic strategy and how did the economy perform in the decade after 1973? The second question is easier to answer than the first. Ikram (1980) and Handoussa (1990) describe areas in which economic performance improved sharply. The growth of GDP in 1975–86 averaged over 9 percent a year in real terms; even in the face of an annual population growth rate of 2.8 percent between 1976 and 1986, real per capita incomes increased at an average of 6 percent a year. The investment rate doubled from 13.7 percent of GDP in 1973 to 28.7 percent in 1985. The growth in investment was paralleled by a rise in gross domestic savings from 8.3 percent of GDP to 17.8 percent in the two years.

Social indicators also progressed. The number of absolute poor rural households declined from 51 percent in the early 1970s to 30 percent by the early 1980s; the infant mortality rate declined from 117 per thousand to 93; life expectancy at birth rose from 50 to 58 years; the average caloric intake per capita increased from 100 to 128 percent of minimum standard requirements; and the primary school enrollment ratio improved from 72 to 78 percent.

However, these improvements owed little to policy changes informed by the *infitah*. The economic resurgence was based on a combination of serendipitous events that enabled Egypt to access a much larger volume of resources. This made possible a simultaneous increase in investment and imports, both for consumption and for intermediates that permitted fuller utilization of installed capacity. But fundamental structural issues remained unaddressed.

There was an absence of policies that would have increased competitiveness, or which would have improved the economic rationality of decisions by correcting distorted price signals. Nor was there a pursuit of institutional changes that would have reduced transactions costs. The enlargement of the economic cake by the fortuitous inflow of resources (oil exports, Suez Canal earnings, worker remittances, tourism receipts, and external assistance) masked serious rigidities in the economic structure. Bruton (1983: 682) argued that the foreign exchange windfall did

little to affect the productivity of the “real” Egyptian economy, and that the elimination of the foreign exchange constraint enabled the government to avoid taking the difficult decisions that were necessary to raise the efficiency of resource use. The cost to the economy of such rigidities became especially marked after 1982, when falling oil prices caused foreign exchange earnings to decline, but the overvalued exchange rate and the price distortions continued the bias towards nontradables.

Some commentators contend that the sudden growth in foreign exchange availability created a variant of the “Dutch disease” phenomenon. “Dutch disease” models predict that a heavy influx of foreign currency (generally caused by sharp increases in primary product or natural resource export prices) can put upward pressure on the exchange rate and erode the competitiveness of industrial exports. Because means of production do not have to be allocated to earning them, revenues from worker remittances, foreign aid, and oil can produce a similar effect. It has been held that the surge of such windfall resources during this period was particularly damaging to the competitiveness of Egyptian industry.

An alternative view is that of Cottenet (2003), who argues that the behavior of the industrial sector during this period can better be explained by an “allocation of talents” mechanism. The boom attending upon the *infitah* created a politico-institutional environment that made rent-seeking activities more profitable than productive activities, and thus attracted the best talents towards the former. Under either explanation, access to a large amount of resources not related to the productivity of the economy created serious distortions in the incentive structure.

The GDP increased rapidly during 1974–87, but these years are best divided into two subperiods, because of important differences underlying the growth. In the first subperiod (1974–81), the growth rate averaged over 9 percent a year, and was based on a conjuncture of three events.

First, the return of oil fields and the increase of international oil prices in 1973 and 1979 provided Egypt with large windfalls in foreign exchange earnings. The main oil fields in the Gulf of Suez resumed production after the 1973 war, and revenues from oil exports in 1981 reached \$3,013 million compared with \$44.8 million in 1972. In 1974 oil had accounted for less than 3 percent of GDP, 11 percent of exports, and less than 1 percent of government revenue; in 1981 it reached nearly 13 percent, 59 percent, and 20 percent respectively. Concurrently, non-oil exports dropped because the demand generated by rising oil incomes and the expansionary fiscal stance diverted commodities from the foreign to the domestic market. Thus, the value of cotton exports dropped by 50 percent in constant prices over the 1974–81 period, textiles by 40 percent, and manufactured exports as a whole by 46 percent. As a result, the Gini index of the concentration of exports increased from 0.442 to 0.483 (a value of 1.0 shows maximum concentration), suggesting an increased exposure of export earnings to external shocks.

Second, the vast increase in purchasing power that higher oil revenues gave to the Arab oil producers created an enormous demand for Egyptian workers in all fields. This not only eased the unemployment problem in Egypt, but also led to a very substantial flow of remittances from these expatriate workers. The flow of remittances surged from \$189 million in 1974 to \$2,855 million in 1981.

Third, there was a rapid escalation in external assistance. Arab countries, which had already provided major support, stepped up their aid programs. An immediate effect was the formation of the Gulf Organization for the Development of Egypt (consisting of Saudi Arabia, Kuwait, Qatar, and the United Arab Emirates) in April 1976, which quickly disbursed about \$2 billion to pay off most of Egypt's short-term debt and to permit the freer import of consumer and intermediate goods. As part of their support of movement towards peace in the Middle East, the main Western countries (particularly the United States) and Japan commenced very substantial programs of economic assistance to Egypt. A large pipeline of aid commitments was soon built up, and in 1981 the total disbursement of official loans and grants into Egypt was put at \$1,602 million, or 7 percent of GDP.

While this deluge of funds radically eased the foreign exchange constraint, it did nothing to ensure a more effective use of resources. Owen and Pamuk (1998: 137) remarked that "Once the regime found itself in possession of huge new funds towards the end of the 1970s, all pressure for public sector reform evaporated." Serious structural reform did not begin until the 1990s.

The period immediately after the announcement of the "open-door" policy was particularly difficult for policymakers, who had little experience in managing a market economy. They did have access to analytical support from institutions such as the World Bank, the International Monetary Fund (IMF), and the USAID, but some degree of wariness in the relationship between the Egyptian authorities and the donor agencies was only to be expected.

Egyptian ministers repeatedly voiced the opinion that outside advisors did not quite understand the Egyptian situation and were unrealistic in their expectations, particularly concerning the pace at which reforms could be undertaken. There was also the feeling that the international agencies could be insensitive: as one minister said, "They are too eager to announce the crime and to pronounce the sentence." These remarks applied more to the IMF and the World Bank; the USAID appeared to be more circumspect in pressing for economic reforms because its business, quite patently, was to provide financial assistance in exchange for political support. For their part, the international financial institutions (IFIs) expressed frustration with what they politely termed "missed opportunities." To the IFIs, it appeared that the Egyptian authorities accepted their analyses of the problems, but did not want to follow through on the

required policies. “They [the Egyptians] wanted simply to waive the penalty, not to rescind the judgment,” minuted an IFI discussant.

For a variety of reasons, the World Bank was constrained in pressing for wide-ranging reforms. Over 80 percent of the Bank’s lending to Egypt at this time was for specific projects; this type of financial support permitted the Bank to propose conditions on that particular project or at times for the sector in which the project was located, but did not give it much scope for requiring economy-wide conditions. Moreover, the World Bank had already come in for a great deal of criticism in Egypt because of its role in the Aswan High Dam incident. The Bank was therefore anxious to minimize friction when it resumed lending to Egypt in 1973. Thus, of the bilateral and international organizations, the IMF remained the most active in proposing conditions on macroeconomic policy.

The political economy of decision-making during this period is the story of a complex interaction between the views of the Egyptian government, of bilateral donors, and the multilateral agencies. World Bank and IMF reports of this time highlighted three weaknesses in Egypt’s economic management. First, the lengthy period of socialistic control and central direction had left few officials in senior positions who were wholly comfortable with the functioning of a modern market economy; there were just not enough persons qualified to devise policies for and to manage the changed economy. Second, the coordination of policies between the different ministries remained unsatisfactory, and on more than one occasion the international agencies proposed that a unit be set up in the Prime Minister’s Secretariat to harmonize economic policies. Third, perhaps as a result of the first two inadequacies, Egypt had not managed to articulate a clear economic strategy, and its thinking and actions tended to be reactive rather than proactive. In the view of international agencies, this created a certain defensiveness in the Egyptian response to donors’ recommendations, and tended to make negotiations more difficult than they need have been.

An economic issue with important political overtones cropped up quite early after Egypt’s opening to the West, and highlighted the effects of the foregoing weaknesses. Since this incident – the handling of policies that led to the bread riots of January 1977 – continues to resonate even today with policymakers, it might be worthwhile to look behind the scenes at the political economy of the decisions leading to it and the dynamics of the policymaking process.

Egypt required a substantial infusion of external funds and the IMF and the World Bank were prime candidates for providing much of these resources. However, the resource transfer from these institutions is accompanied by policy conditions. Broadly speaking, the reasoning is that in the absence of some unavoidable shock, a country’s predicament is the result of poor policies. A new set of policies is therefore recommended to move the country out from its difficulties. The IMF imposes economy-wide

conditions on its lending, because it is responsible for helping countries to maintain macroeconomic balance. In the nature of things, it is quite likely that the policies recommended by the IMF lead to greater austerity and hardship before they begin to improve matters. However, no politician wins kudos for imposing austerity, even if it is intended only for the short run. Soon after the reactivation of links between Egypt and the international financial institutions, a critical issue faced by the Cabinet was the classic one of how to obtain the maximum resources from the Fund while minimizing the accompanying policy conditions.¹

For most of 1975 and 1976, the IMF's attention centered on the budget deficit and especially the weight of the cost of living subsidies. The Fund's main condition for agreeing to a program was a reduction in subsidies. This prescription was resisted by the Egyptians, but by July 1976 the budgetary situation had deteriorated to an extent that it appeared impossible for the country to hold out any further. It became known in Cairo that Egypt was about ready to sign an agreement with the Fund. It also was known that substantive differences existed in the Cabinet on the merits of completing the agreement. The Ministry of Economy was said to be leaning towards an agreement while some other ministries, notably Finance, had serious reservations.

The Ministry of Economy's position was based on three main considerations. First, Egypt needed the Fund's resources to plug the gap in the country's budget. Second, the Ministry reckoned that under the spur of Fund-recommended policies, Egypt could make quicker progress in reducing its reliance on external funds and it would thus be able to lessen its vulnerability to external donors (even though in the immediate term, of course, it would have to borrow more from the IMF). Third, the Ministry felt that Egypt required the Fund's "good housekeeping seal of approval" in order to reassure foreign investors; it preferred foreign investment to Egypt's borrowing from abroad.

The Ministry of Finance emphasized a different set of concerns. In its view, the terms of the agreement would adversely affect growth, impact harshly on the poorer sections of society, and mire the government in political difficulties. The Ministry contended that the budget deficit could be brought down gradually by eliminating the more egregious subsidies, reducing some of the others in a phased manner, and increasing revenues by improving the efficiency of tax administration. The Minister (Dr Ahmed Abou Ismail) pointed out that this process had already begun: he had cancelled the subsidy on *halaawa* (a dessert) amounting to about \$45 million, and had made other cuts that had reduced the subsidy bill by some \$185 million. He was as keen as the Minister of Economy (Dr Zaki Shafei) to see a lessening of Egypt's vulnerability to external pressure; the issue was of attaining this goal while minimizing risks to the country's stability.

Dr Abou Ismail argued that after 1973 Egypt had made a political choice in deliberately orienting its foreign policy towards countries that

were economically much stronger than the Soviet Union. These countries were willing to support a measured restructuring of Egypt's policies and institutions. In his view, it would be irresponsible for an Egyptian policy-maker not to call on these countries for assistance so that change could be brought about at a socially tolerable pace. He was also skeptical about whether the Fund's policy package would actually encourage foreign investment; such investors would be unlikely to derive much cheer from the "revolution" (his word) that was certain to follow an abrupt reduction in food subsidies.²

These two positions reflected very different assessments of the impact of the Fund's proposals on the economy and of the actions that ought to be taken to deal with the budgetary problems. However, the Cabinet debate on these issues did not remain confined within an economic framework.

Dr Ahmed About Ismail and his Undersecretary showed me the letter of policy drafted by the Fund that Egypt would have to sign. They asked whether the terms looked reasonable, or whether Egypt should press the Fund for adjustments, especially to the credit ceilings, the interest rate, and the actions expected on subsidies. The Finance Ministry was also interested in examining whether an exchange rate adjustment would be better handled as an across-the-board devaluation, or whether a system of dual exchange rates would better suit Egypt's circumstances. The idea was that one of these rates would be more depreciated and flexible and apply to exports, such as manufactures, that were supposed to be price-elastic, while the other would be retained for exports that conventional wisdom regarded as less responsive to exchange rate changes.

I replied that, first, the agreement was between Egypt and the Fund, and thus the World Bank could not properly take a position on it. I also sought to discourage the view that simply because a proposal originated from the Fund, it must inevitably be silly or necessarily inimical to Egypt's interests. Second, I did not see much merit in a system of dual exchange rates. Experience had shown that irresistible pressures would rapidly build up to move items to the more favorable rate and to create intermediate rates, and a dual system would soon become hopelessly multiple.

Third, there was little point in parsing the draft policy letter for loopholes. The more effective course was for Egypt to formulate a coherent position reflecting its own priorities, such as reducing poverty and increasing employment. This would have implications for the growth of the GDP to absorb labor, the level of investment needed to produce this growth, and the policies that would create an environment most likely to elicit this investment. Furthermore, the impact of cuts in food subsidies on the real incomes of the poor would have to be examined. Egypt might be able to accept a selective modification of the system while resisting proposals for sweeping or untargeted reductions. Research by the Bank suggested that for the poorest groups the subsidy system augmented family incomes by

about 15 percent. Cuts of the magnitude implied by the Fund's Letter of Intent could devastate families at the lower ends of the income distribution. Once the Egyptian authorities had developed their own perspective, it could be compared with the Fund's recommendations and an exchange initiated on the merits of the rival approaches.

The officials responded that the schedule of negotiations with the Fund had been accelerated and did not allow time for Egypt to develop a comprehensive position. The Cabinet was to finalize matters that afternoon. The Ministries of Economy and Finance would submit their contrasting evaluations of the Fund's proposals and present their recommendations, and the Cabinet would have to adjudicate the disjunction between the two readings. Dr Ismail recognized that there were cogent arguments in support of both positions, but he was apprehensive that a debate focusing exclusively on economic costs and benefits would miss the really important issues. His Ministry opposed the Fund's proposals because they were likely to create serious political problems for the country. Since the economic content of the Fund proposals was inseparable from its political implications, the latter should be explicitly discussed at the Cabinet meeting.

The Ministry of Finance had three main concerns. First, a calculation by the Ministry of Planning showed that the Fund's package was likely to increase consumer prices by at least 30 percent. (I had these estimates examined by Professor Lance Taylor of the Massachusetts Institute of Technology and by the World Bank's economic mission, who both broadly accepted the Ministry of Planning's conclusions.) Was the Prime Minister prepared to take the government into an election in three months' time with a 30 percent increase in the price level? Second, President Sadat's major achievement was to change Egypt's alliances from the communist bloc to the West. The Fund was seen as a Western institution and the consequences of its policies would be visited upon Western countries. If the public viewed these policies as impoverishing the common man, support for the President's strategy would wither. Was the Cabinet ready to accept responsibility for undercutting the President's global strategy? Third, given the probable level of public dissatisfaction, would the Cabinet and the President have the stomach to pursue further economic reforms?

It was obvious that once the economic arguments were recast in a political lexicon, the prospects of an immediate agreement with the Fund would evaporate. Indeed, after the Cabinet meeting, the IMF representative was informed that several further studies would be required before a decision on the subsidy question could be reached. This put paid to an agreement with the Fund.

Subsequent events conformed more closely to the Ministry of Finance's understanding than that of the Ministry of Economy. The denouement arrived in January 1977 after a new Cabinet had taken office in November 1976. Early in January, rumors were making the rounds of Cairo that

major price increases would be announced in the forthcoming budget. In discussion with different sources, it was made apparent to me that an abrupt reduction in cost of living subsidies was likely to carry the most severe consequences. I telephoned Vinod Dubey, the chief economist of the World Bank's Middle East region and presented an analysis of the state of affairs. I insisted that the Bank would be doing Egypt a very serious disservice if it were to join the Fund in pressuring the country into imposing swingeing cuts in cost of living subsidies. I recommended, rather, that if Egypt continued on the path of reform, the Bank should remain supportive and open to discussions regarding its pace. The next day Dubey telephoned me to say that the region's management and the World Bank's President, Robert McNamara, had accepted my assessment of the situation and recommendations on the Bank's response. I was authorized to inform the government that the Bank would separate its approach from that of the Fund if the latter continued to insist on an immediate and major reduction of cost of living subsidies. I was also asked to notify the Cabinet that the Bank would hold the first meeting of the Consultative Group of aid donors if Egypt continued to move on reform, even if Egypt and the Fund failed to conclude an agreement.

I briefed Dr Hamed El Sayeh, the Minister of Economy, on these developments. In turn, he gave me a detailed account of where Egypt and the Fund stood in their negotiations, and arranged a meeting with Dr Abdel Moneim El Kaissouni, the Deputy Prime Minister, and some ministers from the economic group of the Cabinet. I presented the Bank's views, and was asked to argue the pros of the Fund's position (there was no shortage of advocates of the cons). However, the next day Dr El Sayeh told me that the ministers agreed to the reforms outlined by the Bank, but were willing to go some distance with the Fund in order to ensure a "good statement" from it at the Consultative Group meeting.

The budget announced on January 17, 1977 proposed price increases for several widely-consumed commodities: rice 16 percent, gasoline 31 percent, cigarettes 12 percent, household cooking gas 46 percent, sugar 3.3 percent. Cooper (1982: 236) reports estimates of the subsidy cuts increasing the cost of living by at least 15 percent for someone with an average income. The public's reaction was immediate and violent. Serious riots erupted on the 18th and 19th; the first that Cairo had witnessed since 1952. The official toll was 73 dead, nearly 800 injured, and 1,270 arrested. The army was called in, curfew was imposed, but the violence did not abate until the afternoon of the 20th, when it was announced that the price increases had been rescinded. The United States ambassador, a diplomat with outstanding experience in the Middle East and with exceptionally well-informed sources, told me that an acrimonious debate had erupted in the Cabinet over who should be blamed for the fiasco. His judgment was that, on this occasion, the President would put the blame on the ministers responsible for internal security; however, ministers in

the economic group would also feel the pressure and major reforms would be unlikely for perhaps the next 12 months. He was proved correct – the Minister of Interior was replaced about three weeks later and an even greater degree of circumspection descended on economic policy-making.

Ministers in the economic group came under much criticism from political circles. Members of the budget and planning committee of the People's Assembly told me that they were not satisfied that the impact of the price increase on family budgets had been adequately considered by the exchequer. They also thought that the differential impact of the price rise between urban and rural families had been overlooked. Outside the main urban areas it was difficult to obtain subsidized commodities at prices fixed by the government; a premium often had to be paid. The entire structure of pricing (including the premium) would now be moved upward quite sharply and rural families, who were among the poorer classes in Egypt, would suffer disproportionately. Finally, the political implications of the price rise had not been adequately weighed. In the view of committee members, the budget's actions on subsidies had resulted not so much from "so-called economic rationality" as from political naiveté. Other politicians told me that the country had paid a high price merely to relearn a rather well-known lesson, namely, that people get very upset when their lunch is put at risk.

This was perhaps too harsh a judgment. My discussions with a number of Cabinet members in 1977 clearly indicated that the economic ministers had tried to ascertain the views of the different factions within the Cabinet. There had also been a comprehensive discussion concerning the number of commodities whose prices would be raised. The difficulty, as Dr Salah Hamed (the Finance Minister in January 1977) reiterated, was that the Fund had mandated a target for the overall budget deficit, and acting on a smaller number of items meant that the price increases for such items would have to be much steeper.³ He further maintained that no minister at these Cabinet discussions had disagreed with the decision. He confirmed that the night before the budget announcement, the ruling party's caucus in the National Assembly had conferred its blessing on the course adopted. President Sadat had given oral approval to the Prime Minister. Dr Salah Hamed contends that the critics of the January 1977 budget were carping only with hindsight, and that no one had offered any practical suggestions at the time on how to tackle the budgetary problem, which essentially resulted from sharply rising expenditures on consumer subsidies and government salaries. The Cabinet had tried to cut some administrative expenditures and to hold back salary increases, but had been overruled by President Sadat. The President may have taken this into account in the aftermath of the riots. The economic ministers tendered their resignations, but the President did not permit them to stand down and put the blame on the Ministry of Interior.

The riots and subsequent rescission of price increases inevitably had serious consequences for the budget and for the conduct of economic policymaking. In the initial budget for 1977 the authorities had undertaken policy actions toward improving the fiscal position; taking all the measures into account they had forecast an improvement in the budget of LE 280 million. The measures finally approved in the budget submitted to the People's Assembly after the civil disturbances were expected to yield an improvement of only about LE 45 million. This naturally meant that the share of foreign financing in the budget was likely to increase.

The actual outcome was rather worse. The financial program for 1977 had envisaged a bank-financed deficit of approximately LE 400 million with additional measures to be taken during the year to bring this figure within the ceiling of LE 350 million agreed with the Fund. Developments since the standby arrangement was approved showed that the overall deficit was likely to be about LE 300 million greater than projected earlier in the year, and no new measures had been taken to improve the fiscal situation. The government resorted to net external borrowing greater than originally projected and with a higher level of domestic non-bank borrowing, the revised estimate for government borrowing from the banking system would be LE 125 million above the ceiling.

A further consequence was that both the IMF and the Egyptian authorities became more guarded on the question of subsidies. The draft Letter of Intent dated May 13, 1976, which was prepared when it appeared that Egypt might be moving towards an agreement with the Fund, specifically mentioned the elimination of subsidies on a number of items and the reduction of food subsidies by LE 100 million annually. This letter was never signed; the food riots of January 1977 supervened, and negotiations with the Fund were put on hold. In March 1977 the Egyptian authorities requested a one-year stand-by arrangement from the Fund. The letter requesting this arrangement spoke vaguely of an intention "to introduce further measures during the year," but was silent on the question of subsidies. In the following year a revised Letter of Intent (dated June 10, 1978) was signed. This made no mention of decreasing the absolute level of subsidies, but merely affirmed the government's intention of reducing their rate of growth.

At this time, Egypt and its principal advocates realized that the scale of external financing required by the country made it imperative to enlarge the number of donors and to coordinate their efforts. The World Bank thus set up a Consultative Group of aid donors, the first meeting of which was held in Paris in May 1977. The donors' primary interest was to minimize the duplication of efforts; another major aim of the joint action was to set conditions that would prevent Western assistance from being recycled by Egypt to repay its debt to the Soviet Union.

The Egyptian government's instructions to its delegation emphasized four objectives for the Consultative Group meeting. The first was largely

political: it was to demonstrate to potential investors and to the Egyptian public the wide range of support that Egypt was able to attract. Second, it was to get at a single meeting an estimate of the external resources available to Egypt. This would facilitate planning and budget preparation by reducing the delay and uncertainty from having to negotiate aid commitments with each donor bilaterally; a process that could occupy several months. Third, it was to try to obtain as large a portion of the assistance as possible in a quick-disbursing form. But fourth, and very importantly, it was to make a case for assistance in the form of grants rather than loans. As Dr Kaissouni, the leader of the Egyptian delegation, put it, his directive from President Sadat was “to ensure that Egypt’s past does not become its future.”

The government also sought to widen the sources of economic advice. In 1976, President Sadat turned to Germany’s Chancellor Helmut Schmidt for high-ranking advice on economic and financial policy. In response the Chancellor sent a team of German experts led by former Finance Minister Alex Möller. The report was completed in June 1977 and submitted to President Sadat in September. A sanitized version, excising a discussion of reforms to the decision-making process, was published in Berlin in 1980.

The Möller report covered many of the structural features of the economy and offered practical advice. It recognized that Egypt might never be able to forgo the subsidization of the most important food items, but described mechanisms (such as a “foodgrain compensation fund”) whereby the impact on the budget over the long-term could be moderated. The report also provided one of the earliest public recommendations for the project that was commenced in the late 1990s and has come to be known as the “Toshka” project. The report recommended that “all possibilities to create development regions outside the Nile Valley and the Nile delta should be exploited right now,” and went on to specify as one of these regions “the New Valley, whose agricultural potential can be used if a canal link to Lake Nasser is established.”⁴

However, the report did not have much impact on policies and the Cabinet never discussed the proposals in any depth. Indeed, even in mid-1978, a number of ministers who would have been responsible for implementing the recommendations of the report had not seen the document. It is possible that the President’s primary motive for soliciting the report may have been simply to demonstrate that Egypt was not dependent for economic advice exclusively on the United States, or on international organizations in which the USA occupied a dominant position.

The rapid expansion in external economic assistance raised fresh questions for policymakers on how most effectively to utilize these resources. It is convenient to discuss the major policy issues connected with external aid at this point, even though they were raised by policymakers at somewhat different times. Five broad issues recurred with sufficient frequency

to warrant serious discussions in Cabinet and with the international agencies and bilateral donors.

The first was the question of *project versus program* (i.e. for balance of payments support) *assistance*. Egypt argued for a relatively larger proportion of cash transfers or of program assistance in the total volume of aid, especially from the United States.

The economic reasons for seeking a relatively larger amount of such assistance were:

- 1 This type of assistance disbursed very quickly. Studies by the World Bank showed that between 50–60 percent of the amount committed was likely to be disbursed in the 12 months following commitment, compared with only about 3–5 percent of the commitment of project aid. Moreover, the emphasis on project assistance implied much greater involvement by the donors, especially the United States (because it was the largest provider of aid by far), in identification missions, feasibility studies, reviews, and prolonged contracting processes, all of which contributed to delays, and were resented by the Egyptians because, as Weinbaum (1986: 102) judged, of the “comparison between the supervision of US-sponsored projects in Egypt and US economic assistance to Israel that is delivered without an AID mission.”
- 2 Program assistance provided more flexibility for implementing priorities determined by Egypt. A Ministry of Planning paper argued that if total resources, including aid, were insufficient for all of a group of possible projects, the choice of projects implemented with a given amount of program aid could include a larger number of projects to which Egypt attached higher priority than might be possible from the same volume of project assistance in which the donor determined the choice of projects.

The paper argued along the following lines. Suppose that Egypt's desired portfolio consisted of 20 possible projects, but resources (both from domestic sources and from external donors) were available for only 15. Suppose also that Egypt's rank order of priorities for all 20 projects was the opposite to that of the donors; i.e. for the donors, projects from best to worst would be those numbered 1, 2, . . . 19, 20, while for Egypt the ranking from best to worst would be 20, 19, . . . 2, 1. If the donors provided project aid for, say, five of the projects, they would select the five to which they attached the highest priority, namely, numbers 1–5. But these would be the lowest five in Egypt's priorities; hence, the composition would be sub-optimal from Egypt's point of view. However, if the assistance was provided by way of program aid, the aggregate amount of resources would enable Egypt to execute its set of 15 priority projects. The example was admittedly artificial, in that a completely reversed ordering of preferences between Egypt and the donors was most unlikely, but the paper made a point.

- 3 Project assistance to Egypt was heavily concentrated in infrastructure and strengthened the tendency (initially created by an overvalued exchange rate) for resources to move out of the tradable into the non-tradable sectors of the economy – a point stressed especially by the Ministry of Economy (1981) and Handoussa (1991c).
- 4 Egyptian policymakers thought that donors preferred project assistance because a physical project was more politically rewarding for donors, since it enabled them to point to something visible that they had done for Egypt. However, this predilection for projects encouraged donors to go on financing new investments, while at the same time capacity already installed remained under-utilized for lack of foreign exchange to buy raw materials or essential parts.

Program aid, on the other hand, would not only enable existing capacity to be utilized more fully, but it would also increase the Egyptian government's ability to implement projects by enabling the government to raise domestic resources by selling some of the commodities imported under program aid to the private sector. This was not a negligible benefit. The government's budget was always strained, and the implementation of projects was frequently slowed by a shortage of domestic resources. Indeed, a common complaint among Egypt's policymakers at this time was that donors provided only the foreign exchange component of a project, leaving a large domestic resource component (averaging at that time around 70 percent of the total cost) to be found by the government. The sudden availability of foreign exchange in an environment that had been severely deprived of this resource encouraged government agencies to push projects for which donors were likely to provide support, without taking into account the effort that Egypt would have to make to mobilize the complementary domestic resources. Dr Mahmoud El Imam, the Minister of Planning, expressed it succinctly to me: "They bring me a button from abroad and expect me to provide a coat to sew on to it."

The second area that gave rise to concern among policymakers was the *costs of tied aid*. Studies pioneered by Haq (1967) and Bhagwati (1967) had shown that tying aid to procurement in donor countries could very substantially raise the cost of the commodities purchased compared with international prices. Since the United States was by far the biggest aid donor for Egypt, the concern with aid-tying related largely to actions by that country.

Let me paraphrase the findings and the argument of a rather lengthy paper for the Cabinet on this subject. The study found that many items procured from the United States were indeed more expensive, often 30–50 percent higher and at times even more, than in the open international market. This, however, was not because the United States followed a predatory pricing policy for items financed under aid, but because of a mismatch between the items required by Egypt and the areas of the United States' competitiveness.

The United States' comparative advantage lay in the production of the most "modern" products – the more technologically advanced the product, the more competitive the United States. Thus, the United States was a more efficient producer of bicycles than of donkey carts, of motor cars than of bicycles, of jet aircraft than of motor cars, of space rockets than of jet aircraft, and so on. Unfortunately, much of Egypt's demand was for commodities that lay closer to the donkey cart than to the space rocket end of the technological spectrum. Hence Egypt was locked into procuring items from the United States of which the latter was not the most efficient producer.⁵ The effect was that the nominal value of aid overstated the real amount (in terms of purchasing power). And while Egypt received only 50–70 percent of the nominal value, for the non-grant portion it of course had to repay 100 percent. The study also pointed out that the excess cost of the goods imported under tied aid represented a form of subsidy paid by Egypt to the donor country, since in the absence of aid-tying the donor government itself would have had to provide a subsidy to its exporters in order to maintain their competitiveness.

The third problem that concerned policymakers was the *conditionality* attached to some forms of external inflows. In the case of international organizations, such as the IMF and the World Bank, policymakers knew that conditions would invariably accompany the financial transfer. Indeed, at times they voiced the suspicion that some aid providers were lenient with the conditions of their bilateral aid because they could accomplish their agenda through the multilateral agencies. However, while discussions between Egypt and the multilateral agencies might on occasion become quite robust, only rarely did policymakers reject conditions outright. The favored approach was to argue for more gradually phased implementation so as to provide time to ensure public understanding and acceptance. With bilateral donors, Egypt's problem was different, and the dilemma is well captured by Weinbaum (1986: 120): "Egyptian policymakers often express confusion as to why the United States, in an aid program that is admittedly so political, insists on employing predominantly economic criteria to decide what to finance."

Two further issues related to conditionality must be mentioned. The first was the speed with which the conditions had to be enforced. This was often a more important matter than the totality of the conditions, because it decided the immediacy and the intensity of the pain that would be inflicted on the economy. The pace of reforms therefore gave rise to a considerable amount of heat, sometimes at the highest levels of government. Sadowski (1991: 253) quotes some remarks that President Mubarak made in 1988 regarding the IMF's prescriptions. After likening the Fund to a quack doctor, the President went on to say:

A patient, for example, needs a treatment for one month. Instead of this doctor telling the patient to take the medicine daily for one

month, he tells him to take all the medicine today and tomorrow and that he will recover the day after. Of course, he will take the medicine to go to sleep at night and will not wake up in the morning. He dies. This is the IMF. It writes a prescription for those who require prolonged treatment, just as for those who require short treatment. . . . I tell the IMF that economic reform should proceed according to the social and economic situation in the state and according to the people's standard of living. One should not come and say increase the price by 40 percent. Surely, no one will be able to live. This will not be an IMF process: it will be a slaughter.

The second contentious issue was whether the policy conditions would actually achieve their aims. Empirical studies such as Cornia *et al.* (1987, 1988), Harrigan and Mosley (1991), and some from the World Bank itself – e.g. World Bank (1990b), Corbo *et al.* (1992) – had shown that while structural adjustment programs had some effect in improving the balance of payments of borrowing countries, they had much less impact in increasing investment or in accelerating GDP growth. The inference that Egyptian policymakers drew was that the durable benefits to be obtained by following the policy conditions were not likely to be commensurate with the pain imposed on the economy.

Fourth, over time, particularly after the debt crises of the late 1980s and early 1990s, the *terms of aid* emerged as an important concern. At the start of the aid relationship, the authorities tended to regard only grants as “true aid.” Loans were of course accepted, but for a long time policymakers did not define systematic criteria for discriminating between them in order to decide which to accept and which to reject.

The criteria evolved over a lengthy period, and took three principal forms:

- 1 A more sophisticated analysis was undertaken of the prospects of the currency in which the loan was valued; this concern was spurred by the rapid appreciation (in terms of Egyptian pounds) of loans from Japan denominated in yen. These loans had originally appeared to be very attractive because of the low interest rate they carried, but the escalation in the value of the yen by almost 70 percent against the US dollar (the currency in which much of Egypt's foreign exchange earnings was designated) drastically increased the cost of servicing them.
- 2 The phasing of repayments began to attract ministerial attention. In the mid-1990s, Zafer El Bishry, the Minister of International Cooperation, began to require an examination of the time profile of the loan's servicing and its comparison with projections of Egypt's foreign exchange earnings, so as to avoid an unmanageable “bunching” of debt service payments.

- 3 A common measure began to be adopted for comparing the concessionality of loans. The next Minister of International Cooperation, Ahmed El Dersh, laid down conditions for the minimum concessionality of a loan: in order to be acceptable, it was to have a grant element of at least 40 percent when the stream of repayments was discounted at 10 percent per annum.⁶

Fifth, one may briefly mention two problems that bilateral donors raised concerning the aid relationship:

- 1 Especially in the earlier years of bilateral aid relations, the question of limited “absorptive capacity” tended to be brought up. This concept was never clearly defined, but appeared to mean that bilateral donors, especially the United States, could not find a sufficient number of viable projects on which aid funds could be disbursed quickly. Given the bureaucratic pressure on USAID to disburse the large amounts budgeted for assistance to Egypt, it is not surprising that a considerable amount of assistance was directed towards non-project ends. In the period 1974–86, the Commodity Import Program was able to disburse about 80 percent and the PL 480 program almost 100 percent of the amounts allocated, while project aid was able to use barely 40 percent of allocated funds. Indeed, Weinbaum (1986: 111) suggests that even attaining this level of performance required the USAID mission to seek approval from Washington for costly, expanded infrastructure projects and to provide support for several peripheral programs.
- 2 Bilateral donors frequently complained about a disconnect between the objectives of their aid programs and the expectations on the Egyptian side, a mismatch that appeared to arise from – for want of a better expression – cultural attitudes. At its most basic level, donors thought that their Egyptian counterparts seemed to feel that most objectives could be realized simply by getting the donors to provide more resources. As Weinbaum (1986: 121) put it, “This notion of development during much of the history of the program expressed itself in ‘build us this.’” What made this grate more on foreign donors was described by US Ambassador Eilts (1985: xv) as an attitude by Egyptian officials “as though there were some kind of an obligation on the part of foreign donors to provide them with economic help.” He added that there was “usually little sign of appreciation on the part of Egyptian officials and an obvious reluctance to give public credit to the foreign donor for the burden borne by the latter’s taxpayers,” and that “their [the officials’] attitude often brought to mind Pharaonic friezes showing subject peoples bringing tribute to Egyptian rulers.”

An issue that was related to aid, but applied more generally to the use of foreign resources, emerged in the 1990s. This problem became particularly

important after the debt rescheduling of 1991–96 and the success of the stabilization program had eased the foreign exchange situation and enlarged the options for policymakers. The issue generated a considerable amount of discussions between the Egyptian authorities and the World Bank, and boiled down to two broad questions: (1) should Egypt borrow on nonconcessional terms to finance its development? and (2) if Egypt did borrow on nonconcessional terms, how much would it be prudent to borrow?

The case against borrowing on nonconcessional terms rested essentially on a political attitude that did not wish to see a significant increase in external debt, because a heavily indebted Egypt might again be vulnerable to pressure from donors. According to the proponents of this position, external resources should be accepted only if they were offered as grants. This view had some strong advocates within the Cabinet and the Presidency and, given Egypt's experience with external debt, was not one that could be dismissed lightly. However, there were also voices that wondered whether a policy of zero nonconcessional borrowing would cause Egypt to forgo a golden opportunity, when the constellation of international political circumstances was in Egypt's favor, to obtain substantial amounts of additional resources.

The case for borrowing nonconcessional funds accepted that a decision to borrow such resources could only be justified if these helped the country to attain its key economic and social goals. The most critical social and economic problems confronting Egypt for the next two decades were identified as:

- The provision of employment to the rapidly growing labor force and reduction of the backlog of unemployment.
- The reduction of poverty and the creation of substantial social safety nets.
- The modernization of the economy so as to enable it to meet the challenge of joining the European market, and of globalization generally.

The critical assumption underlying the push for borrowing was that Egypt could overcome these problems only if its economy grew at a much faster rate than it had in the last several years.

The key to economic growth and modernization was investment: in infrastructure, in human resources, in technology, and in productive facilities. The investment requirements of meeting Egypt's goals would be very substantial. In order to generate labor demand of the necessary magnitude, real GDP growth would have to average about 7 percent annually for perhaps the next two decades (see Chapter 10 for a more detailed discussion of sustained growth). Such a growth rate would require substantial increases in the investment/GDP ratio, which would have to rise to around 25–28 percent of GDP.

The increase was especially likely because the increasingly sophisticated structure required to compete with European economies would imply high capital:output ratios. The experience of fast-growing economies bore out this analysis. For example, five major East Asian economies had enjoyed average annual growth rates of over 7.5 percent during the five-year period 1990–94: Malaysia 8.4 percent, Thailand 8.2 percent, Indonesia 7.6 percent, Taiwan 8.0 percent, and Korea 8.1 percent. These growth rates were driven by investment/GDP ratios of 39 percent, 40 percent, 33 percent, 37 percent, and 38 percent respectively. As a point of reference, the incremental capital:output ratios (ICOR) for these countries were 4.6, 4.9, 3.8, 4.7, and 4.9 respectively. The 1992–96 average ICOR for Egypt was about 4.4, and the experience of fast-growing economies suggested that the ratio might go higher before productivity gains succeeded in moderating it.

On the other hand, financing the investment was problematic – domestic savings were only 12–13 percent of GDP. While savings could be expected to increase with the growth in incomes and as a result of policy measures, they were still likely to fall well short of the investment requirements. Moreover, in the 1990s Egypt had pursued an extremely conservative borrowing strategy. New commitments of external loans had fallen from \$2.2 billion in 1992 to \$900 million in 1993, \$500 million in 1994, and \$300 million in 1995. Net borrowing (disbursements minus principal payments) was only \$75 million in 1994. What was worse, net inflows (disbursements minus both principal and interest payments) had been negative for several years, averaging more than (minus) \$1 billion in 1993–95. Thus, at a time when critical development needs remained to be addressed at home, Egypt was exporting capital to the rest of the world and forgoing domestic investments needed to maintain a high growth trajectory.

Another reason for including the option of borrowing in the government's financial arsenal was that it gave Egypt a measure of strategic flexibility when dealing with other types of capital inflows. For example, one of the alternative methods of external financing was direct foreign investment. The appeal of this resource was that it did not add to external indebtedness. However, direct foreign investment would be attracted only if it could earn substantial returns, which would have to be repatriated from the country's foreign exchange. The return on foreign direct investment in the fast-growing East Asian countries during a several-year period had averaged over 15 percent. Investors were likely to demand even higher returns on investments in Egypt because of the perceived higher risks in the region. By retaining the option of borrowing, and thus demonstrating that Egypt was prepared to turn to other forms of finance, the authorities could strengthen their negotiating position vis-à-vis foreign investors and thereby be better placed to moderate the demands of such investors.

The next logical question was that if Egypt should indeed opt to utilize nonconcessional funds, what would be the prudent limits of borrowing?

A World Bank simulation explored this question. It found that if real GDP grew at 7 percent a year and exports of goods and services, including worker remittances, increased at 8 percent annually, Egypt could more than double its then amount of nonconcessional borrowing – to levels between \$2 billion in 1996 rising to \$3.1 billion ten years later – while still comfortably maintaining its status as a “moderately indebted” country.⁷ This would indicate a prudent level of borrowing, especially since the growth of foreign exchange earnings assumed by the study was less than that projected by the authorities. Borrowing at this level would leave adequate scope for other types of financing, such as concessional aid and direct foreign investment, and would be sufficient, in conjunction with the other available resources, to raise investment to the required level.

The authorities opted for a cautious middle ground. Their strategic decision was to admit nonconcessional borrowing but to limit it to the amount repaid in that year, thus keeping constant the outstanding amount of external debt. Various other criteria (described above) were also laid down as conditions for accepting a loan.

A question frequently asked is whether foreign aid has had a beneficial or a baleful effect on the Egyptian economy. This is not a question to which an irrefutable answer can be provided, not least because it is difficult to frame a universally endorsed counterfactual. There is a considerable literature on the general question of whether aid supplements or displaces domestic efforts, but a settled conclusion has not been reached. Recent large-scale studies by Burnside and Dollar (2000) and by the World Bank (1998b) concluded that, on average, aid had a rather minor impact on the growth of GDP per capita (partly because aid itself accounted on average for no more than 0.5 percent of GDP), and that it was most effective in promoting growth in countries with good governance and sound macroeconomic policies (especially low budget deficit, low inflation, and open to international trade). Examining the data for 56 developing countries over a 24-year period, World Bank (1998b: 2, 123) found that in countries with sound management at both the macroeconomic and institutional levels, 1 percent of GDP in aid raised the growth rate by about 0.5 percent and reduced poverty by 1 percent. Indeed, the report (p. 33) spoke of poor countries being held back not by a financing gap, but by an “institutions gap” and a “policy gap.”

Findings of the impact of aid on the performance of the Egyptian economy have been inconclusive. Critics of foreign aid argued that large donors imposed their own preferences on Egypt’s development pattern and distorted Egypt’s priorities. Even writers sympathetic to the cause of external aid admitted to instances where aid was likely to have done harm to areas of the Egyptian economy; thus, Weinbaum (1986: 52) reports USAID officials in Cairo acknowledging privately that their analyses

showed that food aid had a negative impact on domestic Egyptian wheat production. Critics also claimed that inadequate donor funds were committed to industrial investment, that too small a contribution was made to building up Egypt's productive capacity, and that the deluge of concessional funds enabled policymakers to abstain from structural reforms that would have improved the efficiency of the Egyptian economy.

Supporters of foreign aid argue that it is difficult to provide a categorical assessment of the foregoing objections, because they contrast actual events with a hypothetical situation, the outcome of which can only be conjectural. On the other hand, the availability of additional financing and modern technology indisputably made a vital difference to the productivity of the Egyptian economy; for example, through the expansion of the infrastructure.

The idea of a significant distortion of Egypt's investment pattern because of a mismatch between the priorities of donors and those of Egypt also tends to get short shrift from aid advocates. They point out that whether or not to accept aid for a particular activity, project, or sector was ultimately an Egyptian decision. Moreover, there is no necessary reason why total investment in the presence of foreign assistance should be less than in its absence, and there was nothing to prevent Egypt from using its own resources to support its priorities. If total investment from Egypt's own resources plus the very substantial foreign assistance was still inadequate for Egypt's aims, it must raise questions about the vigor of the country's efforts to mobilize domestic savings. The modest rates of the latter throughout 1960–2000 suggest that in the preferences of policymakers, consumption counted for more than savings.

Moreover, it is not at all evident that policymakers would have gone in for painful structural reforms had concessional assistance not been available. Little in the experience of Egypt during 1960–90 suggests that structural reform was a priority, no matter whether resources were expanding rapidly (for example, as in 1975–81), or whether they were being compressed (as after 1982 because of falling oil prices). Until the 1990s, there appeared to be little urgency to make public sector enterprises more efficient or to privatize them, to reduce explicit and implicit consumer subsidies, to increase the buoyancy of budget revenues, to correct an overvalued exchange rate, to remove the anti-export bias of the trade protection system, to make the banking system more efficient and lower the costs of intermediation, to reduce monopolistic influences in the economy and increase competition, to reform the bureaucracy in order to speed up decision-making and reduce transactions costs, and so on. A perceived shortage of resources was chiefly addressed by increasing external borrowing, even on hard commercial terms. It is not surprising that in 1960–90 the country witnessed a cycle of high borrowing, followed by a debt crisis, followed by the intervention of various *dei ex machina*, such as the Paris Club or the GODE, to bail out the economy.⁸

The experience of these decades cannot but nourish the suspicion that less concessional assistance would only have provoked more commercial borrowing, not economic restructuring. But the lack of agreement on what might have happened in the absence of aid makes it impossible to render a definitive judgment on the extent to which external assistance helped or hindered Egypt's development. Handoussa (1991c: 223) describes the effects of the massive aid flows as "a mixed blessing." Indeed, the assistance has not been an undiluted godsend, but the proportions within the mixture are likely to be tilted heavily towards the positive.

It might be useful to pause at this stage and to consider the state of the economy and the policymaking process at the end of what might be termed the first phase of the open door period, that is, about the middle of 1982. Despite the improvement in the aggregate growth rate and of a number of sectoral indicators since 1974, the economy continued to contain many structural rigidities. The most important were the following.

The system of prices and incentives was seriously distorted and resulted in many uneconomic allocations of investment and waste of resources

"The distortions characterizing prices and incentives in Egypt are of a staggering magnitude," commented the World Bank (1983: 385–6). The prices of most inputs and outputs were fixed by the government. This often gave out faulty signals concerning the economics of the activities and hence vitiated the basis for decisions on investment and production. Moreover, as a result of the previous shortages of foreign exchange and the imperatives of political relationships, Egypt had been more or less locked into acquiring technology from the communist countries, which frequently had been developed without reference to its economic merits.

The combinations of arbitrary prices, segmented decision-making, and restrictions on the country's access to technology led to some very perverse results. A World Bank study (1983: 293–5) reported several instances of industries in which value-added was negative when computed at international prices; major sectors included chemicals, basic metals, transport equipment, and china and glass. This meant that large numbers of establishments in these sectors used more foreign exchange to purchase the intermediate materials that they used in production than they generated or saved in foreign exchange from the output produced. The same report (360–2) also identified a number of activities whose private profitability was substantial even though their social profitability (i.e. measured at economic or shadow prices) was negative; these included artificial fibers, aluminum, nonferrous metals, steel pipes, motor vehicles, consumer electronics, and china and glass. The social and private profitabilities diverged because of the inconsistent pricing of foreign exchange and inputs such as energy, as well as of outputs, and occurred in both industry and agriculture. In the latter sector, the divergence chiefly resulted

because to farmers, water was a free good, even though for the country it was the resource in shortest supply.⁹

For many years, Egypt's basic economic strategy was one of import-substitution, and the philosophy was to produce everything that could be produced within the country, often without much concern for costs. Tariffs and trade barriers ensured that public sector enterprises enjoyed near absolute freedom from import competition. The distorted economic signals and segmented decision-making had important microeconomic consequences. They encouraged a narrow approach to project selection, in which the ability to produce a particular commodity could be all important, while the economic costs of producing it received only cursory attention. Such an attitude could justify the use of very inefficient technologies. An examination by the World Bank of a draft input–output table in the late 1970s raised a concern that, if the document's figures were taken seriously, some production activities might not even satisfy the Hawkins–Simon conditions. These conditions on the Leontief input–output system stipulate that the production of one unit of a good must not require, directly and indirectly, more than one unit of itself. The violation of these conditions obviously means that the activity is not sustainable. As Dorfman *et al.* (1958: 211) remark, “A production process in which it took more than 1 ton of [say] coal to make 1 ton of coal . . . is not a method of production at all, but just a hard way of running down preexisting stocks of coal.”

The exchange rate and the structure of protection favored imports rather than exports, and distorted investment allocations

This inhibited the development of non-traditional exports and resulted in Egypt's suffering from a persistent deficit on the balance of payments. In turn, the financing of this deficit required borrowing from abroad, part of which took the form of short-term credits. Moreover, these short-term credits were obtained from Western banks, but exports to the West were lagging because of poor technology and an overvalued exchange rate.

The exchange rate was affected by the surge in receipts from the “Big Five” (petroleum, Suez Canal dues, worker remittances, tourism, and foreign aid), which together accounted for well over 80 percent of total foreign exchange earnings. The performance of these inflows, especially of receipts from Suez Canal dues, oil exports, worker remittances, and foreign aid, was largely independent of the productivity in the rest of the economy, and yet their growth provided the main support to the Egyptian balance of payments. These four windfall items brought Egypt about \$1.8 billion in 1975; in 1981, receipts from them approached \$7 billion. The contribution of these items soon dominated Egypt's foreign exchange earnings. For example, oil exports rose sharply from 10 percent of total merchandise exports in 1975 to 73 percent in 1982; for this period as a

whole, earnings from petroleum provided 47 percent of total merchandise earnings; for the five-year period up to 1982 they accounted for nearly 63 percent. Similarly, worker remittances for the period 1975 to 1982 accounted for 43 percent of receipts from services; for the most recent five years the figure was 53 percent. Taken together, the share of petroleum exports and worker remittances in total foreign exchange earnings averaged 45 percent between 1975 and 1982; for the last five years they amounted to nearly 58 percent. The exchange rate that could be supported by the available supply of foreign exchange (given existing tariffs and other barriers to imports) from the Big Five over-valued the Egyptian pound relative to the productivity of the rest of the economy. And this over-valued exchange rate made it very difficult to increase non-traditional exports.

The over-valued exchange rate also distorted the profitability between different investments. It made investment in nontradables more profitable than in tradables. A study by Egypt's Ministry of Economy (1981: 80–1) accepted that the existing mix of exchange rate and monetary policy had produced negative real interest rates and encouraged investment in construction, especially of high-rise apartments and office buildings. The distorted exchange rate, by favoring capital-intensive rather than labor-intensive projects, also kept employment lower than it need have been and thus hindered the country's efforts to reduce poverty.

The exchange and trade system remained highly complex and fragmented

Exchange transactions took place in three pools: the Central Bank, the commercial bank, and the "own exchange" market. The last of these was created in 1976 through legislation permitting residents to hold foreign exchange and to engage in any transaction, provided that they took place through commercial bank accounts. The principal source of supply for this market was remittances from Egyptians working abroad. The Central Bank pool was reserved for transactions by the central government and certain government authorities, while all the remaining transactions covered by the foreign exchange budget (mainly by public sector companies) took place through the commercial banks. The operation of the exchange system was characterized by infrequent and small adjustment of the officially set exchange rates, which resulted in large differentials for a sustained period, between those rates and the "own exchange market" rate.¹⁰

The exchange rate applying to transactions through the Central Bank had been unchanged since January 1, 1979 (at which time the buying and selling rates for the US dollar had been set at LE 0.700 and LE 0.707 respectively, per US\$). This rate applied to proceeds from exports of petroleum, cotton, and rice, as well as from Suez Canal dues, and to payments

for imports of five essential foodstuffs (including wheat), insecticides, and fertilizers, as well as for public sector external debt servicing. A different rate applied to transactions through the commercial banks, notably those in respect of workers' remittances, tourist receipts, and some exports. The commercial bank exchange rate was also established by the authorities, and remained unadjusted for substantial periods (at the end of 1981 it stood at LE 0.79 for buying and LE 0.80 for selling per US\$). Most private sector imports took place in the "own exchange" market at a freely fluctuating exchange rate, which had depreciated sharply from LE 0.77 = US\$1 in January 1979 to LE 1.06 = US\$1 at the end of 1981.

The budget contained many structural rigidities

Three features dominated fiscal trends: (1) the increase in total government expenditure as a proportion of GDP; (2) the high levels of overall budget deficit; and (3) the vulnerability of the budget to external forces. Total expenditure increased from 48 percent of GDP in 1974 to 63 percent in 1982. The overall fiscal deficit averaged about 20 percent of GDP, but the year-to-year fluctuations were considerable, ranging from a low of 17 percent of GDP in 1977 to 27 percent in 1979. Moreover, the relative variability of the income and expenditure streams (as measured by the coefficient of variation) differed sharply.

As Chapter 6 discusses in more detail, the high deficit and the budget instability resulted from a basic structural weakness, namely, budgetary revenues were susceptible to exogenous influences while expenditures moved closely in line with domestic inflation. The exogenous influences were transmitted through the growing dependence of the budget on petroleum and Suez Canal revenues. The increased availability of the profits and taxes from these two activities enabled the government to avoid raising other taxes and public sector prices, with the consequent erosion in the government's ability to mobilize public sector savings from the domestic economy. The ratio of exogenous revenue to total revenue increased from less than 10 percent to over 35 percent during the period under review; more importantly, the ratio fluctuated widely, jumping from 15 percent in 1979 to 35 percent in 1981 and dropping to 27 percent in 1982. The budget's vulnerability to very different factors on the revenue and expenditure sides, and to the very different amplitude and timing of the fluctuations in the two series, created serious problems for short-term economic management.

These difficulties were compounded by the relative inflexibility of domestic non-bank and external financing sources. Consequently, the deficits were largely accommodated by the domestic banking system. Between 1975 and 1981 the overall deficit averaged nearly 23 percent and its financing from the banking system about 14 percent of GDP. As a result, liquidity expanded and prices steadily rose.

The economy was dominated by the government's activities, and by public enterprises that were sheltered from competition

The government's dominant presence in the economy hardly changed. The World Bank (1983: ii) estimated that even by 1981, i.e. seven years after the introduction of the *infitah*, the public sector accounted for 40 percent of total employment, 54 percent of value-added, over 60 percent of total expenditure, and 70 percent of total investment.

In general, public enterprises suffered from over-staffing, poor technology, nonprofessional management, and were structured as monopolies with no incentive to improve efficiency. Their deficits continued to be financed from the budget or at low rates of interest from the public sector banks. They also suffered little penalty if they did not repay their debts to the banks or to other government entities (e.g. there were large arrears from many public enterprises to the public authority for electricity) and thus constituted a drag on the financial system.

There was little pressure to improve the efficiency with which capital was used, particularly in the sectors in which public enterprises played the major role

A study for the Ministry of Economy (1981: 18–19) estimated the incremental capital:output ratio (ICOR) for manufacturing between 1974 and 1979 at 5.56; even after correcting for depreciation the figure would be about 5.0. This is very high by international standards for manufacturing; the study concluded that even after recognizing weaknesses in the data, the low productivity of capital in Egyptian manufacturing was incontrovertible. For agriculture the ICOR was 3.96, for the commodity sectors as a whole it was 4.75; again both were high by international standards.¹¹

The economy was being managed by tools that did not respond quickly to changing circumstances

- 1 Despite the preponderance of the public sector in the economy, fiscal policy was not used actively as an instrument of stabilization policy. For example, in attempting to control inflation the authorities relied heavily on direct price controls, effected mainly through direct subsidies and policies that regulated the prices of the output of public enterprises. Fiscal developments consequently tended simply to reflect other government policies (such as those relating to pricing, employment, and investment), as well as exogenous factors (such as international price movements and defence requirements).
- 2 Monetary policy was hamstrung by other factors. New issues of government securities sold to commercial banks generally carried low rates of interest and since the banks had the right to discount them with

the Central Bank, they promptly did so. Therefore, the initial purchases by the banks had only a momentary impact on their liquidity, and the accumulation of government securities with the Central Bank precluded the development of a secondary market and eliminated the possibility of open-market operations.

- 3 The combination of fragmented exchange markets and the government's rigid pricing policy hampered the use of the exchange rate as an instrument of policy. It was difficult to compute indices of real effective exchange rates, and thus to judge competitiveness. The difficulty arose because, in addition to the problems of selecting the appropriate weight, one also had to choose between the three exchange rates that existed for most of the period, none of which might be the appropriate one for this purpose.

The rigid pricing structure also prevented a large proportion of commercial transactions from responding quickly to changes in the exchange rate. For example, most exchange transactions through the Central Bank were insensitive to the exchange rate either because of the nature of the related economic activity (e.g. Suez Canal dues) or because an exchange rate change would not be directly reflected in domestic prices (this would apply to commodities such as petroleum, cotton, rice, and imported foodstuffs).

Transactions through the commercial banks were sensitive to the exchange rate, as a change in the latter would normally be reflected in domestic prices. But many of the transactions through the commercial banks could be diverted to the own-exchange market, the amount of such diversion depending on the exchange spread between the two markets. Owing to this close interrelationship between the two markets, a failure to adjust the commercial bank rate in line with the depreciating own-exchange market rate reduced the inflow of foreign exchange into commercial banks. Until the end of 1982, receipts from non-oil exports (other than cotton and rice) had to be surrendered to the Central Bank of Egypt at the commercial bank rate. When a large differential arose between the commercial bank rate and the own-exchange market rate, this arrangement discriminated in favor of import-competing activities and against exports.

The framework for policy-making and economic management was not congruent with the requirements of the new economic structure

The most important discrepancy applied to the system of economic planning. The strategy outlined in the plans from 1975 was intended to recognize the new direction of economic policy, the *infitah*, by projecting private investment at much higher levels than in previous plans. However, such projections overlooked an important asymmetry in dealing with the

private sector – the authorities could easily *prevent* the private sector from doing something (by passing a law or by administratively denying it access to some vital input), but it was much more difficult to *make* the private sector do something. The authorities could only provide incentives, which might or might not be sufficient to prompt the desired response. Moreover, the financial incentives offered might be swamped by more important disincentives, such as the fear of nationalization or confiscation of assets.

To sum up, while according to the “open door” pronouncements the economy was supposed to behave like a free market economy, government interventions continued to create serious distortions. Moreover, the tools for managing a liberal economy were missing or their functioning only imperfectly comprehended.

While some of these shortcomings might be shrugged off as mere technical matters that would be corrected as more experience was gained, the basic weakness in policy guidance came from a lack of clarity about the direction that the economy should take. The government went far towards accepting this as a source of confusion; the prologue to the 1978–82 Plan expressed the dilemma very forcefully:

More and more young people and workers perceive the contradictions of a socialist society which thinks with a capitalist mind, which takes from socialism and communism the concepts of public ownership, dominance of the public sector, guaranteed employment, education, services and social security, but neglects to take firm enforcement of civil authority or condemnation of the carelessness which decreases productivity. Similarly, the government has taken from capitalism the features of consumption and interclass mobility, the concept of the importance of the individual and of historical tradition. But it has not adopted from the capitalist system the stringency of market competition or the responsibility of the firm for quality control, upon which depends the success or failure of the firm.

The end result is a society lacking discipline or supervision, distribution without production, promises without obligations, freedom without responsibility.¹²

The authorities’ response to the resource pressures and structural rigidities emphasized gradualism. In part, this arose from a concern about the strains that too rapid a change in the economic structure would impose on the social fabric; the lessons of the 1977 budget measures and the subsequent riots were only too deeply etched into the psyches of the policy-makers. Cabinet discussions on reducing subsidies or otherwise adjusting prices towards market levels were invariably dominated by concerns about the effects of such measures on the country’s internal stability. And it did not seem to matter much which subsidies were under review (even ciga-

rettes were subsidized). Whenever the rationalization of subsidies came before Cabinet, “Up would go the Minister of Interior’s hand and he would insist that he could not be responsible for the security situation in such circumstances,” said Ali Lotfi, a former Finance and Prime Minister.¹³

In part, however, it was made possible by Egypt’s relationship with the major Western powers. This relationship had two results. First, it gave Egypt access to large amounts of financial resources that were to be repaid in a political, and not economic, coin. The political nature of the aid relationship was stressed by several writers. Thus, for example, after detailing the amounts of US aid and investment, Dessouki (1996: 164–6) concluded that “These amounts cannot be justified in economic terms alone.” He quoted a report of the US General Accounting Office submitted to the Congress in 1989 that stated bluntly, “If aid to Egypt were considered purely on economic or developmental grounds, Egypt would have received annual obligations of not more than \$100–200 million.”¹⁴ At the time, US aid to Egypt amounted annually to \$815 million in economic and \$1.3 billion in military assistance. Very substantial amounts of assistance were also offered by Japan, the European Union, individual European countries, and, of course, Arab countries and institutions. This large volume of soft money could have been used to cushion the more painful aspects of structural reform and thus made such reform more palatable, but apparently the necessity of economic restructuring did not bulk large in the thinking of either the Egyptian authorities or the donors. The latter called for reform, but continued to support unreformed policies and showed little urgency to repair this incongruity. In this sense, the leading aid donors must be seen as contributors to the slow pace of structural reform.

Second, the political relationship gave Egypt the opportunity to “play the American card” in its dealings with other donors. This was especially effective with the IMF and the World Bank, in which the United States was the principal shareholder. Several examples of Egypt’s co-opting the United States to pressure the Fund are documented by Richards (1991) and in various issues of the *Middle East Economic Digest*.¹⁵ Another good example is furnished by the experience of the Consultative Group for 1979. In September 1979 it appeared that the World Bank was reluctant to hold a meeting of the Consultative Group for Egypt. Dr Hamed El Sayeh (the Minister of Economy and International Cooperation) asked the United States ambassador to have Robert Strauss (at the time President Carter’s special representative for the Middle East) call on the World Bank’s President, Robert McNamara, and prevail on him to hold a meeting of the Consultative Group within that calendar year. The Minister argued that meetings of the Group had been held in 1977 and 1978. Not holding one in 1979, after President Sadat had visited Jerusalem and thereby incurred the hostility of the Arab countries, would send an unfortunate political signal, namely, that the West also had abandoned Egypt.

In the event, intervention by Robert Strauss proved unnecessary; an assistant Secretary of State telephoned McNamara and was assured that a meeting of the Consultative Group would take place before the end of the year. The meeting was held in Aswan on December 20th.

Commentators generally blamed tardy policy response and lack of an effective champion (whether individual or group) for the lackluster performance of the economy. The structure and dynamics of economic decision-making thus came in for a considerable amount of discussion. Some writers – for example, Cooper (1982), Richards (1984) – pointed to features embedded in Egypt’s political and economic system that stood in the way of major policy changes. Richards argued that:

It is increasingly clear why the state persists with its current set of inefficient and inequitable policies, and why it can get away with it: The class structure engenders policy stasis, while international rents permit the state to avoid the balance of payments crises and other pressures for change which would otherwise result from such inaction.

He identified the class that most stood in the way of change as being composed of the old elites who had intermingled with the upper layers of the technocracy. The rents that had rescued Egypt from the worst pressures of economic problems were: (1) oil rents, either directly in the form of petroleum exports, or indirectly as worker remittances and Suez Canal revenues; and (2) locational rents, in the form of tourist receipts or as international aid provided to Egypt because of its strategic location.

Other commentators elaborated this basic argument, sometimes with additional distinctions. Weiss and Wurzel (1998: 169) charged that the ruling elite was not unambiguously supportive of economic reform, because basic changes in the economy would require greater political liberalization than those in power were prepared to concede. Therefore, they argued, “There [was] no broad political coalition in favor of reform and international competitiveness,” and that Egypt’s political and administrative culture remained dominated by a pattern of “neo-pharaonic control.”

Mason (1984: 10–11) contended that the most important factor affecting the economic growth of Egypt was the position that the goal of development actually occupied in the priorities of the policymakers. He pointed out that Korea and Egypt were two countries with, in 1979, similar size of population, endowment of arable land, structure of production, and authoritarian nature of government, but had had very contrasting experience of economic growth since the 1960s. Mason highlighted the reason as being differences in the objectives of the two governments. In Korea, the primary purpose of government was to facilitate economic growth; he quoted President Park, who initiated Korea’s development

drive: “In human life, economics precedes politics or culture.” In Mason’s view, the primary objective of the Egyptian government was not economic development. President Nasser’s purpose in his early years was to lead the Arab world; President Sadat’s primary attention was devoted to foreign affairs and security. This led to very different results in the conduct of policy in the two countries. In economic policy, Egypt was inward-looking, while the primary political objectives of government concerned the outside world. In Korea, economic policy was outward-looking, while its primary political concern was with internal development.

Hansen (1991: 250–4) argued that the authorities relied on an implicit social compact between the government and the populace, with “the latter offering acquiescence and surrender of political rights in return for *la dolce vita*.” Comparing the impact of exogenous factors on the Egyptian economy and of the country’s own policies, he concluded that “Egypt’s main enemy has been Egypt.”

Holt and Roe (1993: 216–21) assigned the main responsibility for hesitant economic policymaking to the governments’ lack of political legitimacy. Not having a popular mandate, Egyptian regimes were disinclined to call for sacrifices that might benefit the country in the long run. Governments therefore lacked the will to act decisively. Holt and Roe argued further that the Egyptian government consisted of a set of powerful ministries, each of which had strong vested interests that would be hurt by one or other element of a comprehensive reform package. Any general reform package would face the opposition of a sufficient number of powerful ministries to frustrate action. Governments thus lacked the capacity to act expeditiously.

No doubt such structural tensions played an important role, but equally critical was the environment in which policies were made. A major factor responsible for the cautious and hesitant policymaking was the rapid turnover of ministers in the economic team. The following incident might illustrate the problem. In early 1981 the Deputy Prime Minister for Economic Affairs, Dr Abdel Meguid, tabled at a Cabinet meeting a wide range of issues, including the exchange rate, subsidies, the restructuring of loss-making public enterprises, and the introduction of competition into the banking sector. This meeting came after a long process of consultation, and he appeared optimistic of getting support from his colleagues for action in these areas. However, after the meeting he told me that the Cabinet had not managed to reach any decisions. “It was the usual thing,” he said, “everyone wanted to go to heaven, but no one was prepared to die.” After a pause he added, “I suppose the most sobering thought for any politician is that *he* should die, and that because of this his successor should be able to go to heaven.”

And therein lay the rub. Ministers were prepared to support measures that created austerity only if they could be certain of still being in office when the benefits of these policies arrived. But no one could guarantee

that this would be the case. One can hardly blame ministers for wanting to avoid certain and immediate criticism for the sake of some uncertain felicity in the future when the evidence pointed to a rather short ministerial shelf life. Between 1973 and 1980 there were seven changes of Finance Ministers, seven of Planning Ministers, five of Ministers of Economy, and four of Ministers of International Trade.¹⁶ This mortality rate did nothing to encourage ministers to take the long view. As a former Minister of Economy remarked: “[Ministers] do not necessarily support reform; they just want the results of reform.”

Perhaps the ministers’ fears of acting on sensitive subjects, such as the cost of living subsidies and the exchange rate, were not without foundation. In a classic examination of 24 devaluations between 1953 and 1966, Cooper (1971: 28–9) found that in about 30 percent of the cases the government fell within one year, compared with only 14 percent in a random control group of similar countries that did not devalue. There were also some important near misses, where the government came under intense criticism for its decision to devalue, but survived for more than a year. Ministers of Finance did much worse: nearly 60 percent of them lost their jobs in the year following devaluation, compared with 18 percent in the control group.

Some observers, for example Weiss (1993), attributed the hesitancy of Egyptian policymaking to institutional tensions that they saw as inherent in the political structure. “Any successes are the President’s. Mistakes are the Prime Minister’s.” In Weiss’s view, the President would be reluctant to see an overly successful Prime Minister in case the latter developed into a potential rival. Inertia in policymaking was guaranteed by the dilemma that:

On the one hand, the President would be more than reluctant to see an effective reform structure become established in the Prime Minister’s office [for fear that it would become too successful]. On the other hand, the President himself would not assume this task [for fear that it would fail].¹⁷

It should be noted that Weiss made these remarks on the turnover of ministers and on the institutional tensions between the Presidency and the Prime Minister in the context of President Sadat’s governments. Under President Hosni Mubarak the incumbency of ministers became much more stable.

External debt-based growth, 1982–87

The story of macroeconomic performance in 1982–87 is largely that of a sharp drop in oil prices and of the authorities’ attempts to continue rapid GDP growth in the face of falling oil revenues. Oil exports had come to

account for a very substantial weight in the Egyptian economy, affecting not only foreign exchange earnings and the domestic budget, but also contributing in substantial measure to the GDP and its constituents.¹⁸ Fluctuations in earnings from oil, therefore, created instability in several key economic variables.

Petroleum export prices plummeted from an average of \$33.60 per barrel (weighted according to the prices received and the shares contributed by each oilfield in exports) in 1981 to \$14.29 per barrel in 1987; in real terms the decrease of course was even worse. The collapse in revenues from petroleum resulted in the share of oil in GDP rapidly dwindling from 16.6 percent in 1981 to 5.4 percent in 1987, in exports from 74 percent to 37 percent, and in government revenues from over 20 percent to 9 percent. The fall in oil prices caused Egypt's terms of trade to deteriorate by nearly 40 percent between 1982 and 1987; the World Bank estimated the income effect of this deterioration at 11 percent of GDP and 39 percent of exports. Egypt's total foreign exchange earnings in 1987 were 2 percent lower than in 1981 expressed in current dollars and nearly 12 percent lower expressed in real import capacity.

This rapid contraction in resources called for an equally swift policy response to mobilize alternative sources of finance to maintain the desired level of investment. However, the economy was not sufficiently flexible to generate a due measure of additional savings (e.g. from more exports), nor did policies try to increase productivity so as to generate the same rate of GDP growth from a lower level of investment. The government, nevertheless, continued to maintain expansionary economic policies.

The incentive system continued to discriminate against exports. Between 1982 and 1987, the real effective exchange rate appreciated by 32 percent.¹⁹ This was over and above the nearly 28 percent appreciation already registered between 1970 and 1982 and resulted from the operation of the "Big Five" discussed earlier. As a result, Egyptian non-oil exports were severely discouraged. The disincentive was heightened by the tariff structure and the domestic price control and tax systems, which favored domestic sales over exports. As if that were not enough, the World Bank lamented that export-oriented firms had to navigate through numerous administrative encumbrances, complicated duty drawback schemes, bank guarantees, travel allowances, export credit insurance, and procedures for transfer of export proceeds.

The overvalued exchange rate made capital artificially cheaper and increased the bias towards capital-intensive projects. The increasing capital intensity of projects is illustrated by the worsening of the economy-wide incremental capital:output ratio (ICOR) from 2.5 in 1976–81 to 6.5 in 1984–88. This also suggests substantial inefficiency of investment, as this rapidly increasing capital:output ratio was not commensurate with the rate of GDP growth. The seriously overvalued exchange rate, the system of tight import controls, the extremely low domestic energy prices, the low

interest rates, and the tight import controls delivered price signals that did not reflect the country's comparative advantage. The result was suboptimal investment allocations, which stressed capital- and energy-intensive projects, while neglecting labor-intensive investments in agriculture and in the processing of domestic raw materials.

The GDP continued to grow at an average annual rate of about 6 percent in 1982–85, but investment was increasingly financed by external borrowing, both long- and short-term. With interest payments on external debt tripling between 1982 and 1987 and declining worker remittances, net factor service incomes turned negative in 1986, bringing the current account deficit to a peak of more than (minus) 15 percent of GDP. Even with official capital grants averaging nearly \$1.2 billion and an increase in special cash grants from the United States, the financing gap became too large for Egypt to maintain its debt-servicing obligations. In 1984–87, arrears increased by an average of \$1.7 billion a year. Total debt outstanding exceeded \$40 billion by June 1987, equivalent to 112 percent of GDP. This last figure is calculated using the official exchange rate; it works out at about 184 percent if calculated at the prevailing free market rate, which would have made Egypt the most heavily indebted major debtor country in the world.²⁰ The total debt service due continued to mount, and in 1986 reached 114 percent of current account receipts and over 7 percent of GDP. Egypt was in no position to pay these amounts and its foreign debt arrears increased further. By June 1986, arrears had risen to \$4.3 billion, of which 47 percent represented interest payments. The situation was only brought under control, temporarily, by a Paris Club rescheduling in May 1987.

3 Economic development and policymaking, 1987–2000

The period started with a crisis and was punctuated by financial difficulties that were only resolved through extensive debt forgiveness and rearrangement. These years were also notable for the implementation of a major stabilization program and for a start on some important aspects of structural reform.

Egypt's debt crisis of 1987 was not caused by a sudden or unexpected shock. There was not the sudden collapse of a fault line; rather, the cumulative effects of the heavy external borrowing that the country had engaged in since 1975 began to dominate the economic landscape. The approach of a climacteric had been recognized for some time – a multinational bank monitoring the Egyptian economy described the event as “one of the slowest train wrecks in history.” The crisis resulted from a loss of confidence on the part of Egypt's creditors and the inadequate growth of the country's foreign exchange earnings. Non-oil exports did not increase sufficiently to compensate for falling oil revenues, and this set in motion a relentless increase in indebtedness and debt service obligations. Foreign creditors lost confidence and cut back new commitments, particularly of supplier credits.

Egypt found itself in a debt trap in which capital inflows were increasingly consumed by debt servicing. In 1979, nearly 40 percent of gross disbursement of foreign civilian loans and credits was used to finance new investments, while about 60 percent went to service the foreign debt (interest and amortization). With gross disbursements declining and debt service payments increasing sharply, in 1982 virtually all new borrowing was used to finance the debt service. By 1987, the gross inflow of new loans had declined to nearly half its peak five years earlier, and covered less than half the debt service actually paid, which in turn was less than two-thirds of the debt service payments falling due. Large arrears accumulated and shut Egypt out of international capital markets.

Under the auspices of the Paris Club, in May 1987 Egypt and the major bilateral donor countries reached a rescheduling agreement. Total arrears of \$6.9 billion outstanding at that time were rescheduled, plus all interest and amortization payments (amounting to \$4.4 billion) on medium- and

long-term loans falling due until June 30, 1988. These debts were rescheduled over ten years, including a five-year grace period.

The agreement only palliated the problem, rather than resolve it. Even the partial debt service paid amounted to 36 percent of current account receipts – well beyond the ratio of 25 percent after which the World Bank normally becomes concerned about a country's creditworthiness. Some calculations by the World Bank indicated that even after excluding future financing needs, the debt stock at the end of June 1988 would have required debt service payments of almost \$5.6 billion annually in 1989–92. Including projected financing needs, these payments were likely to rise to \$9 billion, corresponding to nearly 45 percent of Egypt's projected export earnings in 1995, when the rescheduling period ended.

The main cause of rising external debt was the expansionary policy, exemplified by high budget deficits and a relaxed monetary stance. The consolidated budget deficit of the government, excluding debt and amortization, reached 23 percent of GDP in 1986. These deficits were caused primarily by declining revenues, which fell from 40 percent of GDP in 1982 to 24 percent in 1988. About half the decline was directly attributable to oil revenues (including tax and transferred profits), which dropped from 7.9 percent of GDP in 1982 to 2.5 percent in 1987.

The authorities tried to limit the deficit by cutting expenditures, particularly on explicit subsidies, which at the end of this period accounted for a little over 5 percent of GDP, compared with more than 13 percent only five years earlier. However, the implicit subsidies, especially the very low retail prices for energy and power in the domestic market and the overvalued exchange rate used to import most basic foodstuffs, must be added to the explicit ones. Both these implicit subsidies represented revenues forgone by the government and together they accounted for nearly 15 percent of GDP.¹ Thus the total subsidy burden remained large, and during this sub-period the government spent about as much on subsidies as on investments. Unfortunately, the bulk of these subsidies did not benefit the poorest strata of society. The World Bank estimated that only about 17 percent of the flow of subsidies benefited the poorest 20 percent of the population; in 1988, nearly one-fourth of the subsidies, principally the implicit, went to the richest 20 percent of the population.

Interest rates (both lending and deposit) were kept low and remained mostly negative in real terms for the entire sub-period. Low interest rates discouraged enterprises from self-financing and thus lowered business savings. A World Bank study concluded that a major factor in the financial difficulties experienced by Egyptian public enterprises was the inappropriate financial base caused by high debt:equity ratios – a consequence of making debt artificially cheap. Even more harmful were the low deposit rates which depressed domestic savings, especially workers' remittances. A further drawback to mobilizing resources was the relatively free system of capital transfers, which encouraged Egyptians to hold deposits in foreign

currency. Holders of foreign currency accounts could expect a return equivalent to the international rate of interest plus a margin for the expected depreciation of the Egyptian pound. Given the wide difference between domestic and international interest rates, the incentive to hold foreign currency accounts was very strong.

Low interest rates and high budget deficits contributed to the expansionary credit and monetary policies during these years. The large budget deficits also led to the crowding out of credit to the private sector, hampering overall economic growth. The method of financing the deficits, with nearly half the amounts being provided by the domestic banking system, fuelled the excessive expansion of liquidity. Between 1982 and 1986 the money supply expanded on average in excess of 22 percent per annum while nominal GDP increased by only 16 percent. Despite extensive price controls, which implied fixed prices for staple products and cost-plus pricing for most public manufacturing goods and services, the consumer and wholesale price indexes both rose sharply after 1982; annual increases in the index of consumer prices for the urban population consistently remained above 16 percent. Even these figures represented a significant underestimate, both because of the methodology of the index's construction and of the growing importance in consumption of the free market in which prices were substantially higher than in the official.

Developments in the main causal factors determining the behavior of private sector liquidity can be seen from changes in reserve money (currency in circulation and Egyptian pound bank reserves) of the Central Bank and the money multiplier (the multiple between the Egyptian pound component of private sector liquidity and reserve money). The major factor determining reserve money was Central Bank financing of the fiscal deficit. In response to the increasing budget deficits, reserve money increased from about 3 percent of GDP in 1981 to 5.8 percent in 1986, and the money multiplier moved up from about 1.22 in June 1980 to 1.44 in February 1986. The IMF attributed the upward trend in the money multiplier to the decline in the currency:deposit ratio from 1.44 in June 1980 to 0.74 in February 1986, with variations about the trend determined by developments in the ratio of bank reserves to deposits.

Policy adjustment during the earlier part of the period (1987–91) was hesitant and piecemeal. Critics cast doubts on Egypt's commitment to reform, with Richards (1991: 1727) particularly scathing on Egypt's negotiating tactics with international agencies:

Several tactics supported this strategy [of dilatory reform]. One tactic was to promise much and to deliver little: The GOE constantly proclaimed "bold new reforms" throughout the economy, it actually did little in comparison with the IMF's recommendations and even less in comparison with the magnitude of the economic problems facing the

country in the 1990s. Negotiating tactics included “numbers games,” “smokescreens,” and “musical ministers.” Calculations of inflation rates, the GDP, and government revenues and spending can be distorted, concealed, and simply falsified. . . . The government created interministerial committees with overlapping jurisdictions to confuse outsiders – no one knew who was really in charge (if, indeed, anyone was). . . . Finally, World Bank and IMF teams often met with the GOE negotiating team composed of four or five ministers, all of whom disagreed with each other; the composition of the team changed from day-to-day, as “important business” took one member away, leading to his temporary replacement with someone else. Such tactics helped to postpone a break with the IMF, buying time for Mr Mubarak to persuade Mr Bush to call Mr Camdessus [the Managing Director of the IMF].

Richards clearly expected this state of affairs to continue long into the future. He likened Egypt’s acting on economic reform to the final scene from Samuel Beckett’s *Waiting for Godot*, where the characters must resign themselves to accepting that they face a wait of an unknown, and possibly indefinite, duration.

In view of what happened with later rounds of reforms, this judgment may have been a little hasty. At the time of the 1987 negotiations, the demons of the 1977 bread riots had not yet been exorcized; policymakers were uncertain of the public’s reaction to the reforms proposed by the multilateral agencies, and felt compelled to proceed with caution. This better explains the drawn-out negotiations and the delaying tactics that were bound to frustrate the no doubt well-intentioned urgings of international institutions and to drive to distraction equally well-meaning commentators. Indeed, at the end of a lengthy report on the negotiations, a representative of the international financial institutions wrote that the most suitable encapsulation of their feelings during the process was provided by some lines of Rudyard Kipling in *The Naulakha*, to the effect that their epitaphs would describe them as fools who tried to hurry the East.

After 1987 the shortfall in resources began to take its toll on the GDP growth rate, which began to slow steadily; by 1991 real growth had dropped to 3.7 percent. The rising budget deficits, the accumulating debt, and the rising debt service were exacerbated by the Gulf crisis of 1990. Estimates of the direct economic loss to Egypt of that crisis ranged from \$2.5 billion upwards.

The situation was unsustainable. By 1991 the budget deficit had reached 15.3 percent of GDP; the money supply had increased in one year by 27.5 percent, and inflation was running at an annual rate of 14.7 percent. Confidence in the domestic currency was ebbing; the “dollarization ratio” (the share of total liquidity accounted for by foreign currency deposits) increased to nearly 50 percent. The external picture was equally

difficult: balance of payments deficits continued; foreign exchange reserves had dropped to \$3.9 billion (providing cover for only $3\frac{1}{2}$ months of foreign exchange payments); external debt in that year reached \$31.1 billion, or 28 percent of GDP;² more pertinently, the ratio of debt servicing to foreign exchange earnings climbed to nearly 55 percent. This amount could not be paid without substantially cutting imports, with severe consequences for production, investment, and per capita consumption. Accumulated debt service not paid in 1991 amounted to \$3,855 million, about 10 percent of GDP. With arrears again mounting rapidly, Egypt's creditworthiness suffered further blows.

At this time the authorities made a determined bid to rectify the situation. Egypt entered into negotiations with the International Monetary Fund and the World Bank. The Egyptian negotiating team (Kemal El Ganzoury, Atef Ebeid, Mohammed Ahmed El Razaz, Salah Hamed, Youssef Boutros Ghali) was technically strong and politically adept, and had the firm backing of the President and the Prime Minister. The negotiations were prolonged, but it was evident that the government was serious about trying to break the cycle of continuing crises. According to Youssef Boutros-Ghali (who was responsible for much of the technical work on the Egyptian side), the overriding instruction from President Hosni Mubarak to the team was to reach an agreement that would quickly trigger the debt relief arrangements offered by the Paris Club.³ The Bank and the Fund were equally serious about supporting a program that would deal not only with the immediate difficulties, but would also create a basis for sustained growth. Fortunately, Egypt's role in the Gulf war had inclined the major donors to look favorably on attempts to resuscitate the economy. They not only seconded the efforts of the international organizations, but also undertook bilateral actions, especially in the form of write-offs and reschedulings of Egypt's external debt.

The Bank and the Fund were concerned with two overarching aspects of Egypt's economic problems. The first was the immediate issue of stabilizing the economy and bringing into balance the main macroeconomic indicators. Second, structural reforms had to be undertaken that would minimize rigidities and free up the economy. In order to do this, the authorities would have to commit to visible actions demonstrating their determination to move towards a market economy. Only this would dissipate the ambiguity engendered by what the 1978–82 Plan had labeled "a socialist society that thinks with a capitalist mind."

The core of the discussions between the Bank/Fund and the Egyptian authorities comprised four strategic issues.

The first was the sequencing of reforms. A consensus was reached that stabilization would be coupled with a clear signal that the private sector would increasingly be provided a level field on which to compete with the public sector. Therefore, in addition to the usual measures associated with stabilization, a simultaneous move towards privatizing public enterprises,

especially those in the areas of production, distribution, and services would be made. The privatization measures were to exclude the “Economic Authorities” (such as the Suez Canal, the General Authority for Supply Commodities, etc.) from their ambit. It was hoped that the commencement of privatization in a vigorous manner would clearly signal that Egypt was looking to the private sector as the future engine of growth, while the preservation of Economic Authorities in the public sector would reassure the public that the country’s key assets would not be turned into private monopolies.

The second issue was the speed of the transition, sometimes expressed as a “big bang” versus gradualism. Several voices in the Bank and the Fund argued for shock therapy on the grounds that this was more likely to commit Egypt to a durable acquiescence in the new strategy. However, given the previous experience with the country, this was surely an unrealistic expectation; “make haste slowly” was the best that could be expected. The only area in which a big bang, in the sense of an abrupt and drastic change, might have been felt was budgetary expenditure on government investment, which in fact *imploded* from about 11.5 percent of GDP to 5.4 percent in the space of four years. But perhaps this should more properly be called a “big whimper.”

The third issue concerned the reform of the banking and financial sector. The outcome of this particular discussion remained muddled. The Bank and the Fund pushed for the early privatization of at least one of the public sector banks, and provided the authorities with some very detailed analyses of the financial sector to justify their concerns and to facilitate the formulation of the authorities’ policies. In the event, the government moved to gradually privatize only the joint venture banks. It was considered too sensitive to act on the major commercial banks, which even in 2000 remained wholly in the public domain.

The fourth major issue that had to be tackled was a realistic alignment of the exchange rate. For at least a decade and a half the authorities had resisted a meaningful devaluation of the exchange rate. The authorities offered various objections to devaluation, prime among which were the following:

- Devaluation would be inflationary. Devaluation would increase the cost of imported food, and thus require further budgetary allocations for subsidies (which had already reached 19 percent of total current expenditure in 1991). Moreover, public enterprise pricing was not on a cost-plus basis, so increases in the domestic prices of imported raw materials would decrease profits or increase losses. Devaluation would also require the government to generate more local currency to service the external debt. The foregoing outcomes would all increase the budget deficit. Egypt was already mobilizing a high level of resources through taxation; thus the increased budget deficits

might have to be financed through increased seigniorage and the inflation tax.

- Devaluation would lower future growth by increasing the price of investment, and would thus make it more difficult to meet the social and political targets for employment.
- The structure of Egypt's production was dominated by items for which world demand was not growing, while the country's consumption pattern was heavily weighted by necessities. Thus the elasticity of foreign demand for Egypt's exports, and Egypt's demand for imports were both low; hence, devaluation would neither increase exports nor reduce imports sufficiently to materially improve the balance of payments.
- A variant of the foregoing "elasticity pessimism" argument was that devaluation would not work because the pervasive system of controls and institutional impediments would weaken the supply response. According to this argument, devaluation was likely to succeed only if it formed part of a comprehensive package that liberalized large parts of the economy simultaneously with the exchange rate depreciation. But such a package was likely to require draconian measures and to carry too many politically unpalatable side-effects to be acceptable.

The foregoing points dominated the technical exchanges between Egypt and the international agencies. However, behind the technical façade, there lingered a memory from 1977 of the political consequences of pushing reform at too rapid a pace.

Egypt's experience under the program of stabilization and structural reform will now be examined in more detail.

The stabilization program

The Egyptian authorities concluded a standby agreement with the IMF in May 1991 and a program with the World Bank in November 1991. This arrangement, the Economic Reform and Structural Adjustment Program (ERSAP), aimed at stabilizing the economy and starting structural reform.

The program aimed at both the external accounts and the budgetary deficit, focusing especially on the links between the two. It sought to stabilize the external accounts by correcting and unifying the exchange rate. This, in turn, would help the budget by valuing imports at higher prices in terms of Egyptian currency and consequently increasing the revenues from import duties; in a like manner the measure increased the contribution of earnings from the Suez Canal. Again, cutting government expenditures would not only reduce the budget deficit, but would also reduce the demand for imports and thus move the external position closer into balance. The debt relief package would similarly ameliorate both external and internal balances, by reducing the foreign exchange requirements as well as the budgetary appropriations for debt servicing.

The correction of the fiscal imbalance employed all the standard tools of adjustment. The policy package comprised (1) demand management measures, including fiscal policies (such as widening the sales tax and reducing government investment expenditures), monetary policies (such as raising nominal interest rates to over 20 percent so as to make them positive in real terms); (2) expenditure switching measures, accomplished chiefly through exchange rate changes, which encouraged expenditures to be redirected from external to domestic markets; (3) financing measures, effected by creating a large differential between Egyptian interest rates and those available on US Treasury bills and Euromarket instruments, so as to attract higher capital inflows; and (4) structural measures that would stimulate improvements in productivity.

The last were particularly important if the package was not to turn into just another temporary analgesic. Extended discussions between the Egyptian authorities and the international financial institutions had created a consensus that Egypt's future lay in a competitive, market economy that was integrated into the global economic system.

A primary condition for the successful creation of a market-based economy was to give a clear signal that the private sector would henceforth be the leading sector. The duties of the public sector in the economy would be more clearly laid out – the Economic Authorities would continue to play a key role but, generally speaking, in matters of industry and services the public sector would no longer occupy a privileged position. The logical concomitant of this strategy was a decision to privatize most of the public sector enterprises engaged in industry and services, including financial services. Such a measure would at once give the apposite signal, transfer assets to the private sector where they were likely to be used more efficiently, and raise additional resources for the budget.

It was recognized that in the near-term these measures could have a negative impact on some groups; for example, a part of the labor force in public enterprises that were privatized would likely be made redundant. A Social Fund for Development was therefore set up to provide resources for retraining labor, for constructing public works with labor-intensive methods, and for extending credit to microenterprises. This would expand job opportunities and mitigate some of the negative impact of the reforms.

Action on the exchange rate involved unifying the multiple rates that existed in early 1991 and later adjusting them to correspond closer to market realities. The authorities, in fact, replaced the multiple rates into a dual exchange rate system before the agreement with the IMF. The new system became effective from February 27, 1991 and involved a devaluation of about 25 percent. Full unification of the exchange rate arrived on October 8, 1991; at that time the Egyptian pound was pegged to the US dollar.

The government also liberalized interest rates, effective from January 3, 1991. Initially, there was a minimum charge of 12 percent per annum on three-month deposits; this was dropped from 1993. In view of the tight monetary policy followed by the Central Bank of Egypt, the rate on three-month pound deposits climbed from an annualized 8.5 percent at the end of December 1990 to 17.2 percent at the end of January 1992. According to Abdel-Khalek (1998: 45), when compared with the London Inter-Bank Offered Rate (LIBOR), the interest differential jumped from 0.59 percentage points at the end of December 1990 to 13.02 points at the end of January 1992; the World Bank reported that compared with the yield on 90-day Certificates of Deposit in the USA, the differential was nearly 15 percentage points.

Experience under the stabilization program (1992–97)

The key imbalance in the economy was the budget deficit, which in the decade 1981–90 had averaged nearly 18 percent of GDP at current market prices. The dangers of excessive fiscal deficits were frequently raised in the negotiations between the Fund, the Bank, and the Egyptian government. The discussions ranged over several points, but the following tended to recur, and helped to shape the stabilization program.

- 1 Egypt had to face the issue of sustainability, i.e. how long could these deficits be financed? Deficits can be financed by printing money or by borrowing, domestically or internationally. In the view of the international agencies, Egypt had already used each of these methods to the point of a potential crisis. By printing money in excess of the demand for it generated by the growth of real GDP, the government had been levying an inflation tax on the populace. But the revenue from this tax is subject to a maximum set by the rate of inflation that the population considers “acceptable.” The inflation tax is discussed further in the chapter on public finance, which shows that the rate of the inflation tax had reached over 10 percent of GDP in some years, and was well above the average rate in developed and in most developing countries. Borrowing from abroad had already created a crisis in Egypt’s ability to service the debt; arrears had accumulated and Egypt had lost access to private capital markets. Debt rearrangements in 1987 had bought the country some time, but did not offer a long-term solution.

Moreover, Domar (1944) has shown that financing fiscal deficits by borrowing is unsustainable if the interest rate exceeds the growth rate of the GDP. In such cases, any primary deficits (the budget deficit excluding interest payments) net of the inflation tax would lead to an explosive ratio of debt to GDP. Egypt would then have to default on the debt, either explicitly, or implicitly through monetization and inflation.

- 2 Even if high fiscal deficits could be sustained, they would not be optimal for Egypt's development because they crowded out private investment. If private investment were crowded out by public consumption, the growth rate of GDP would directly be reduced. However, even if it were crowded out by public investment, the Bank and the Fund maintained that there would be a loss of growth because extensive international experience had shown public investment to be less productive than private investment.
- 3 High fiscal deficits reduced the flexibility of policy. In particular, they reduced the government's ability to respond to exogenous shocks, such as had occurred to Egypt with the fall in oil prices. And, of course, budget deficits reduced public savings and thereby national savings.

The authorities' actions under the stabilization program concentrated on the fiscal deficit, the exchange rate, and the interest rate. In the analysis that follows, the pre-stabilization period has been taken to be from the 1987 debt rearrangement to 1992, the stabilization period from 1992 until 1997, i.e. after the completion of the 1991–96 debt rearrangements.

The key to the adjustment was a sharp reduction of the budget deficit, from 15.3 percent of GDP at market prices in 1991 to 0.9 percent in 1997 (Figure 3.1). This reduction was achieved through both an increase in revenues and a decrease in expenditures, the former accounting for about 35 percent of the adjustment and the latter for about 65 percent.

Revenues were spurred by the devaluation, which increased the valuations of imports for duty purposes and also increased oil company profits and Suez Canal dues in domestic currency. Subramanian (1997) estimated that in 1992–97 the latter increased by 2 percent of GDP and the

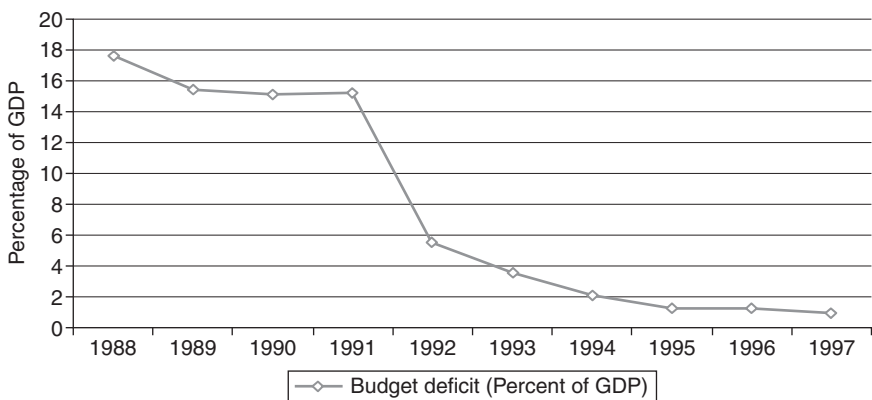


Figure 3.1 Budget deficit, 1988–97 (percent of GDP) (source: MOF; World Bank LDB).

former by 1 percent. In addition, the introduction of the sales tax in 1991 and the widening of its ambit during the period to 1997 contributed another 1.4 percent. Budgetary expenditures were cut by 7.5 percent of GDP between 1992 and 1997. The main items of reduced expenditures were public investment, subsidies, and interest on foreign loans. The items on which expenditures continued to rise were wages and salaries, and interest on domestic borrowing.

The biggest reduction was borne by expenditure on government investment, which fell from 11.5 percent to 5.4 percent of GDP. This was in keeping with the government's strategy of relying increasingly on the private sector for investment. The reasoning was that if the government cut public investment, but at the same time permitted the private sector to invest in areas (such as infrastructure) from which it had hitherto been excluded, overall investment would not suffer. The government realized that this strategy might offer hostages to fortune – public sector investment would definitely be cut, but the private sector might not respond commensurately. Unfortunately, this is exactly what happened. Although the private sector took up some opportunities in infrastructure, such as Build-Own-Operate-Transfer (BOOT) projects in power generation, for a variety of largely institutional reasons (discussed in Chapter 10), its response remained muted.

Another important item of expenditure reduction was on subsidies, which were cut from 5.2 to 1.6 percent of GDP, and were limited to four items (compared with 18 items in 1980): bread, wheat flour, sugar, and cooking oil. This was a more carefully prepared step than that of January 1977 that had led to widespread riots and forced the restoration of the subsidies. Some studies – e.g. Ali and Adams (1996) – indicated that the subsidies that remained were effective, in that they were “self-targeted” towards the poor, and that eliminating them would significantly worsen the distribution of income, especially in urban but also in rural areas.

The authorities also made some important changes to the fiscal and monetary system. Zaki (2001: 1876) summarizes them as: (1) terminating many policies (such as interest rate ceilings, compulsory credit allocations, high liquidity ratios, etc.) that distorted capital markets; (2) strengthening the financial system by recapitalizing public sector banks (at a cost of 5.5 percent of GDP), permitting more competition, and improving prudential measures; and (3) developing a market for government securities (Treasury bills) which not only created an important substitute for Treasury borrowing from the Central Bank of Egypt, but also provided an additional tool for monetary control by the Bank and allowed it scope for a more active monetary policy.

Added to the deliberate acts of policy was another intervention *ex machina* with fortunate consequences for both the budget and the balance of payments. On May 25, 1991, Egypt concluded an agreement to reorganize and reduce its debt to the 17 members of the Paris Club. Debt service

obligations were locked in at a reduced level for the first three years, providing a minimum of 15 percent (net present value) relief. The full implementation of debt-restructuring/rescheduling had to achieve the equivalent of 50 percent reduction (net present value) of the entire schedule of debt service payments on eligible debts. To achieve the full benefit of the agreement, Egypt was required to have an agreed program with the IMF and to keep closely to its IMF targets; to remain current during 1991–94 with respect to payments due under the terms of the agreement; and to obtain comparable terms of debt relief from non-Paris Club creditors.

Overall, the 1991 Paris Club agreement involved a total of \$19.6 billion, excluding debt owed to the United States. There was also a very large cancellation of debt by Arab countries. At the beginning of the 1990s, Egypt's continued problems because of the debt overhang were intensified by the cost associated with the military build-up and the war in the Gulf. In October 1990, Kuwait, the United Arab Emirates, and Qatar forgave \$2 billion, \$255 million, and \$121 million respectively. In December 1990, the United States canceled military debt with a face value of US\$7.1 billion; in December 1991, GODE and Saudi Arabia canceled \$2.7 and \$1.1 billion, respectively.

The May 1991 Paris Club general agreement comprised an immediate and a final debt reduction and reorganization. The benefits were substantial. The first two stages, each comprising a reduction of 15 percent of the net present value, were accomplished in July 1991 and October 1993 respectively; the third stage comprising a reduction of 20 percent was completed in 1996. The debt arrangements involved a total reduction of 50 percent of the net present value of debt service payments on eligible debt.

The scope of the debt relief was wide. The debt eligible for rescheduling covered: (1) all concessional public and publicly guaranteed debt owed to the participating Paris Club creditors contracted prior to October 31, 1986 and having an original maturity of more than one year; (2) medium- and long-term commercial credit insured by the participating creditor countries contracted prior to the same cut-off date; (3) nonconcessional medium and long-term bilateral debt owed to participating countries; and (4) repayments due under the previously rescheduled debt dated May 22, 1987. Overall, the 1991 Paris Club debt relief package involved a total of \$19.6 billion, and enabled Egypt to save an average of over 2 percentage points of GDP a year in debt service payments from 1992–97 on debt owed to Paris Club creditors. Additional savings on the servicing due to Arab countries and institutions and on US military debt meant that the benefits from the debt rearrangement could be conservatively put at about 4 percent of GDP annually in the 1992–97 period. The impact of the debt reduction on Egypt's external position was very considerable: Subramanian (1997) estimated that the debt relief provided the balance of payments with an improvement of \$2.2 billion, and that it

would have required a real exchange rate depreciation of 17 percent in order to obtain an equivalent benefit.

Another important result of the improved fiscal position was lessened reliance on seigniorage and the inflation tax.⁴ Seigniorage in the pre- and post-stabilization period averaged between 2.0 and 2.4 percent a year. This is in line with the findings for other countries; Easterly and Schmidt-Hebel (1994: 41–2) found that between 1970–88 seigniorage contributed on average about 1 percent of GNP in the OECD countries, and just over 2 percent in developing countries, although for particular countries in specific periods it could be much higher. Seigniorage, of course, accounts for a higher proportion of government current revenues than of GNP; in a study of 26 developing countries, Fry (1997: 346–7) found that, on average, a 1 percentage point increase in the revenue from this source in relation to GNP corresponded to an increase of 8 percentage points in seigniorage revenue in relation to government current revenues. Proceeds from seigniorage made similarly important contributions to Egyptian revenues (see Chapter 6). The yield from the inflation tax, i.e. the capital loss suffered by holders of money as a result of inflation (the tax is calculated as the inflation rate multiplied by reserve money as a share of GDP) followed a similar downward path in the post-stabilization period, dropping from an average of 3.8 percent of GDP in 1988–91 to 2.2 percent in 1992–97 (see Figure 3.2).

A major reason for the rapid growth of liquidity in the pre-stabilization period was the easy monetary policy – the authorities automatically accommodated fiscal deficits. The squeeze on expenditures in the stabilization period, and the sharp fall in the budget deficit, enabled the authorities to tighten monetary policy. Consequently, the growth of liquidity in the period 1992–97 was restrained to an average rate of 13.4 percent a year,

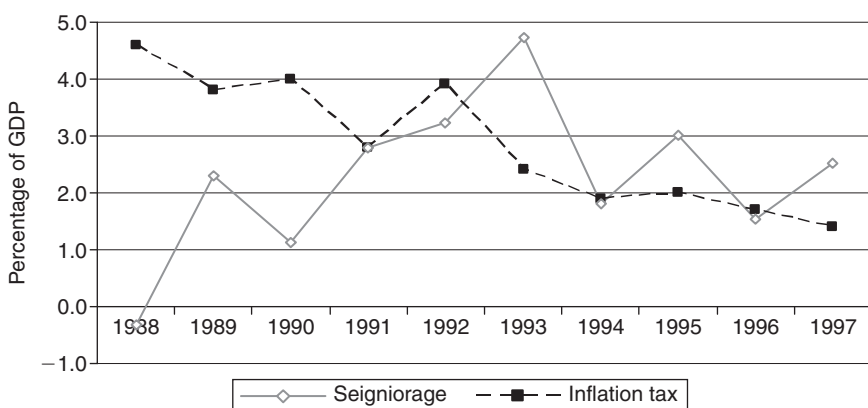


Figure 3.2 Seigniorage and the inflation tax, 1988–97 (percent of GDP) (source: CBE; World Bank LDB).

compared with an average rate of 21.7 percent annually during 1988–91. This led to a sharp fall in the inflation rate from 19.3 percent a year in the pre-stabilization to 10.7 percent in the stabilization period (see Figure 3.3).

These developments were reflected in a growing confidence in the currency, as evidenced by the fall in the dollarization ratio from over 50 percent to less than 20 percent (see Figure 3.4).

The increasing dollarization of the economy in the pre-stabilization period carried significant costs. It conveyed an unfortunate signal to potential foreign investors about the prospects of the economy by suggesting that Egyptians were losing faith in their own currency. It reduced the potency of monetary policy, because the Central Bank of Egypt's control of monetary aggregates was obviously more effective on the domestic

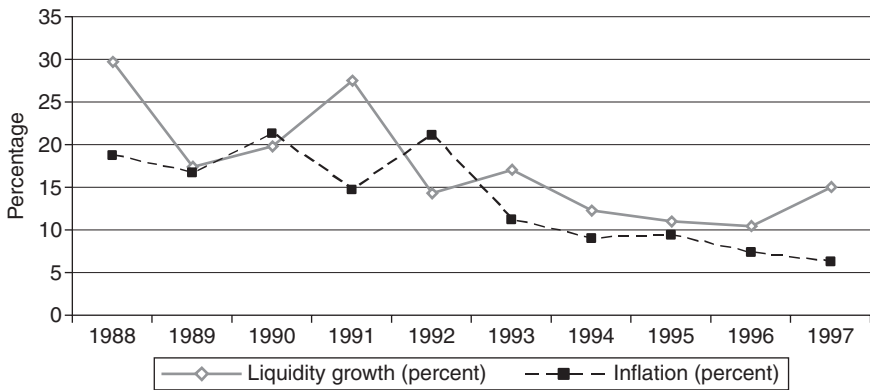


Figure 3.3 Liquidity growth and inflation, 1988–97 (percent) (source: CBE; CAPMAS).

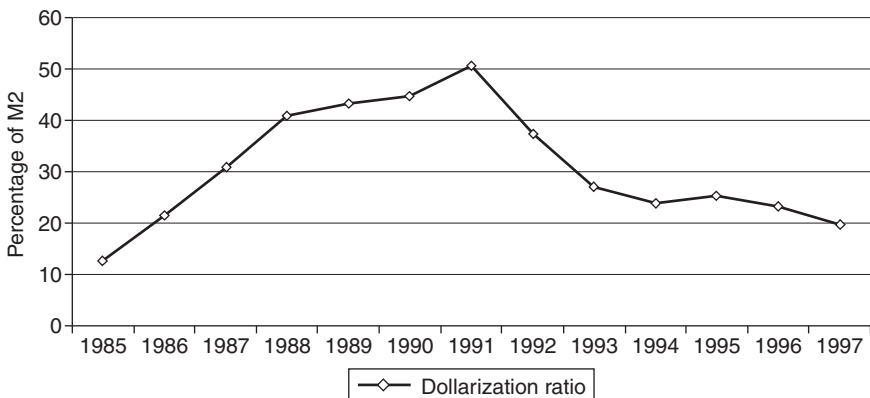


Figure 3.4 Dollarization ratio, 1985–97 (percent of M2) (source: CBE; World Bank LDB).

component. And it reduced the government's ability to raise resources through seigniorage.

A major weapon in stabilization was the use of the exchange rate as a nominal anchor. From early 1991 the Egyptian pound was effectively pegged to the US dollar. The combination of an exchange rate peg, which virtually eliminated exchange rate risk, and the high interest rate differential between Egyptian and dollar-denominated instruments led to a large surge in capital inflows. This helped to increase the country's international reserves from \$3.9 billion in 1991 (covering $3\frac{1}{2}$ months of foreign exchange payments) to \$19.7 billion in 1997 (providing nearly 13 months' cover).

Dealing with the inflows was not without cost. These flows would have had major consequences for the money supply if they had not been sterilized. Consequently, the authorities undertook a massive sterilization effort immediately at the start of the stabilization program, particularly in the period 1992–94. The sterilization was carried out through sales of Treasury Bills, the proceeds of which were deposited at the Central Bank of Egypt.

As Abdel-Khalek (2001: 72–3) pointed out, sterilization meant that fiscal policy was subordinated to monetary policy: in order to avoid monetary expansion, the government issued Treasury Bills well in excess of the amounts required to finance the budget deficit. The costs of sterilization – calculated as the change in net domestic assets of the Central Bank of Egypt multiplied by the interest differential between domestic and foreign assets – were not insignificant. Subramanian (1997) estimated them at 0.6 percent of GDP a year for 1992–97; Abdel-Khalek has higher estimates. Moreover, the excess foreign exchange reserves carried by the Central Bank also imposed a cost. The World Bank estimated that by holding reserves in excess of a safe level (defined as cover for six months of imports), Egypt lost the equivalent of 1–2 percent of GDP annually. This resulted from the differential between the returns the country obtained on the excess amount of foreign currency holdings and what it paid on the internal debt incurred to purchase these holdings.

Another key element, the choice of a peg for the exchange rate, merits an extended discussion. The exchange rate peg was the fulcrum of the stabilization program, and the handling of this policy had important repercussions during the entire 1991–2000 decade.

Egypt pegged the pound to the US dollar at a rate of LE 3.4/\$, and that rate was maintained until the second half of 2000. Was this policy optimal? There is a considerable literature on the choice of an optimal peg for a currency. Essentially, there are three broad choices of a peg: (1) a specific currency, such as the US dollar; (2) a tailor-made basket of currencies that reflects the trade of the country concerned; and (3) a more general basket of currencies, such as the Special Drawing Rights (SDR).

The major conclusions that have emerged from the debate on the choice of an optimal peg are surveyed in Williamson (1982), Thirlwall and

Gibson (1992), and Edwards (1993b), among others. The following discussion draws primarily on Williamson.

First, there is a consensus that the most feasible aim of policy should be to *stabilize* something rather than to *optimize* (whether maximizing or minimizing) anything. What should be stabilized? Williamson argues that there is a strong case for countries taking as their objective the maintenance of a *continuous* internal balance, while being content with ensuring that external balance is satisfied *on average* over the medium term. His argument for this asymmetry is that departures from internal balance always involve a welfare cost, while temporary departures from external balance can be handled through variations in reserves and/or foreign borrowing, with almost negligible welfare costs. Thus, departures from internal balance, for example in the form of higher unemployment than necessary to maintain a specified rate of inflation, involve a waste of resources that can never be fully recouped; as Williamson (1982: 54) puts it, “Today’s unemployed cannot do today’s work tomorrow.” Lower unemployment might accelerate inflation, the reversal of which will cost more in terms of lost output in the future than the benefits gained today.

The operational implication of choosing the foregoing objective function is that the peg should be chosen to stabilize the effective exchange rate (EER), i.e. a trade-weighted average of the bilateral exchange rates with a country’s trading partners. Stabilizing the effective exchange rate will balance out the effect of individual bilateral exchange rate changes over the economy as a whole, and thus leave macroeconomic equilibrium undisturbed.

Second, pegging against a single currency produces less macroeconomic stability than pegging against a basket of currencies. Egypt chose to peg its currency to the United States dollar. A country that pegs its currency to the dollar is, in effect, tying its monetary and exchange rate policies wholly to US policies. This makes sense only if US exchange rate and monetary policy are wholly appropriate for the pegging country’s national economy. This was not the case for Egypt. During much of the period after 1991 the US dollar appreciated, which forced the Egyptian pound to appreciate against other currencies as well. The loss of export competitiveness and the consequent balance of payments deficits did not much matter to the United States, because the world showed an almost insatiable appetite for holding US dollars. However, it did matter to Egypt, because the world showed no comparable enthusiasm for accumulating Egyptian pounds. Moreover, in order to maintain the fixed parity, Egypt had to prevent an outflow of foreign funds; this meant keeping interest rates in Egypt at much higher levels than in the United States. This was again suboptimal for the Egyptian economy which, with substantial underemployed resources, generally required a more expansionary stance.

Williamson shows that the least exchange instability is generated by pegging to an individually tailored basket of currencies. The consensus

appears to be that the weights in the basket should reflect the direction and elasticity of *total* trade (i.e. taking both imports and exports into account) between the country and its trading partners. However, there could be some problems with using such a basket. The pegging country must have the capacity to acquire information on the foreign exchanges continuously and to make rapid and frequent calculations, and it would have to develop a forward market. Moreover, a country could not intervene in a “basket,” but would have to acquire the constituent currencies (and incur the cost of doing so) in order to intervene.

Nevertheless, it is somewhat surprising that neither Egypt nor the Bank and the Fund gave more thought to adopting the SDR as a peg. The SDR is itself a basket of the principal currencies more or less weighted according to their importance in world trade. A number of studies conducted in the IMF, UNCTAD, and elsewhere have concluded that for the vast majority of developing countries, an SDR peg would have produced somewhat more instability of the effective exchange rate than a tailored peg, but noticeably less than any single currency peg. Egypt’s foreign trade was quite diversified; hence, it would clearly have benefited from an SDR peg. However, members of the Egyptian and IMF teams negotiating the structural adjustment program of 1991 told me that the idea of the SDR peg was never seriously examined.

Third, Williamson argues that longer-term questions, such as neutralizing the effect of inflation differentials, promoting payments adjustment, and imposing an external discipline (if this is desired) are better addressed by changing the value of the peg rather than by influencing the unit to which the currency is pegged. Thus, Egypt could have pegged its currency to the dollar, but committed itself to a “crawling” appreciation or depreciation. In the light of this, Egypt’s decision to peg to a single currency did not constitute the main difficulty; it was the failure to adjust the value of the peg in response to changing economic realities that imposed a straitjacket on important aspects of policymaking. The striking stability of the exchange rate after 1991 would repudiate the authorities’ pronouncements that the rate was market-determined. Calvo and Reinhart (2002: 386) found that for the period February 1991–December 1998 the probability that the monthly change in the rate would lie only within a very narrow 2.5 percent band was 98.9 percent, suggesting that the parity was, in fact, rigidly controlled.⁵

An argument frequently advanced by Egypt in support of maintaining this degree of rigidity in the exchange rate was that it reduced uncertainty and therefore encouraged foreign investment. However, most foreign investors are aware that a pegged exchange rate is a conditional promise, not an absolute guarantee; in Edwards’s (1993b: 20) words, it is “a commitment with escape clauses.” The pegged value is conditional upon the country’s having sufficient reserves of foreign exchange to defend the parity. The exchange rate might collapse, even if the country does

everything that it reasonably can to prevent that from happening. Indeed, that is what occurred in the second half of 2000, after the Central Bank of Egypt lost a substantial part of its foreign exchange reserves in an unsuccessful attempt to maintain the exchange rate at LE 3.40/\$. It is thus not clear how important the maintenance of a “fixed” rate actually was for investors.

Even at the risk of some oversimplification, we can sum up the discussion on the choice of an optimal peg as follows. The variance in the real effective exchange rate (REER) can be decomposed into a part due to changes in the EER, a part stemming from differential inflation (sometimes termed “relative prices”), and a term representing the interaction between the two.⁶ The recommendation emerging from (in particular) Williamson’s discussion is that the overall exchange rate policy should seek to preserve the constancy of the REER, except when it must be changed in order to promote payments adjustment. The choice of the peg should be guided by the objective of stabilizing the nominal EER, while the relative price part of the REER should be handled by crawling changes in the value of the peg. The peg that produces the least volatility in the REER (in some sense the “best” peg) would be a basket of currencies with weights reflecting the direction and elasticity of total trade between the country and its trading partners. The SDR would also lead to less variability than would a single-currency peg.

The analysis of an optimal currency peg and of the experience of the Egyptian economy over the decade 1991–2000 suggests that Egypt would have been better served by choosing a more diversified peg and to have shown greater flexibility in adjusting the value of the peg.

Another weakness in the IMF/World Bank program was the inconsistency between some important structural and stabilization elements. The structural adjustment recommended for Egypt essentially consisted of shrinking the space for the public sector and attempting to substantially enlarge that for the private. Such a strategy rests on two main assumptions. First, it assumes that the private sector is *able* to fill in the gap caused by the shrinking of the public sector, i.e. that the private sector possesses the necessary resources. Second, it assumes that the private sector is *willing* to fill in the gap, i.e. that the private sector will consider it profitable to engage in a much higher rate of investment once the public sector has retreated from the scene. Neither of these stylized facts may be true.

Public sector investment dropped, but the private sector did not step in to make up the deficiency. It is unlikely that this occurred because of a shortage of resources in the private sector; after all, there was a spectacular inflow of foreign exchange, and most of these resources appeared to have been the repatriation of balances held abroad by the Egyptian private sector. It is therefore more likely that the shortfall occurred because the private sector was hesitant to undertake new capital formation and to engage in productive activities.

This view derives a measure of support from Dr Atef Ebeid.⁷ He put forward two reasons for the private sector's not filling in the gap created by the public sector's withdrawal. The first was the absence of institutional investors and financial institutions, with the consequence that the equity market was thin, especially for new investors. The second was that most of Egypt's entrepreneurs came from trading families (because 30 years of socialism had prevented the growth of a substantial entrepreneurial class) who tended to be quite cautious about venturing into new activities.

The reasons might not be far to seek. As part of the structural adjustment program, the authorities had raised nominal interest rates to 22 percent; soon thereafter the inflation rate came down quite rapidly, but interest rates followed only after sizeable lags. As a result, for significant periods real interest rates on financial assets (including bank deposits and government paper) remained in excess of 8–10 percent, and the income from which was not taxed. If private investors could obtain real returns of this magnitude without making any effort or incurring any risk, the real net return on capital invested in entrepreneurial activities would have to be much higher in order to tempt businessmen to put up with the hassles of the bureaucracy and the tax authorities and to submit to the vagaries of the market. The behavior of real interest rates had drastically raised the opportunity cost of productive investment. Consultations with Egyptian businessmen by the World Bank suggested that during this period businesses were looking for minimum real rates of return on capital of 25 percent a year and more. Not many activities readily offered such returns, and it was thus quite rational for private investors to eschew the toil and the hazard involved in applying their resources to new capital formation.

Soon after the stabilization was completed, the Egyptian economy was hit by a combination of serious events. The first of these was the onset of a financial crisis in East Asia, beginning with the banking sector in Thailand. As this crisis generalized through most of the formerly fast-growing economies of East Asia (especially Korea, Indonesia, and the Philippines), these countries sought to protect their balances of payments by rapidly depreciating their currencies. However, Egypt did not follow suit; its currency remained tied to the dollar, which kept appreciating against the East Asian currencies. The average devaluation against the Egyptian pound by 1998 (a year after the onset of the crisis) was 73 percent for the Indonesian rupiah, 42 percent for the Korean won, 36 percent for Malaysia's ringgit, and 46 percent for the Thai baht.

The devaluations made exports from the East Asian countries to third markets more competitive than those from Egypt, impacting particularly on the growth of non-traditional exports. They also made imports from East Asia into Egypt cheaper in dollar terms. This created a substantial surge in imports and added to the pressures on the balance of payments.

The second serious event was an attack on tourists on November 18, 1997 in the town of Luxor in which 58 foreign tourists and four Egyptians were

killed. This incident led to an immediate and sharp fall in tourism, which further cut into foreign exchange receipts. The slowness with which the exchange peg was adjusted in response to these events (it was not changed until 2000) added to Egypt's difficulty in dealing with these challenges.

The attempt simultaneously to raise the interest rate to unprecedented levels, to liberalize the economy, and to fix the exchange rate brought to the fore another conundrum that was novel for Egyptian policymakers. They had to confront what is sometimes described in the literature as the "impossible trinity" or the "inconsistent trilogy." The impossible trinity principle says that it is impossible simultaneously to achieve a fixed (managed) exchange rate, free capital movement, and an independent monetary policy. Any pair of these goals can be achieved, but the third will have to be relinquished.

Jan Tinbergen (1952: 27–30) has shown that a necessary condition for economic policy to be effective is that there should be as many independent instruments of policy as the number of objectives to be attained. In fact, several writers recommend that because the effects of policy instruments are uncertain and may be associated with significant time-lags, it is better to deploy more instruments than there are targets.

So long as Egypt's economic strategy was based on an exchange rate peg, monetary policy had to be subordinated to the needs of maintaining the peg. The interest rate had to be set at whatever level was necessary to prevent an outflow of funds, because a loss of funds would have put pressure on the exchange rate. Thus monetary policy did not exist as an independent instrument; an independent monetary policy would have required a floating exchange rate. When the authorities attempted to attain all three goals simultaneously, it only led to a hemorrhage of foreign exchange reserves (e.g. from 1998). Ultimately, the policymakers opted for an intermediate regime, one that aimed at a *de facto* fixed exchange rate, monetary independence, and various measures to restrain capital outflows. This helped to square the circle because capital controls permit the monetary policy and exchange rate policy to act as *separate* instruments (capital controls can restrict the outflow of funds, and thus avoid the pressure on the exchange rate).

Structural reform

Concomitantly with the stabilization program, some measures of structural reform were introduced. These measures related to reforms of the tariff structure and pricing policies, but the most fundamental issue concerned the privatization of state-owned enterprises. It had been evident for a considerable time that the performance of such enterprises left much to be desired and constituted a major drag on the country's economic performance.

The financial and production efficiency of the public enterprise sector

was the subject of several inquiries – for example, Mabro (1974), Hansen and Nashashibi (1975), Waterbury (1983) – and in studies by multilateral and bilateral donors. The findings of a study by the World Bank (1987) best sum up the problem. The Bank examined the performance of 366 public companies and 37 Economic Authorities in the non-financial sector from 1973 to 1984. It found that while some of the Economic Authorities (particularly the Suez Canal Authority and the Egyptian General Petroleum Company) made surpluses, the financial and productive performance of the public enterprise sector as a whole was dismal. This was because of the particularly weak performance of the public companies.

The financial indicators for the sector painted a bleak picture. Deficits were large and growing – the overall deficits increased from 3.9 percent of GDP in 1973 to 8.4 percent in 1984). Financial rates of return were low and falling – the net rate of return on book values dropped from 9 percent to 4.8 percent. Capital invested in the industrial public sector earned a negative rate of return on revalued assets in the years covered by the study – the figure dropped to minus 5.7 percent in 1984. The sector imposed a very substantial burden on the national budget – except for 1981, in each year between 1973 and 1984 the aggregate deficit of the public companies and economic authorities accounted from 17 to 37 percent of the total government budgetary deficit, and was a much higher percentage than accounted for by the public enterprise sector in a sample of about 20 countries at a comparable level of development. The World Bank cautioned that even the foregoing figures might not have fully captured the situation, because of the somewhat opaque accounting procedures employed by the public enterprises.

Indicators of productivity painted the same picture. Between the periods 1973–79 and 1979–83, total factor productivity fell sharply. The marginal productivity of capital dropped from 15 percent to 5 percent, while marginal labor productivity in the second period was less than 15 percent than in the first. The growth rate of value-added dropped from 11.7 percent in 1973–79 to 1.2 percent in 1979–83. These developments impacted on the competitiveness of Egyptian industry. A World Bank (1983) report showed that the domestic resource costs (DRC) for several industries was greater than unity; a product with a DRC greater than unity indicates that it would be better to import that item than to produce it domestically. Moreover, as Ott (1993: 208) pointed out, resources were not redirected from industries with comparative disadvantages to those with clear advantages; public investment continued to increase in non-competitive sectors.

The picture had not improved in subsequent years. A later World Bank (1991) investigation found that 35 out of out of 397 state-owned enterprises in 1989 regularly made returns on assets of zero or negative percentages, and were extant only because the government continued to inject liquidity. Another 162 state enterprises had returns on assets of less than 5 percent.

A reform of the sector was essential to the long-term viability of the Egyptian economy. The discussions between the Egyptian authorities and the Bank in 1991 focused on an early reform of state-owned enterprises. The discussions covered much of the usual grounds that have been brought up in other countries. The international organizations identified privatization as the key instrument in the reform. Both sides understood that privatization could have many aims; the memoranda between the Bank and Egypt touched on increasing competition for producers; reducing public sector borrowing; widening share ownership; allowing firms to compete more freely for funds in the capital market; redistributing income and wealth; and freeing producers from frequent and detailed government intervention.

The discussions narrowed down to four items: the financial gains to the government from disinvestment; the easing of pressure on the budget because it would no longer be necessary to inject public funds into loss-making enterprises; the more efficient use of privatized assets because of increased competition; and the freeing of producers from incessant government interference. However, significant as these advantages might be, the most fundamental issue was a non-tangible one – it was that in future the private sector would be the main engine of growth for the economy, and that it would no longer be disadvantaged vis-à-vis the public sector.

The importance of this last factor partly explains the vehemence of the debate within Egypt. While the recommendations of the international organizations were seemingly concerned with means, their most potent impact was likely to be on ends. Privatization on the scale proposed was not simply a financial exercise, but rather the abandonment of a model of development that had shaped Egyptian society for a generation. Moreover, privatization was to proceed concomitantly with a relaxation of controls in several areas of industry and trade. Controls generated rents, whether monopoly profits or guaranteed public sector incomes, and the recipients had a powerful interest in the continuation of the system. The changes were bound to throw up a different set of winners and losers than those produced by the existing system. Thus the seemingly straightforward technical issue of privatizing some 300-odd enterprises might be the thin edge of a wedge that could initiate far-reaching changes in Egyptian society. The Egyptian authorities in 1991 accepted this possibility. The central question then became how to manage the change while minimizing its worst effects on the losers.

Some policymakers viewed the change in the relative roles of the public and private sectors as a logical progression. Dr Kemal El Ganzoury (Minister of Planning 1982–85, Deputy Prime Minister 1985–96, Prime Minister 1996–99) presented the change as a pragmatic response to evolving economic and international conditions. In his view, immediately after the 1973 war the main task facing the Egyptian economy was the rebuilding of a large amount of infrastructure. The domestic private sector did not have

the resources to undertake this task, while foreign investors were wary of the situation in the Middle East and reluctant to invest substantial amounts in the region. Therefore, it was left to the Egyptian public sector to carry out this responsibility.

However, by the 1990s a large part of the infrastructure had been built and the more immediate challenge for the economy was the provision of productive employment. This could be created much more efficiently by the private sector. Moreover, the private sector was now much larger and was able to undertake projects requiring sizeable amounts of capital; it could be encouraged to undertake substantial infrastructure projects. Finally, the changed situation in the Middle East had reassured foreign investors. It was time to reformulate strategy to take advantage of all these changes. In Dr Ganzoury's view, therefore, the redirection of strategy was simply a necessary step in the process of making the Egyptian economy viable for the twenty-first century. Indeed, despite Dr Ganzoury's reputation as an advocate of the public sector, privatization accelerated during his tenure as Prime Minister (1996–99).

His successor, Dr Atef Ebeid, had to wrestle with two major problems while continuing the process. One, the economy and the stock market had slowed, making it difficult to sell off enterprises at prices the Ministry considered appropriate. Two, the earlier buyers had bought up the more profitable enterprises, leaving the Ministry to dispose of a less attractive portfolio.

A review of the documentation and extended discussions with the main actors indicate that, for both sides, acceptance of the philosophical change was seen to be the crucial matter; ironing out the technical details was regarded as secondary. This would explain why not much attention was devoted to questions of how the sale price of assets would be determined; of the different methods of selling the assets; or of the uses to which the proceeds from privatization should be put.

Before discussing progress on privatization, it may be useful to look briefly at the structure of the economic activities of the public sector.

Four major types of public institutions (in addition, of course, to the government) are involved in economic activities: (1) local government productive enterprises; (2) service authorities; (3) Economic Authorities; and (4) public enterprises. The last two are the main public sector economic agents in Egypt.

There are somewhat more than 60 Economic Authorities, which cover the most important sectors of the economy: the utilities (such as telecommunications, electricity, railways, the postal system, etc.), the Suez Canal and the Petroleum Company, the General Authority for Supply (which controls the import and distribution of the basic subsidized commodities), social and health insurance, etc. They are organized as semi-autonomous corporations, and in the beginning of the 1990s employed some 3 percent of the labor force and produced about 20 percent of the GDP.

In the early 1990s, the public enterprises produced around 10 percent of the GDP and employed about 6 percent of the labor force.⁸ They operated in virtually all sectors of the economy, their activities ranging from the production of iron and steel to soap, cement to movies, phosphates, ceramics, beer, hotels, and so on. They also dominated the banking and insurance sectors.

As part of its structural reform program, the government committed itself to privatizing public enterprises, but not the Economic Authorities. The first step was the passage of Law 203 in July 1991 by which 314 nonfinancial public economic enterprises were grouped under 27 new holding companies; in 1993 these were reorganized into 17 holding companies. The 314 affiliated companies were distributed in a manner as to prevent undue sectoral concentration under any single holding company. An independent body, the Public Enterprise Office, was set up in November 1991 under the Ministry of Public Enterprise Sector in order to advise on issues related to the privatization of state-owned enterprises (SOEs).

The affiliated companies were given greater autonomy in matters of management, pricing, and finance. However, questions of employment remained tightly regulated. The holding companies were responsible for initiating plans for the privatization of their constituent affiliated companies. Five methods of diluting public ownership have been used: sales to anchor investors, sales through the stock market, sales to Employee Shareholder Associations, sales of companies' assets, and liquidations.

How successful was the first decade of the privatization program? It is not possible to provide a unique litmus test, because the goals of privatization and the criteria for judging its success were never unambiguously identified. However, some comments can be offered which, taken together, can provide a basis for judgment.

First, one may look at how many companies out of the original portfolio of 314 had been divested. As of June 2000, the government had sold the controlling interest in 118 enterprises, with a sales value of about LE 12.3 billion; it had sold a minority interest in another 16 companies, with a sales value of about LE 1.87 billion. In terms of privatization receipts per year as a share of GDP, the Egyptian program was rated by the IMF (1998a: 52) as the fourth most successful program in the world. Of the total sales proceeds, half was transferred to the Ministry of Finance to reduce the budget deficit, nearly 30 percent was allocated to settle debts of the privatized companies to the commercial banks, and about 17 percent was used to finance early-retirement schemes for labor in the privatizing enterprises.

Second, using profitability as a measure of efficiency, the second half of the 1990s witnessed, on average, an improvement in the performance of Law 203 companies. The return on investment increased from 0.72 in 1996 to 3.54 percent in 1999, while the net profit margin in the latter year reached 8.1 percent compared to 1.20 percent in 1996. These average

results, of course, concealed substantial variations in individual performance. Moreover, these comparisons are not without their own problems; for example, an increase in profitability might simply reflect the exercise of market power by a newly-privatized monopolist or oligopolist. This is especially possible since the Egyptian reform program has not encompassed laws to increase competition, and much of the empirical evidence – surveyed, for example, in Megginson and Netter (1999) – suggests that it is ownership together with competition and managerial freedom (e.g. in respect of hiring and firing labor) that favors private over public ownership of business enterprise on efficiency and profitability grounds.

Third, a main reason for the government's hesitation in launching the privatization program was the effect that this would have on the labor employed in the privatized enterprises. It was no secret that public enterprises suffered from a surfeit of labor. Khattab (1999: 12–13) reported that in 1996 (i.e. before the main restructuring began), public enterprises covered by Law 203/1991 employed 932,404 workers, and that the Ministry of the Public Enterprise Sector estimated that about 300,000 of them were redundant. It was inevitable that if these enterprises were to be made attractive to the private sector, the excess labor would have to be shed.

Several measures were adopted to help cushion the impact. One was the creation of the Social Fund for Development which had as its principal aims the retraining of redundant labor so as to provide it with employment opportunities in other sectors; the extension of credit and market information to permit some of the redundant workers to begin their own small enterprises; and the construction and refurbishing of infrastructure through labor-intensive methods. Another important method was the offer of early retirement packages. By the year 2000, approximately 110,000 employees had chosen to take these packages, which in general provided benefits equal to three years' compensation. The total outlay on such packages from 1993 to 2000 was about LE 2.7 billion, at an average cost of LE 25,000. Of course, what made the retirement packages affordable from the government's point of view was the low wages and benefits paid in the public sector. The IMF (1998: 55) calculated that reducing the labor force in the public enterprise sector by 300,000 workers would require only a once-for-all payment of 2.5 percent of the GDP. Moreover, Egypt would not have to bear the entire burden, as international donors had offered to assist with part of the compensation.

The Public Enterprise Office estimated that total labor in public enterprises dropped from just over one million in 1993 to under 600,000 by the middle of 2000. This reduction resulted from: 220,000 workers transferring to the private sector because their enterprises were privatized; about 110,000 workers taking early retirement packages; and about 150,000 being lost through normal attrition of leaving at full retirement age, or death.⁹

Fourth, very little progress was made in privatizing the financial sector. The Egyptian financial system remained dominated by the banking sector, in particular the four public sector commercial banks. These banks accounted for 70 percent of total assets of the banking sector in 1990, and even by the end of the decade represented about 60 percent. Their portfolios were heavily weighted by loans to the public sector and were judged to contain a substantial proportion of weak or non-performing loans; Roe (1998: 5) put the figure as high as 40–45 percent of the total portfolio. In 1991 the banks required a capital injection of LE 3.1 billion from the government in order to meet the minimum capital adequacy ratio of 8 percent in relation to risk-weighted assets mandated by the Bank for International Settlements. At the end of the government's fiscal year 2000, none of these four commercial banks had been privatized, even partially. Similarly, the privatization program had not touched any of the four public sector insurance companies, which accounted for over 90 percent of the market.

Fifth, because the more profitable enterprises were the first to be privatized, by 1997 loss-making enterprises accounted for one-third of the portfolio. This reduced the average profitability of the portfolio, slowed down the pace of privatization, and compelled the authorities to look for different methods of divestiture. The preferred alternative for the government was to sell to “anchor investors” who would invest resources in improving the performance of the company and increasing its attractiveness for sale through the stock exchange or some other means. But finding such investors and negotiating suitable terms with them was a time-consuming business. The rate and method of privatization between 1993 and 2000 is shown in Table 3.1.

Sixth, despite the moves on privatization, by the end of the decade the rate of private sector investment had hardly changed. Private investment amounted to about 15 percent of GDP in 1987; it was about the same in 2000. Public investment, on the other hand, dropped quite sharply from over 12 percent of GDP in 1987 to 6 percent in 1994; even by 2000 it had only recovered to just over 7 percent. However, with the private sector not filling in the gap, aggregate investment dropped from over 27 percent of GDP in 1987 to 16 percent in 1993, and in 2000 was still only about 20 percent.

Privatization was insufficient to call forth the investment expected from the private sector. This was a matter of some concern, because it frustrated the ends of the government's restructuring strategy. That strategy was to reduce the budgetary burden by cutting down sharply on public investment, while at the same time encouraging the private sector to take up the slack, by giving it evidence of better treatment and by permitting it entry into areas that previously had been off-limits. Of course, there was no way to precisely synchronize the timing of the fiscal contraction with the private sector response, but the absence of any significant response for a decade must prompt some questions about the assumptions of the strategy.

Table 3.1 Development of privatization, 1993–2000 (proceeds in LE million)

Method	1993		1994		1995		1996		1997		1998		1999		2000	
	Tra	Pro	Tra	Pro	Tra	Pro	Tra	Pro	Tra	Pro	Tra	Pro	Tra	Pro	Tra	Pro
IPOs	0	0	3	4	11	1,077	19	1,988	14	2,865	6	1,418	0	0	0	0
Majority	0	0	2	–	5	85	13	1,650	12	2,519	5	1,342	0	0	1	47
Minority	0	0	1	–	6	992	6	338	2	346	1	76	0	0	0	0
Anchor investors	0	0	3	433	0	0	3	453	3	447	2	276	9	2,766	4	2,217
ESA	0	0	7	227	3	139	0	0	3	79	12	351	5	75	0	0
Liquidation	6	0	2	0	2	0	1	0	3	0	6	0	7	0	3	0
Asset sales	0	0	0	0	0	0	1	350	1	6	3	316	2	31	2	60
Long-term lease	0	0	0	0	0	0	0	0	2	...	0	0	6	...	10	...
Total	6	0	15	664	16	1,216	24	2,791	26	2,872	29	2,361	29	2,872	20	2,324

Source: Ministry of Public Enterprises.

Notes

Tra = Transactions; Pro = Proceeds.

Nevertheless, the shares of value-added originating in the public and private sectors changed over the decade. According to the Ministry of Planning's figures, the contribution of the public sector to GDP dropped from about 39 percent in 1992 to a little over 28 percent in 2000. The share of the private sector rose correspondingly. Some part of this change resulted from a semantic sleight of hand, because from 1993 the companies about to be privatized under Law 203/1991 were classified as "private," even while they remained in the public sector.

The 1991 program displayed a curious degree of one-sidedness where structural reform was concerned. A great deal of emphasis was put on the privatization of public sector enterprises, and much of the subsequent evaluation of the program by the World Bank appeared to regard structural reform as almost synonymous with privatization. This was unfortunate. While privatization was undoubtedly a crucial signal of the government's intent for the future direction of the economy, it could not by itself guarantee a more efficient use of resources; there was always the danger that it could end up simply replacing public monopolies with private monopolies. The program thus overlooked a crucial lesson from the privatization experience of other countries, namely, that it is the competitive environment in which a firm operates, rather than whether the firm is publicly or privately owned, that is the more important factor in performance. It would therefore be overly simplistic to equate privatization with assured improvements in efficiency. The program proposed by the international organizations would have been more effective had it taken a broader approach to private sector development, in which privatization would play a key, but not virtually exclusive, role. Other crucial elements of such a program would be institutional reform, especially the implementation of a legal framework to strengthen competition within the private sector and between the private and public sectors. The absence of such elements meant that the impact of the 1991 program on the structure of the economy and on the vigor of its functioning would remain partial and uneven.

4 Growth, productivity, and structural change, 1960–2000

The geographic and demographic characteristics of Egypt define its basic economic problem. Although the country comprises nearly 386,000 square miles, only a narrow strip of 15,000 square miles in the Nile Valley and the Delta is usable. Cramped into the habitable area is 98 percent of the population, estimated in mid-2000 at nearly 64 million, giving a density of more than 4,000 per square mile.

The population of Egypt more than tripled from 19 million in 1947 to the estimated 64 million in 2000.¹ Population growth reached its maximum between 1976–86, when it touched 2.8 percent per annum; thereafter the rate fell, but by 2000 was still estimated at about 2 percent a year. Urbanization increased rapidly, but appears to have leveled off towards the end of the twentieth century, so that the proportion of the population said to live in urban areas had actually decreased. However, the definition of “urban” in Egypt is somewhat arbitrary, and depends less upon predictable criteria such as the pattern of land use or on the size of the population in the agglomeration, and more on administrative decisions, the application of which is not always consistent (Table 4.1).

Despite land reclamation, the cultivated area increased by only about 20 percent between 1947 and 2000. Intensive cultivation has to some extent moderated the effects of the deterioration in the man–land ratio, but even so the cropped area (the cultivated area times the cropping intensity) has increased only from 9.1 million feddans to about 12.8 million.² A feddan in 2000 was expected to support nearly five persons, compared with 2.1 in 1947. These two themes – the relative fixity of the usable land and the rapidly growing population – resonate as *leitmotifs* in any discussion of Egypt’s economic development, and fix a lower limit to the increase in factor productivity required for the country to attain a meaningful level of per capita income growth.

Long-term trends in GDP

Any attempt to work with long-term data series is fraught with difficulties and the Egyptian case is no exception.³ Attempts at constructing

Table 4.1 Population and urbanization, census years 1947–96

	<i>Population (000)</i>	<i>Growth rate (% p.a.)</i>	<i>Urban pop. (% total)</i>
1947	19,022		30.1
		2.38	
1960	26,085		36.6
		2.54	
1966	30,076		39.8
		2.00	
1976	36,626		43.4
		2.80	
1986	48,254		43.3
		2.08	
1996	59,313*		41.8

Source: CAPMAS.

Note

*In addition, an estimated 2.18 million Egyptians were abroad.

long-term series and detailed comments on Egypt's national accounts are provided in Anis (1950), Hansen and Mead (1965), Hansen (1974), World Bank (1978), Ikram (1980), Hansen (1991), Ministry of Planning (1991, 1996), and Waite *et al.* (1998). The extent and coverage of the national accounts have frequently changed, and retroactive adjustments to data of previous years have not always been applied consistently.

Moreover, national accounts and other official data measure only part of the picture; in Egypt, as in most developing countries, a considerable part of output, employment, and investment is generated in the unrecorded "gray" economy. Hansen (1975: 203) also points out that Egypt's national accounts tend to exaggerate the growth rate of the GDP because two important slow-growing sectors (agriculture and housing) are greatly underpriced and therefore underweighted, while a fast-growth sector (industry) is overpriced because of various protective devices and therefore overweighted. However, while the national accounts data may show biases and leave gaps, overall they are adequate to judge trends and broad aggregates. An extensive comment on data and methodologies is appended to this chapter.

Between 1965 and 2000, the growth of GDP at 1992 market prices averaged nearly 5.2 percent a year. This figure, of course, is subject to the difficulties that arise in compiling a meaningful price deflator covering a long period and to the biases mentioned above in the construction of Egypt's GDP series; however, it will do as indicating the order of magnitude. Population growth over the same period averaged 2.4 percent a year, and annual growth in per capita income was of the order of 2.7 percent. This raised the level of real per capita income by 2000 to about 2.6 times its level 35 years earlier. The overall trend rate conceals wide

variations, and in the long-term growth of the GDP one can distinguish several distinct periods (see Figure 4.1).

- 1965–70: low growth, averaging 3.4 percent a year;
- 1971–74: very low growth, averaging 2.2 percent a year;
- 1975–80: very high growth, averaging 9.7 percent per annum;
- 1981–85: high growth, averaging 6.8 percent annually;
- 1986–90: moderate growth, averaging 4.2 percent a year;
- 1991–94: low growth, averaging 3.1 percent per annum;
- 1995–2000: high growth, averaging 5.3 percent a year.

Hansen and Mead (1965) suggest that growth was high (over 5 percent a year) from about 1958, reaching a peak in 1965. Thereafter, the rate declined and remained low until 1974. From 1975 output growth expanded rapidly, albeit with fluctuations resulting from external shocks and major changes in domestic economic policies. GDP growth rates approached 10 percent in the late 1970s because of the return of oil fields and high oil prices, rising international use of the Suez Canal, a surge in remittances from Egyptians working overseas, large inflows of external assistance, and the “open-door” policies that brought in fresh investment and encouraged trade. These factors also provided both the incentive and the finance for capital formation, which increased at an average of 14 percent annually. The high investment and GDP growth continued until about 1986, but after 1982 was increasingly based on external borrowing.

In the second half of the 1980s, economic growth faltered following the fall in oil prices and by the late 1980s macroeconomic disequilibria, resulting from the continuing expansionary monetary and fiscal policies, became

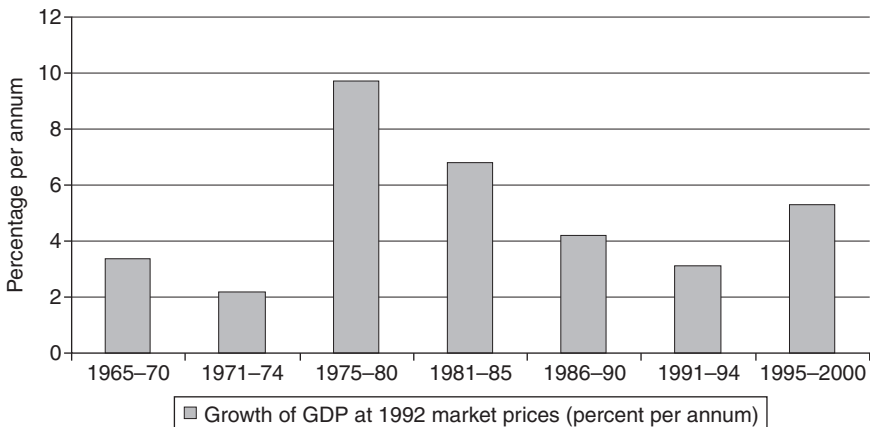


Figure 4.1 Average growth rates of GDP at 1992 market prices, 1965–2000 (percent per annum) (source: Mohammed (2001); World Bank LDB).

apparent. The government addressed these difficulties through a program of stabilization and structural reform beginning in 1991. After a slowdown in economic activity in the early 1990s, growth resumed in the mid-1990s.

Subsequent sections in this chapter identify the factors that underpinned Egypt's growth trajectory by analyzing the sectoral, factor, and demand contribution to growth.

Structural changes in GDP

Economic growth in Egypt has been associated with significant changes in the structure of the economy and the relative importance of the various economic sectors; these are shown in Figure 4.2. Throughout 1965–2000, the services sector accounted for at least about 50 percent of GDP and its contribution to GDP growth was more than commensurate with its size. Within the services sector, trade, government and personal services, transportation, and tourism were the most dynamic sub-sectors. The share of agriculture declined steadily. The contribution of manufacturing moved around, but did not exceed 20 percent of GDP. The share of the petroleum sector fluctuated widely, depending on movements in world oil prices.

The national accounts probably understate the size of the services sector in the economy, in particular by not fully reflecting the contribution of the tourism component to total output. Value-added in tourism is measured in the national accounts by the contribution of hotels and restaurants. Computed according to this methodology, tourism is estimated to contribute 1 percent of GDP, 1 percent of total employment, and 28 percent of foreign exchange earnings. More detailed investigations by Tohamy and Swinscoe (2000) showed that when the indirect effects of the sub-sector were

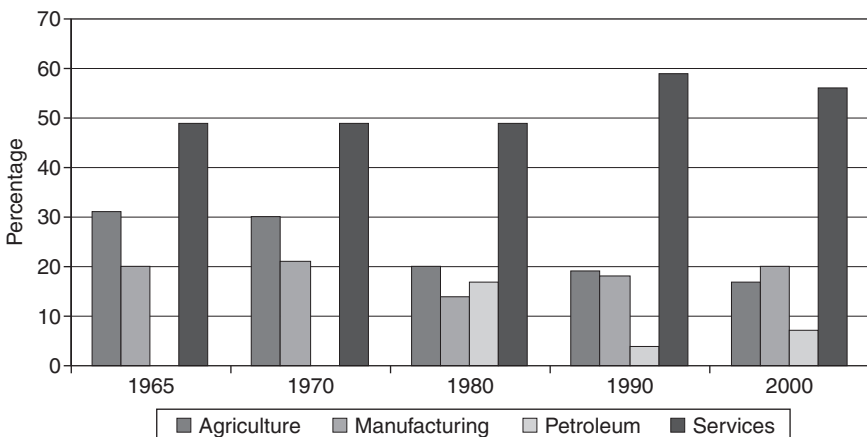


Figure 4.2 Structure of GDP, 1965–2000 (percent) (source: World Bank LDB).

included, the contribution of tourism spending exceeded 4 percent of GDP and in certain years reached nearly 10 percent of GDP.

The share of the industrial sector in Egypt's total output remained constant – at about a third of GDP – throughout the last four decades. Within that sector, however, the share of manufacturing increased to 18.5 percent of GDP in 2000 from less than 15 percent in the early 1980s. The contribution of the manufacturing sector to GDP growth has been more commensurate with its share in total output. The oil and construction sectors each contributed about 6 percent of GDP in the late 1990s.

The share of petroleum in GDP after the return of the oil fields in Sinai and the Gulf of Suez after the 1973 war was modest in the first years. However, it rose sharply and peaked in the early 1980s, when it reached more than 18 percent of GDP. Oil prices fell from 1982; this was not compensated for by increased production and the share of the sector continued to decline in the subsequent period. It fell to about 4 percent in the late 1980s; recovered slightly in the early 1990s, and again started to decline from 1993, reaching about 5 percent of GDP in 2000.

The importance of oil to the economy of Egypt, especially after about 1976 when production had reached a significant level, can be seen in Figure 4.3, which shows how closely movements in the growth of GDP tracked movements in oil prices.

As in many other middle-income countries, the contribution of agriculture in Egypt's total output continued to decline, dropping to about 15 percent in the late 1990s from about a third of GDP in the 1960s. Agriculture's contribution to GDP growth also declined to about 10 percent, mainly as a result of the slow growth of the sector. Agricultural growth averaged only 2.7 percent annually during 1965–2000, just a little ahead of the population growth. Much of the expansion in agricultural value-added resulted from intensive cultivation, although land reclamation did somewhat extend the boundaries of the cultivated area. Total area under cultivation represents about 4 percent of the total land area of Egypt.

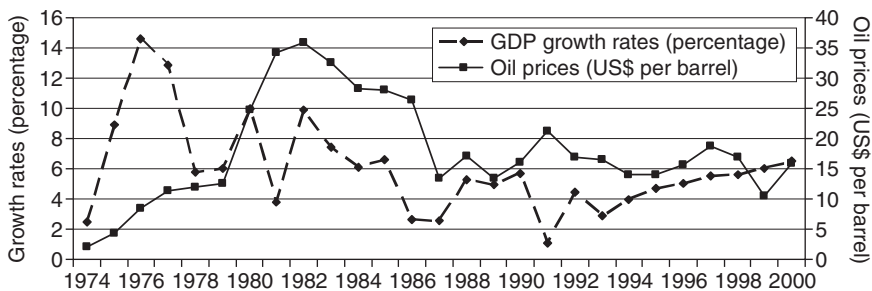


Figure 4.3 GDP growth and oil prices, 1974–2000 (source: World Bank LDB. Oil prices (Gulf of Suez Mix crude) from the Egyptian General Petroleum Corporation).

Contribution of demand components to growth

How much of the growth of Egypt's GDP resulted from domestic factors and how much did it owe to foreign demand? In general, Egypt's growth was based on low value-added output purchased by internal consumers. In the period 1965–2000, domestic demand (consumption plus investment) absorbed about three-quarters of total output and contributed about the same proportion to GDP growth. During the first 20 years, except for the quinquennium 1970–75, the growth of domestic demand exceeded that of total output. In the next decade, the growth of foreign demand was faster than that of domestic demand, but the roles were reversed during 1995–2000. Domestic consumption had the lion's share in total domestic demand throughout this period. The growth of both domestic and foreign demand slowed in the early 1990s as the economy adjusted to the program of structural reforms and stabilization. Domestic demand picked up by the late 1990s as investment spending began to recover (Table 4.2).

Investment

The factor chiefly responsible for the growth of Egypt's GDP was capital formation. Even allowing for difficulties in measurement, it is clear that the investment rate over the 35-year period 1965–2000 fluctuated considerably. The reasons behind these variations were the availability of domestic savings and the very different amounts of foreign resources that could be accessed at different times. The availability of domestic savings varied with the economic philosophy prevailing in the country: whether it was "socialistic," or whether the private sector felt adequately safeguarded. Another important factor for much of this period was the political

Table 4.2 Demand decomposition of growth, 1965–2000

Period	Average annual growth rates (%)			Ratio to GDP		Contribution to GDP growth (%)	
	GDP	Domestic demand	Foreign demand	Domestic demand	Foreign demand	Domestic demand	Foreign demand
1965–70	3.3	4.6	0.2	0.72	0.28	99.3	0.70
1970–75	3.5	3.0	4.8	0.74	0.26	62.3	37.7
1975–80	9.8	9.9	9.6	0.71	0.29	74.7	25.3
1980–85	6.7	8.5	1.5	0.77	0.23	90.0	10.0
1985–90	4.2	3.0	8.2	0.76	0.24	54.2	45.8
1990–95	3.4	2.7	5.2	0.72	0.28	61.2	38.8
1995–2000	5.7	6.3	4.3	0.74	0.26	78.8	21.2
1965–2000	5.2	5.4	4.8	0.74	0.26	74.3	25.7

Source: Mohammed (2001).

situation in the Middle East, which determined the amount of resources devoted to defence (which meant increases in government consumption).

Variations in the investment rate during 1965–2000 are shown in Figure 4.4. For the most, investment hovered at around 17–20 percent of GDP. Immediately after the opening of the economy in 1973 by the rapid inflow of foreign aid, worker remittances, and earnings from oil exports sharply raised gross investment so that it touched 35 percent of the GDP. Even after international oil prices began dropping from 1982, the investment rate remained high, but especially after 1987 was increasingly financed by external borrowing. By the early 1990s the situation could not be sustained and the investment rate declined sharply. By 2000, investment had recovered somewhat but was still well below its earlier heights.

A caution is in order when considering rates of investment. Bruton (1983: 684–5) argues that (a) a significant part of what is described as “investment” in Egypt would be classified as “maintenance” in other countries; and (b) that investment in the 1970s was heavily concentrated in a small number of projects, and that *net* investment, over much of the economy, was negative for many years before and after 1974.

Decomposing the investment series into fixed investment and changes in inventories shows that the spike in aggregate investment in 1975–76 resulted partly from a surge in inventory accumulation following the opening up of the economy. Another boost in inventory accumulation occurred in 1997–99. During the latter period, inventories initially were increased as a deliberate measure with importers taking advantage of exchange rate devaluations by the East Asian countries hit by a financial crisis in July 1997. Towards the end of the Millennium, Egypt went through a liquidity squeeze; this reduced aggregate demand, and by 2000 much inventory accumulation was involuntary. I need hardly warn that figures for changes in inventories need to be viewed with even greater caution than those for fixed investment.

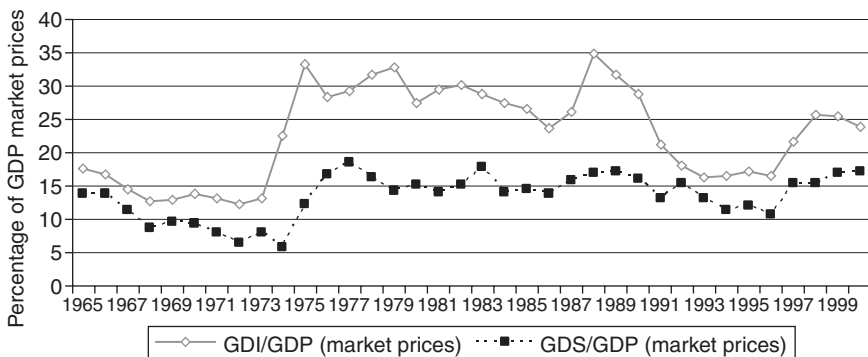


Figure 4.4 Investment and savings, 1965–2000 (percent of GDP) (source: World Bank LDB).

The gap between investment and savings observed in Figure 4.4 underlines the role of external resources. During the entire period 1965–2000, the investment rate was higher than the savings rate – at times very markedly. The overall domestic savings rate seldom exceeded 20 percent of GDP, mainly because the public sector saved very little or was a net dis-saver. Private savings over the 35-year period fluctuated between 10 and 30 percent of GDP.

During 1965–2000, the relative shares of private and public investment changed significantly. Not surprisingly, the period of Arab socialism saw a substantial increase in the share of public investment in the total. Private investment increased with the liberalization of the economy after 1973, and assumed the dominant role following the structural adjustment reforms of 1991. These developments are illustrated in Figure 4.5.

The foregoing discussion must be regarded only as indicating the approximate trend. Egypt's national accounts do not disaggregate investment into private and public components; hence, capital expenditures from government finance statistics must be used as a proxy for public investment. The residual is considered to be private investment, even though this may somewhat overstate the actual level. This issue is particularly important for the data of the 1990s, because of a semantic confusion. In 1991, the 314 public enterprises that were being prepared for privatization under Law 203/1991 were classified as “private sector.” By 2000, only about half the enterprises had actually been privatized, but the others were still considered as belonging to the private sector even though they remained in public ownership.

The determinants of private consumption

An investigation by the World Bank (1993a, vol. 1: 57–9; vol. 3: 21–7) of the determinants of private consumption behavior in Egypt during

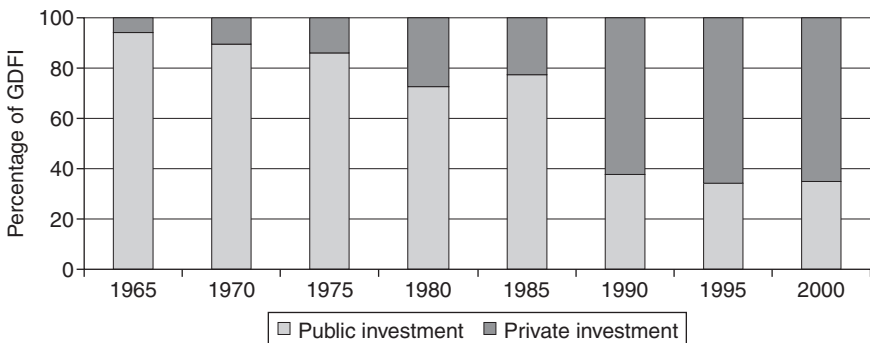


Figure 4.5 Public and private investment, 1965–2000 (percent of Gross Domestic Fixed Investment) (source: MOP).

1960–90 suggested that private consumption was heavily dependent on current private disposable income (including worker remittances) and rather weakly on permanent private disposable income. Broad money holdings exerted a positive and very significant influence. This indicated the dominant influence on consumption of liquidity or borrowing constraints. The availability of foreign saving also played an important role in constraining private consumption; about 40 percent of any increase in foreign saving went to private consumption, while the remainder went to finance either government consumption or gross investment.

The study found a strong positive relation between government savings and private consumption (and hence a strong inverse relation between government and private savings): private saving declined by LE 0.63 (i.e. private consumption increased) for each additional LE 1 in (permanent) government savings.⁴ The report attributed this result to a direct “crowding-out” of private savings by public savings because of a combination of financial repression and controls on consumer imports and on private capital outflows. This crowding-out effect was stronger if higher public saving came from lower public expenditure. It was weaker when the higher public saving resulted from higher taxes.

Private consumption did not respond much to domestic inflation, domestic real interest rates, or foreign real interest rates. The non-significance of both domestic and foreign real interest rates was consistent with other cross-country studies, which showed that consumption in developing countries was interest-insensitive. These findings suggested that a financial reform that raised domestic real interest rates might not be effective in raising private saving. The role of interest rates was more important for the better allocation of resources. The study compared the results for Egypt with those for a representative group of developing countries and found that the marginal propensity to consume out of permanent income was slightly lower in Egypt than in other developing countries, while the marginal propensity to consume out of current income was slightly higher.

The study provided in some measure a test between the Keynesian hypothesis in which only current income determines private consumption, and the Friedman permanent income hypothesis, under which only permanent income is relevant for the determination of consumption. The result showed that the propensity to consume out of current income was significantly higher than out of permanent income. This suggested that consumption was not smoothed and that in Egypt, Keynesian-type or liquidity-constrained consumers tended to dominate aggregate consumption.

The study also rejected the presence of strict Ricardian equivalence.⁵ Under Ricardian equivalence, a rise in public saving will not induce changes in private consumption if it results from a tax increase, while it will induce a rise in private consumption if it stems from a reduction in government expenditure. However, as the paper pointed out, if the

government can extract resources from the private sector directly, for example through financial repression and/or foreign trade restrictions, crowding-out of private consumption will occur directly. The results from the model suggested the occurrence of direct crowding-out of private saving by public saving, not ultra-rational forward-looking behavior by consumers.

Economic growth and employment

The creation of productive employment is the main challenge for economic policy in developing countries since it is the most effective method of reducing poverty. However, it is not easy to obtain an accurate picture of long-term developments in labor force and employment in Egypt. The data come from different sources, time periods are not always uniform, and definitions and concepts have changed over the years. A detailed review of the data and literature will be found in Chapter 8; here only a general overview is provided. Developments in population, labor force, and employment between the years 1960–2000 can be seen in Table 4.3.

The broad trends shown in the table are probably accurate, but the data for specific years (particularly the employment figures for 1976 and 1986) might be suspect; some work by Fergany (1991) and Assaad (1997) suggests an unemployment figure of two million in 1986. The data suggest that open unemployment was not a problem in the sixties (although this may largely be just a definitional artifact); it then increased steadily, and started to come down from about the middle of the 1990s (Figure 4.6).

Between 1960–2000 population increased at a rate of 2.35 percent a year; the labor force grew marginally slower, averaging 2.28 percent a year; while employment increased at an even slower average of about 2.10 percent a year. At the end of the period, the official figures show that there were about 1.3 million persons in the labor force who were not employed. Official data in Egypt estimated unemployment at 7.4 percent of the labor force in 2000, while independent estimates such as Radwan (1998) would put it at about 10–13 percent. In part these differences arise

Table 4.3 Labor force and employment, 1960–2000 (millions and percent)

	1960	1966	1970	1976	1986	1992	1996	2000
Population	26.1	30.1	33.3	36.6	48.3	53.7	59.3	63.3
Labor force	7.8	8.4	8.8	11.5	12.9	15.1	17.2	18.9
Employment	7.7	8.3	8.4	9.6	12.2	13.7	15.8	17.4
Unemployment	0.1	0.1	0.4	1.9	0.7	1.4	1.4	1.5
Participation rate (% of pop.)	29.8	27.9	26.4	31.4	26.7	28.1	29.1	29.9
Unemployment rate (% of lab. force)	1.3	1.2	4.5	16.5	5.4	9.2	8.1	7.9

Source: MOP; World Bank (1966, 1969).

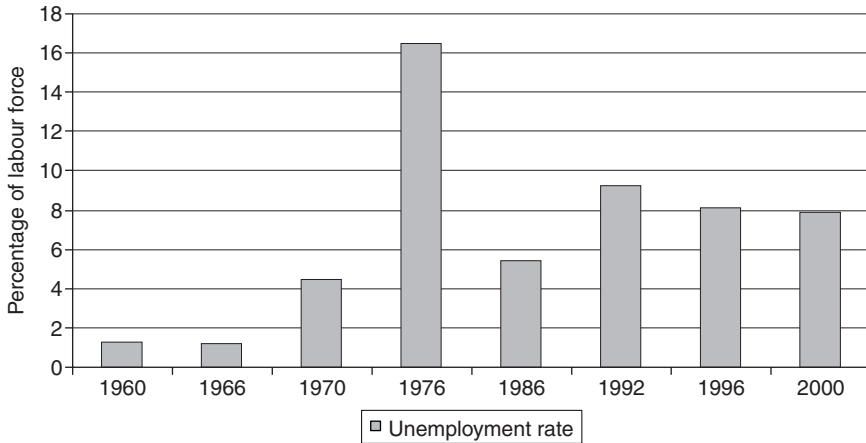


Figure 4.6 Unemployment as percent of labor force, 1960–2000 (source: MOP; World Bank).

from different measurements of the labor force, and are discussed in more detail in Chapter 8.

The responsiveness of employment to economic growth can be briefly examined. During 1965–2000 the Egyptian economy created an average of 297,000 net additional jobs annually, giving an average growth rate of employment of 2.4 percent a year,⁶ and an elasticity of employment with respect to output of 0.48. However, the elasticity varied considerably over the 35 years. For the first seven years of the 1960s, the employment/output elasticity was relatively high, averaging 0.7 during the period. After the 1967 war, extreme shortages of foreign exchange created major difficulties. Economic growth and the demand for labor dropped sharply.

Open unemployment increased during 1975–85 despite a high growth of GDP, because a significant portion of the growth originated from the petroleum sector, which was heavily capital-intensive. During this decade the elasticity of employment with respect to output dropped to 0.23.

Between 1985 and 2000, about 6.5 million jobs were created in Egypt at an annual average of 430,000 jobs per year, but the rate of job creation fluctuated a good deal. During 1985–93, unemployment rates continued to rise. Domestic GDP growth had slowed, and with lower oil prices the growth of incomes and the demand for labor in the Gulf countries had also fallen. The labor-generating capacity of the economy therefore was severely curtailed; open unemployment peaked at 10.2 percent of the labor force in 1993. Thereafter, the economy recovered. During 1995–2000, the resurgence of economic growth led to an absorption of labor in both private and public sectors, until the (officially-measured) unemployment rate dropped to 7.4 percent of the labor force at the end

of the Millennium.⁷ A substantial part of this growth emanated from the oil industry; reflecting this the elasticity of employment to GDP declined to 0.56 during the last five years (from 0.79 in 1990–95).

Of those employed, 35 percent were in the public sector (28.6 percent and 6.8 percent in the central government and public enterprises sector respectively), while 65 percent of total employment took place in the private sector (including agriculture and self-employed). The central government employed about 1.4 million persons, the public service authorities about 0.5 million, and the regional and local governments 3.1 million persons. The rate of growth of public employment declined substantially since 1997, but the share of the government in the total civilian labor force fell only slightly.

The structural transformation of the economy during 1960–2000, with a decline in the share of agriculture and an increase in that of services in the GDP, was mirrored in the pattern of employment (Figure 4.7). Most of the jobs created during this period were in the services sector (61 percent) followed by the industrial sector (27 percent), while additional employment in agriculture constituted only 12 percent of total employment.

The characteristics of unemployment in Egypt at the end of the Millennium revealed important factors in the labor market. First, unemployment disproportionately affected the younger age groups. It peaked among the age group of 15–25 years (27.5 percent compared to an overall average of 7.4 percent in 2000). This group also remained unemployed for longer than the average period. Second, and a matter that is of concern, the incidence of unemployment was higher among these with intermediate education (19 percent) and university graduates (12 percent) than among illiterates, for whom the unemployment rate was only 1 percent. This

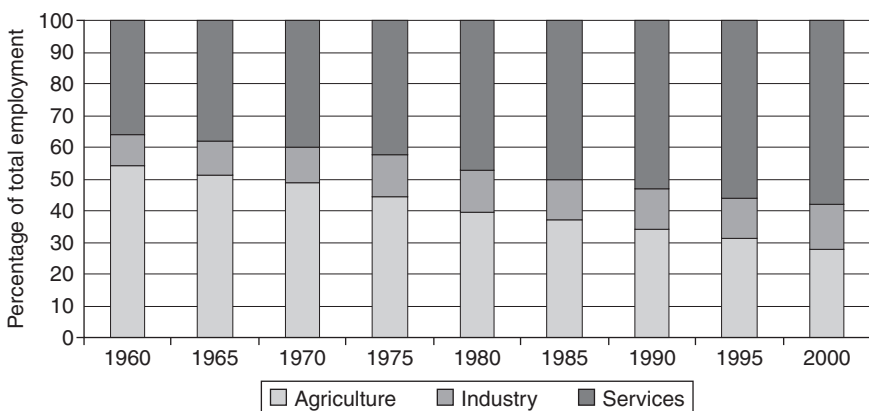


Figure 4.7 Structure of employment, 1960–2000 (percent of total employment) (source: CAPMAS; World Bank reports (1960, 1966)).

indicates negative labor market returns to education. Third, unemployment was also higher among females, especially in urban areas where female participation rates were relatively higher than in rural areas.

Unemployment and inflation: the Phillips Curve

Two important objectives of macroeconomic policy are low unemployment and low inflation. An important question then arises: is there a trade-off between these two goals?

The classic study on this issue was conducted by Phillips (1958) who plotted the rate of wage increases (a proxy for the rate of inflation) against the rate of unemployment in the United Kingdom from 1861 to 1957. He found a clear negative relation between inflation and unemployment, namely, that when unemployment was low, inflation was high, and when unemployment was high, inflation was low. A similar relation was found by Samuelson and Solow (1960) for the United States in the period 1900–60.

The basic form of the original Phillips Curve, for a given institutional structure and a fixed capital stock, can be expressed as:

$$\pi = -\alpha u$$

where π is the rate of inflation, u is unemployment, and α is a parameter that measures the response of inflation to short-term unemployment.

These results appeared to be important for policy because they implied that countries could choose between different combinations of unemployment and inflation. Policymakers could achieve low unemployment if they were willing to accept higher inflation, or they could attain low inflation if they were willing to tolerate higher unemployment.

Figure 4.8 shows the relationship between the unemployment rate and the inflation rate (the basic Phillips Curve) in 1982–2002 for Egypt.⁸ Inspection of the diagram shows a more or less clear negative relationship for the period 1986–93 and again in 1997–2001. Following modern interpretations of the Phillips Curve (see below), it is possible to view the diagrammed inflation–unemployment relationship as representing a family of shifting Phillips Curves, shifting to the right because of workers’ expectations of higher inflation. However, let me again caution readers that because of the equivocal nature of the data, too much exactitude should not be read into the connection pictured, which may better be regarded simply as suggestive.

In the industrialized economies the relationship broke down in the 1970s. Most developed countries showed both a high rate of inflation *and* high unemployment, a condition often referred to as “stagflation.” It was evident that the original Phillips Curve no longer provided an adequate explanation of the inflation–unemployment outcome.

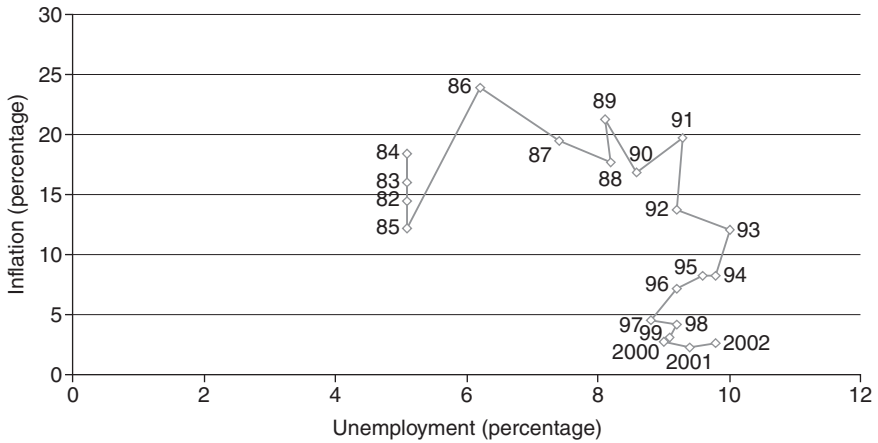


Figure 4.8 Unemployment and inflation in Egypt (The Phillips Curve), 1982–2002 (percent) (source: MOP; World Bank LDB).

Some economists – notably Friedman (1968) and Phelps (1967) – maintained that the Phillips Curve represented only a short-term relationship. They argued that a trade-off as described by the curve could exist only if workers continually underestimated the future inflation rate and persisted in the belief that their real wages had increased. Under these conditions more labor would be offered, and therefore a higher level of nominal wages would be associated with lower unemployment. However, it is unrealistic to assume that workers would forever fail to notice that the actual inflation rate invariably exceeded their prediction. A more realistic assumption is that workers would learn from their mistakes and keep adjusting their expectations of the inflation rate in the coming period until they got it right. More labor would only be offered at higher real wages. Thus the trade-off between unemployment and the inflation rate would disappear. The long-run Phillips Curve would be vertical and located at the “natural rate of unemployment,” which Friedman defined as the rate of unemployment at which inflation did not increase – which is why it is frequently called the Non-Accelerating Inflation Rate of Unemployment, or NAIRU – and below which the unemployment rate could not be sustained.

The modern formulation of the short-run Phillips Curve – the “expectations-augmented Phillips curve” – incorporates the role of expectations. In this version, the rate of inflation depends upon expected inflation, and the difference between actual unemployment and the NAIRU (i.e. short-term or cyclical unemployment). Thus a basic form of the equation for the relation between inflation and unemployment is:

$$\pi = \pi^e - \alpha(u - u^*)$$

where π is the inflation rate, π^e the expected inflation rate, u actual unemployment, u^* the NAIRU, and α is a parameter that measures the response of inflation to short-term unemployment. More complex models incorporate additional variables to represent import prices, productivity growth, real wages, supply shocks, and so on.

In spite of the amount of time and space devoted to discussions and estimates of the NAIRU, its usefulness for directing policy is not settled. Staiger *et al.* (1997) investigated the precision of estimates of the NAIRU for the United States and found that the conventional confidence intervals were very large – a typical 95 percent confidence interval for the NAIRU in 1990 ranged between 5.1 percent to 7.7 percent. This imprecision remained in spite of the natural rate being modeled in several different ways, using monthly or quarterly data, and using various measures for expected inflation. The imprecision led the authors to urge caution in using the NAIRU to guide monetary policy. In another recent review, Atkeson and Ohanian (2001) examined the accuracy of inflation forecasts from NAIRU Phillips Curve-based models with a naive forecast by comparing the root mean squared error (RMSE) of the two sets of forecasts. They found that over the previous 15 years, most of the major models (including those used by the Federal Reserve System of the United States) had on average been no more accurate than the forecast from a naive model which said that inflation over the next year would be equal to inflation over the previous year. In a similar vein, Pisani-Ferry (2000: 58) pointed to the uncertainty attending on measurements of the level of the NAIRU for European countries (and in particular for these estimates often to simply follow movements of the actual unemployment level), and expressed skepticism concerning the operational content of the concept in Europe.⁹

Pesaran and Smith (1995: 203–4) point out that such models contain two types of unobservables – the natural rate of unemployment (i.e. the NAIRU) and the expected rate of inflation. To be able to model them empirically, one must make auxiliary assumptions about the determinants of the natural rate of unemployment and the manner in which inflation expectations are formed. The manner of dealing with each of these has been contentious. For example, is expected inflation (π_t^e) to be formed by “adaptive expectations” (the assumption adopted by Friedman), or by “rational expectations” (as assumed by writers such as Lucas, Sargent, and Barro)? In the case of adaptive expectations, expected inflation is generally modeled as the actual inflation rate in the previous year, i.e. $\pi_t^e = \pi_{t-1}$. Of course, it is not necessary to posit that expectations adapt completely in one year (or other period chosen). It is also possible to use a lagged adjustment; for example, that the rate of inflation expected by workers is a weighted average of past inflation rates, with the weights decreasing over time (thus giving more importance to inflation rates in more recent years than to those further away in time). In the case of rational expectations, expected inflation is often modeled as the mathematical

expectation of the inflation rate (because this is the best predictor of the inflation rate).¹⁰

Following Ball and Mankiw (2002: 134) we can sum up as follows. The concept of the NAIRU might be tenable, in that shifts in aggregate demand (created, for example, by monetary policy) drive inflation and unemployment in opposite directions, and one could believe that, in the short run at least, there exists an unemployment rate at which inflation is stabilized. However, there are severe practical difficulties in measuring the NAIRU, not least because it changes over time for reasons on which there is little agreement. This makes it a rather dubious instrument for guiding policy. Data limitations and inadequate knowledge of the working of labor markets (such as the real strength and role of the trade and professional unions), of the formation of expectations, and of the determinants of inflation make the use of NAIRU-type analysis even more moot in Egypt.

As if to confirm this, the results of the few experiments with NAIRU-based models for Egypt have been ambiguous. The overall implication from equations estimated by the World Bank (under the assumption of simple adaptive expectations, i.e. $\pi_t^e = \pi_{t-1}$) was that rather substantial increases in unemployment would be required for rather modest reductions in inflation. It is possible that the model was misspecified, and hence the estimator of the coefficients of the included variables was biased; in particular, the role of the prices of imports in determining domestic prices in Egypt may not have been sufficiently taken into account. However, another serious weakness was that the results were very sensitive to the choice of years over which the model was estimated, with the steepness of the Phillips curve differing sharply depending upon the sub-period selected. In view of the major responsibility assigned to the Central Bank of Egypt for targeting inflation, a significant amount of work will be required in the area of unemployment and inflation to develop models that can provide a useful guide to policy.

Economic growth and investment

Economic growth in Egypt was driven chiefly by capital formation. Studies of the contribution of the different factors of production to output growth (examined later in this chapter) suggest that up to two-thirds of growth was attributable to physical capital accumulation, one-third to human-capital adjusted labor, and virtually nothing to the growth of total factor productivity.

Investment rates averaging close to 30 percent of GDP during 1975–85 produced a rapid growth of output.¹¹ A sharp decrease in investment to about 19 percent of GDP after the introduction of the stabilization program in the early 1990s resulted in some years of low economic growth. Private investment recovered somewhat in the late 1990s, and with it the GDP growth rate also improved. However, El-Gamal and Bisat

(1999) argue that in the 1990s, private investment targeted sectors with artificially high short-term profitability (high yield but short-lived capital) with increased capital depreciation rates, and that there was a reduction in Total Factor Productivity.

While public investment fell in the post-stabilization period by about 8 percent of GDP, private sector investment did not fill the ensuing gap and total investment was under 20 percent of GDP during 1990–97. Total investment picked up gradually in 1997–2000. Gross domestic savings more or less depicted the same trend as investment, increasing from 9 percent of GDP in the early 1970s to 16 percent in the late 1970s and the early 1980s. Domestic savings remained only about 13–14 percent throughout 1990–2000. Table 4.4 shows savings and investment ratios for five-year periods during 1965–2000 (Figure 4.4 shows annual relationships).

Economic growth and Total Factor Productivity

Output per head may increase in an economy because of different reasons. First, firms may be using more capital-intensive methods of production. Second, capital and labor, the main factors of production, may be more fully utilized. Third, resources may be used more efficiently.

A crucial question for development policy is: what has each factor of production contributed to the growth of output? Growth in the neoclassical framework stems from two sources: factor accumulation and productivity growth.¹² The relative weight of each of these sources carries important implications for policy. If growth is largely the result of applying more inputs of labor and capital, then the authorities should concentrate on one set of policies – for example, encouraging higher participation by women in the labor force and permitting quicker write-offs of capital equipment for tax purposes. If, however, the main driver of economic growth is increased productivity, then another set of policies – such as

Table 4.4 Investment and savings ratios, 1965–2000 (percent of GDP)

	1966– 70	1971– 75	1976– 80	1981– 85	1986– 90	1991– 95	1996– 2000
Gross domestic investment	14.6	19.5	30.2	28.1	29.4	18.8	20.4
Gross domestic fixed investment	13.1	15.3	25.5	27.1	28.4	18.7	18.9
Public sector	11.9	13.5	19.6	20.7	14.1	7.4	5.7
Private sector	1.3	1.7	5.8	6.6	15.8	11.3	13.2
Change in stocks	1.6	4.2	4.7	1.1	0.9	0.2	1.5
Gross domestic savings	11.0	8.5	15.5	15.1	16.1	13.3	14.2

Source: Mohammed (2001), World Bank LDB.

Note

Figures may not add up because of rounding.

greater emphasis on education and more support for research and development – would be the appropriate choice. Since questions of productivity loom so large in contemporary discussions of sustainable growth, it is worthwhile examining the issue in some detail.

The modern analysis of the contribution of the different factors of production to output growth was initiated by Solow (1957). He decomposed the sources of GDP growth into the contributions of capital and labor, and found that these did not account for the entire growth. A substantial residual remained, and this he identified with “technical progress.” Solow estimated that for the period 1909–49 the average annual growth of total GDP in the United States was 2.9 percent. Of this, he concluded that 0.32 percentage points (i.e. 11 percent) was attributable to capital accumulation, 1.09 percentage points (38 percent) to increases in labor, and the remaining 1.49 percentage points (51 percent) came as a result of technical progress. This pattern appears to have stood the test of time reasonably well; for example, Denison (1985) examining the period 1929–82 for the United States came to broadly similar conclusions.

The neoclassical model used in these studies relates the level of real output to the levels of three inputs – labor, capital, and productivity. The latter is assumed to augment both labor and capital equally, essentially increasing their individual productivities, and is thus generally termed Total Factor Productivity (TFP). The growth of total output depends upon the rate of productivity growth, the elasticity of output with respect to capital (i.e. the percentage increase in output resulting from a 1 percent increase in the capital stock) multiplied by the rate of growth of capital, and the elasticity of output with respect to labor multiplied by the rate of labor growth. These elasticities can be interpreted as the marginal products of the relevant factors, and under the assumptions of constant returns to scale and perfect competition can be proxied by the share of that factor in GDP. The growth in TFP is defined as a residual, namely, the portion of growth in output not explained by the growth of inputs; it is the increase in output that would occur as a result of improvements in the methods of production, with all inputs unchanged.

Although the measurement of technical progress in this manner is extremely widespread, the assumptions on which it is based should be noted and the results interpreted in the light of the limitations. First, the exercise faces a number of technical and data difficulties. To begin with, the measurement of the capital stock runs into serious conceptual problems; these were the focus of an extensive debate, initiated by the exchanges between Joan Robinson and Robert Solow.¹³ Once past the conceptual difficulties, data problems are not insignificant; for example, Jorgensen and Griliches (1967) maintained that the residual appeared simply because inputs, particularly capital, had been poorly measured and that it disappeared when these inputs were more accurately computed. Labor input also must be measured with some caution. At times, the

growth of the population has been used as a proxy, but in situations where, for example, the labor force participation rate has altered significantly, the use of the proxy would give erroneous results. The contribution of education and training to the labor input must be carefully quantified – better educated labor is equivalent to more labor.

Second, the model must assume that labor and capital are paid their marginal product (i.e. we must assume a competitive economy) and the production function must be constant returns to scale, otherwise we cannot use the observed share of the factor in national income as a proxy for the marginal contribution of the factor to total output.¹⁴ We no longer have the ability to measure these variables because the marginal products of labor and capital are not observable from macroeconomic data (while the shares of these factors are).

Third, as Hahn and Matthews (1965: 47) point out, it is important to have a definition of “neutral” technical progress that will in some sense leave unchanged the balance between labor and capital, and so will permit steady growth. Two definitions of “neutrality” have dominated the literature.

Following Hicks (1932), technical progress is said to be “Hicks-neutral” if the ratio of the marginal product of labor to the marginal product of capital is unchanged when the ratio of capital to labor is unchanged.¹⁵ Thus, technical progress is Hicks-neutral if it leaves unchanged the marginal rate of substitution between capital and labor, which is the rate at which one factor must be substituted for another in order to leave output unchanged. This view of technical change assumes that the same degree of technical change affects both capital and labor. Because the same labor and capital inputs produce more output, this type of technical change is sometimes called “factor-augmenting technical change”; the effect is as if the amount of factors of production had been increased.

An alternative definition is that of Harrod (1948). Technical progress is “Harrod-neutral” if all the techniques in a technology experience the same degree of labor-saving technical change. Expressed differently, technical progress is said to be Harrod-neutral if it leaves the capital:output ratio unchanged. This type of technical change is sometimes called “labor-augmenting technical change,” because each worker after the change is able to produce more than he could previously; the effect is as if there were more labor.

For an economy to sustain a steady rate of growth with output and capital both growing at the same constant rate, technical progress must be Harrod-neutral.¹⁶ But in order to decompose the contribution of the factors so as to estimate the contributions of labor and capital separately, technical change must be Hicks-neutral. Otherwise, in standard growth accounting, the residual would only determine the weighted (by the shares of profits and wages in total income) average of capital- and labor-augmenting rates of technical change.¹⁷ Analysts have looked for a

production function in which technical progress is both Hicks-neutral and Harrod-neutral. For this to be the case, the elasticity of substitution between labor and capital in the production function must be unity. The only production function with this property is the Cobb–Douglas production function.¹⁸ This property, together with its ease of manipulation, is no doubt the reason for the widespread use of this production function in TFP studies, including all the estimates for Egypt.

The interpretation of the residual as the contribution of “technical progress” also must be nuanced. Some analysts regard the residual as being a catch-all item affected by too many factors – such as government regulations, changes in managerial competence, the functioning of institutions – that we do not fully understand, and would simply regard it as “a measure of our ignorance.” Hence the increasingly preferred term in the literature is the neutral “Total Factor Productivity” (TFP) or the “Solow residual.” The growth accounting approach also treats the variables in the production function as independent of each other, whereas in practice they may be closely interdependent; thus, for the most part labor and capital are not substitutes but are complementary, while most technical progress must be embodied in physical capital.

The upshot is that the growth accounting approach provides somewhat equivocal results for policy. First, it identifies proximate, not ultimate, causes of economic growth. Moreover, as Matthews *et al.* (1982: 200) point out, an important weakness of these models is that no explicit link is established between economic policy and the rate of technical progress; TFP-generated output growth “is growth due to causes that resemble manna from heaven.”¹⁹ This, in part, has led to the current interest in “endogenous growth” models, of which a key feature is that growth depends on the incentives to invest in improving technology. Once it is accepted that “technical progress” can itself be created by investment, it opens up possibilities, such as actions to encourage innovation, for policy intervention in the growth process.

The theory behind, and the conclusions derived from, work on the contribution of productivity to economic growth were further refined in the context of research on the experience of the rapidly industrializing economies of East Asia. The original view – as expressed, for example, in World Bank (1993b) – was that the spectacular performance of these countries stemmed chiefly from the manner in which they had absorbed new skills and learned to efficiently use the new technologies that they had imported. The converse view is that growth in these countries was mainly input-driven, resulting more from factor accumulation than from productivity increases.²⁰ As Krugman (1997: 27) succinctly put it, growth in these countries was “mainly a matter of perspiration rather than inspiration – of working harder, not smarter.”

The foregoing discussion of the rather heavy load of measurement issues and assumptions that validate a growth accounting decomposition of the sources of growth should alert one to the limitations of such an

approach. However, it is widely held that, *in principle* at least, the decomposition of growth should help policymakers decide the direction that policy could most fruitfully follow. It is therefore understandable that several attempts have been made to estimate the sources of growth in the Egyptian economy – for example, World Bank (1983: Chapter 8); World Bank (1994: Table 42); IMF (1998: 7–8); Bisat and El Gamal (1999); Mohammed (2000, 2001); Kheir El Din and Moursi (2002). The studies cover different time periods and use differing data sets, thus the details of their findings are not always congruent with each other. However, a generally consistent result is that at least during 1960–90, capital accumulation provided the main driving force for the growth of output. For the 1990s, the picture becomes especially confused, with Mohammed (2000, 2001) finding that TFP growth contributed essentially nothing to the growth of GDP in 1990–2000, and Kheir El Din and Moursi (2002: Table 2) reporting that TFP growth contributed 44 percent in 1991–98. However, the latter authors comment (p. 35) that the increase in the share of TFP growth in economic growth during this period resulted more from a decline in the rate of capital accumulation than from improvements in the management and organization of production.

Rather than becoming enmeshed in the minutiae of methodological, temporal, and data differences between the numerous studies, it might be more fruitful to look at one of them a little more closely.

Mohammed (2000, 2001) assumed a production function of the Cobb–Douglas type and estimated the share of capital and labor in GDP growth for the period 1965–2000 at 0.5989 and 0.4011 respectively. The contributions of capital, labor, and TFP growth to GDP growth over this period, as well as in different sub-periods, are shown in Table 4.5.

The study found that during 1965–2000 the growth of GDP in Egypt owed much more to the growth of inputs (labor and capital) than to TFP

Table 4.5 Factors' contribution to GDP growth, 1965–2000

Year	Growth rate (%)			Contribution to GDP growth (%)		
	GDP	Human capital/ adjusted labor	Physical capital	Human capital/ adjusted labor	Physical capital	TFP
1965–70	3.33	3.29	3.80	1.74	1.79	–0.20
1970–75	3.48	3.04	6.24	1.61	2.93	–1.06
1975–80	9.80	4.07	13.54	2.16	6.36	1.28
1980–85	6.73	2.42	11.89	1.28	5.59	–0.14
1985–90	4.22	3.37	6.45	1.78	3.03	–0.59
1990–95	3.39	3.64	3.73	1.93	1.75	–0.29
1995–2000	5.72	4.65	6.88	2.47	3.23	0.02
1965–2000	5.22	3.50	7.45	1.85	3.50	–0.13

Source: Mohammed (2001).

growth. While Egypt's GDP grew by an average rate of 5.2 percent during 1965–2000, physical capital grew by about 7.5 percent; human capital-adjusted labor increased by an annual average of 3.5 percent – and employment by 2.6 percent – during the same period.²¹ Over the entire period 1965–2000, capital accumulation contributed about two-thirds of the growth in real GDP, growth in human capital-adjusted labor about one-third. TFP contributed virtually nothing for most of the period; it was only important during 1975–80, when it was responsible for about 13 percent of the growth of GDP. The negative contribution of TFP to GDP growth, for example between 1980–85, says that any combination of labor and capital would have produced less output in 1985 than it could have in 1980.

During 1965–75, growth of TFP was negative; all the output growth was contributed by factor accumulation. The public sector dominated the economy and low efficiency in public investments may have been the main factor behind slow productivity growth. Productivity recovered in the late 1970s – a period characterized by post-war construction and major trade liberalization reforms. However, productivity growth slowed again in the 1980s and most of the 1990s, recovering only slightly in the late 1990s.

Parenthetically, one might note an estimate by Maddison (1970: 53) of the factors' contribution to growth in an earlier period. Surveying the years 1950–65, Maddison calculated that 29 percent of Egypt's growth was provided by growth in human resources, 51 percent by growth in non-residential capital, and about 20 percent by changes in efficiency. However, Maddison assigned weights of 0.5 to both labor and capital. If we substitute the weights estimated from more recent studies into Maddison's data, productivity improvements would account for about 12 percent of the growth of GDP during that period.

Attempts have been made to probe a little deeper into Total Factor Productivity. A recent effort was by Hall and Jones (1999), who decomposed differences in output per worker across countries into differences in the capital:output ratio, differences in educational attainment, and differences in productivity. The contributions from each of these inputs were expressed as ratios to US values. Their data showed that output per worker in Egypt was less than one-fifth that in the United States. They found that if Egypt had the same level of TFP and educational achievement as the United States, then its output per worker would be only 45 percent of that of the United States. If the only difference between the countries was in educational achievement, then Egyptian output per head would be 58 percent of that of the United States. If Egypt had the same capital stock and educational achievements as the United States, its output would be 70 percent of the United States level. Therefore, low output in Egypt was not just due to low factor inputs, but resulted from the relatively lower efficiency with which Egypt used these inputs.

Hall and Jones hypothesized that differences in capital accumulation, productivity, and therefore output per worker were related to differences in social infrastructure (i.e. the institutions and government policies that determined the economic environment within which individuals functioned). A good social infrastructure linked social and private returns, so that individuals benefited from pursuing activities that also benefited society. Such a social infrastructure would protect the output of individual producers from diversion to non-producers, i.e. to rent seekers. Hall and Jones found a close association between output per worker and measures of social infrastructure across their sample of 127 countries. Countries with policies favorable to productive activities – rather than to diversion – produced much more output per worker.

TFP growth in Egypt also does not compare well with rates of productivity in other middle-income countries in Asia and Latin America. Thus in 1973–94, TFP growth contributed about 24 percent and 40 percent of GDP growth in Malaysia and Thailand respectively. For the period 1965–97, it appears that TFP growth in Egypt was negative in 19 years while it was negative in only nine years in Korea, and while TFP growth did not contribute to growth in Egypt during the whole period, it accounted for up to 20 percent of GDP growth in Korea. TFP growth in Egypt also lagged behind that in Tunisia.

Some approaches to productivity – for example, Nishimizu and Page (1982), Danilin *et al.* (1985), Schmidt (1985), Fu *et al.* (1988) – refine the concept a little further. They decompose productivity change into two components: *technological progress*, which corresponds to changes in techniques of production, and *technical efficiency change*, which corresponds to changes in the efficiency with which existing techniques are employed.²²

A World Bank study (1983: 227–64) applied this concept to productivity movements in Egypt. Although the essay was limited to the industrial sector, the findings may have a more general interest. First, TFP change was an important element of the rapid rate of industrial growth enjoyed by the Egyptian public sector between 1973 and 1979. This suggests that the new policies and the greater access to investment and new technology introduced by the *infitah* had a significant impact on this sector. Second, the gap between the average firm and the “best practice” firm in the industries studied was widening over time. The average firm *was* experiencing productivity improvement, but at a slower rate than the best-practice potential rate. Third, the rates of best-practice TFP changes encountered in Egyptian industry for the 1973–79 period – particularly in industries such as edible oils, paper, transportation equipment, fabricated metals, and electrical machinery – were very high in comparison with long-term trends in more developed countries. These results most likely indicated a process of short-term adjustment by best-practice firms rather than the effects of technological progress in expanding production possibilities. The report concluded that productivity growth in industry would

be more readily sustained by bringing the average and below-average firm closer to the level of performance of the best-practice firm than would investment in newer technologies for the highest performing firms. The poor performance of productivity in Egyptian industry over longer periods is confirmed by other studies; for example, Adams (2003) found that growth in labor productivity in Egyptian industry during 1984 to 1996 averaged only 0.93 percent annually, compared with 5.93 percent for his sample of 22 developing countries.

These implications carry over from the micro- to the macroeconomic level. For example, a significant lesson derived from the study of factor productivity is the importance for developing countries of expending time and effort to absorb the continuously improving technology that is available through imports. In fact, Young (1995) argued that perhaps the chief reason for the surprisingly low estimates of TFP growth that he had obtained for the Singapore economy was that it had been pushed too quickly into acquiring new technologies without being given time to consolidate at each stage and realizing the benefits of what Arrow (1962) termed “learning by doing.” Absorbing the best practices means – in addition to enhancing the system of education and labor training – paying attention to learning by doing, improving managerial practices, and strengthening the functioning of institutions (particularly the legal system, the tax system, the trade system, and the financial system) that enhance competitiveness. It also requires greater transparency in and more efficient performance by the framework of government. These elements are vital, because the Egyptian economy can only grow as fast as the rate of expansion of its factor inputs plus the rate of productivity change of these inputs. Many of these issues, in the context of Egypt, are discussed in the chapter on sustaining growth.

A note on data

The plural of anecdote is data.

George Stigler, Nobel Laureate in Economics 1982

The quality of Egyptian economic data, in common with that in other developing countries, is quite variable.²³ Data on tax collections, the money supply, payments made for imports, receipts from exports, foreign exchange reserves, and some other monetary and fiscal aggregates are generally reliable. However, data on national accounts and its principal components (such as investment, savings, public and private consumption) and the data on employment are less firm and are more useful as indicators of trends than of precise magnitudes.

The first modern estimate of the national income for Egypt was by Anis (1950). Since that time many elaborations have taken place, but throughout 1952–2000 the system offered considerable scope for improvement.

Useful comments on national accounts and other data sets are offered by Hansen and Mead (1965), Mabro (1974), World Bank (1978), Ikram (1980), Hansen (1991), Ministry of Planning (1991, 1996), and Waite *et al.* (1998).

These studies point to six principal sources of weaknesses in the national accounts data. The *first* is the use of official prices, which distorts the final outcome. Hansen (1968: 28) cautioned that “current price estimates of GDP should always be understood to mean current *official* prices.” This warning must be kept in mind because it explains to a large extent why the GDP implicit deflator appears to be so modest over substantial periods. Price administration has ensured a large measure of stability in official prices. If the price series were to be adjusted for manifestations of scarcity – such as queues and rationing – higher figures would be obtained, thereby reducing the level of real GDP. Moreover, the system of trade protection raises the prices of industrial compared to agricultural products and thus artificially gives industry a relatively bigger weight in the measured GDP. This not only distorts estimates of the structure of the GDP, but also affects calculations of the growth rate, because it raises the share of the normally faster-growing sector, industry, and depresses that of the slower-growing, namely, agriculture.

Second, data on private sector activities – such as investment, sales, inventories – are especially inadequate, with the service industries being the worst affected. This inadequacy becomes a growing handicap as the economy becomes increasingly privatized and one in which the services sector occupies the most important part. The problem is accentuated because the private sector has been growing faster than the economy in general. Moreover, the primary method of estimating GDP is the production approach, i.e. by using price and quantity data for detailed commodities to estimate gross output, intermediate consumption, and (by residual) value-added. For the expenditure-based GDP estimates, the greatest deficiency is the lack of current data on private consumption (because of the absence of a regular series of household surveys). As Waite *et al.* (1998: 10) emphasize in a comprehensive review of the national accounts, “Most of the expenditure estimates are tied to various production measures and hence not truly independent estimates.” Measurement of changes in inventories and their values is deficient as there is no regular system of collecting information on the book value of inventories; changes in stocks are derived partly from statistics on commodity balances.

Third, the existence of substantial lags between the time period in question and the publication of the data reduces the usefulness of the information for analysis or policymaking. Typically, projected estimates of the upcoming fiscal year’s GDP are made in the first half of the calendar year. They are then revised and called “expected estimates” a year later. Further data adjustments are made, and sometimes two and three years from the date of the projected estimates the “preliminary” and “final” estimates are

issued.²⁴ Thus the GDP for a given year may be projected or estimated four times and the final numbers may not be established until three years or more after the end of the fiscal year in question. Moreover, because the projections of the macroeconomic variables and the estimation of the outcome are both performed by the Ministry of Planning, Waite *et al.* (1998: 12–13) judge it “highly unlikely that those who project and monitor GDP for the Plan can avoid all bias when they then compile the ‘actual’ estimates,” and they recommend that the two processes be separated in order to ensure that the estimating procedure is perceived as impartial and objective by users of the data.

Fourth, the coverage of the statistics has changed a number of times as a result of changes in definition and of the time period covered (such as changes in the fiscal year from a July–June basis until 1971/72 to a calendar year from 1973 through 1979, and then again back to a July–June period from 1980/81). These changes complicate the task of analysing long-term trends.

Fifth, an important shortcoming is the absence of reliable and consistent data on a regional basis, particularly that relating to the GDP and its sectoral composition. The available information does not permit a comparative analysis of productivity developments in the different regions. This becomes particularly critical in the analysis of levels, trends, and the causes of poverty, which by 2000 had increasingly taken on a regional dimension.

Sixth, the national accounts and other official data measure only a part of the picture. In Egypt, as in most developing countries, a considerable part of economic transactions takes place in the unrecorded “gray” economy.²⁵ Individuals and micro-enterprises function in this theater in order to conceal activities that in themselves may be licit, but which the protagonists wish to keep hidden in order to avoid paying taxes or to evade the attention of the authorities for other reasons. The criterion used in most Egyptian studies of the informal sector – for example, Fergany (1991, 1996b), Rizk (1991), Assaad (1997) – is the size of the establishment, and defines the informal sector as economic units employing less than ten workers.²⁶ This rather misses the point. Actors generally function in the gray economy because they wish to “pass under the government radar,” i.e. they want to evade notice. Hence, the more appropriate criterion would be non-registration of the unit.

No reliable estimate of the contribution of the gray economy in this sense exists for Egypt, although all commentators agree that it could be substantial. The estimates cover a wide range: Waite *et al.* (1998: 39) suggested that Egypt’s GDP might be understated by as much as 30 percent; Schneider and Enste (2000: 7–8) in a working paper of the IMF estimated Egypt’s shadow economy in 1989–90 at 68 percent of GDP; while Oweiss (1994: 21) reckoned that the shadow economy provided a contribution “at least equal to the published figure of the country’s national income.” The

size of the gray economy makes a difference – an increase in this part of the economy is likely to decrease government revenues, and this could reduce the amount and quality of publicly provided goods and services.

The absence of reliable information on the informal economy leaves policymakers without the wherewithal to answer questions about the actual level of employment in the country, the size of family incomes, and the extent of poverty. It also leaves open two other particularly important questions. First, does the informal part of the economy move pro- or counter-cyclically with the formal economy? The answer from studies of other economies – for example, by the Social Policy and Development Centre (2001) for Pakistan – is that the gray economy largely moves in the same direction as the formal economy. This means that if the latter faces difficulties, the authorities cannot assume that the informal part will pick up the slack and that the impact on incomes and employment will be cushioned. Second, does the presence of the gray economy imply that the distribution of income is more or less equal than it would have been in its absence? Based on a very detailed study for India, Acharya (1985, 1988: 300) concluded that the distribution of actual household income from all sources was likely to be even more skewed in favor of the top decile than indicated by standard surveys. This would result (a) from the incentives for households with a higher proportion of gray income to understate their true incomes and to do so to a greater degree than households with little or no income from gray sources, and (b) from the greater opportunity for the “haves” (such as industrialists, traders, real estate operators, politicians, bureaucrats, etc.) to earn gray incomes than the “have nots” (e.g. small farmers, peasants, rural and casual labor). These reasons apply to Egypt just as strongly as to India. However, for the entire 1952–2000 period, Egyptian policymakers were handicapped by the absence of a firm empirical basis for a judgment.

In view of all the omissions and uncertainties in the data, it can be a little disconcerting to see the doggedness with which some of the international organizations and the Egyptian authorities dispute the decimal points of the growth rate.

It will be clear from the foregoing that the data situation poses considerable difficulties even for analysing long-term trends. The situation is still more challenging for day-to-day policymaking, because the absence of short-term (e.g. quarterly) national accounts and other magnitudes makes it very tricky to assess the current state of the economy and to devise suitable policies. In order to buttress its own analysis, the World Bank attempted to supplement the available official statistics with more timely proxies. The following short description of the efforts made will give some flavor of what needs to be done.²⁷

The World Bank’s office in Cairo compiled a composite indirect indicator of real activity entitled “Resident Mission Real Activity Index.” This was a linear average of the monthly indexes for: (1) dollar imports of

consumer goods, durable and non-durable; (2) net tonnage of cargo crossing the Suez Canal; (3) number of, and nights spent by, tourists visiting Egypt; (4) real credit extended by the Principal Bank for Development and Agricultural Credit (PBDAC); (5) electricity consumption by industrial users (in megawatts); (6) domestic sales of cement (in tons); (7) domestic sales of iron (in tons); (8) number of licenses issued by GOFI for newly-established industrial companies (capital of LE 100,000 or more); (9) freight transportation (in tons) by the Egyptian National Railways; (10) the real wage bill of the central government; (11) the number of checks cleared at the Central Bank's clearing houses; (12) average number of job advertisements in *Al-Ahram* newspaper (Friday); and (13) average number of calls for bids (supply and contracting) advertised in *Al-Ahram* newspaper (Friday).

The Bank also attempted to track private sector performance. Each month it surveyed some 50 private enterprises, local and foreign, fully-private, and asked them (in confidentiality-protecting index terms) about their monthly sales, employment, and inventories of final goods. The data series could, of course, be criticized for the biased quality of the respondents: they were, after all, English-speaking, World-Bank-connected businesses. Yet it provided a reasonable lower bound in looking to the future – if things appeared bad for these more dynamic enterprises, there could be little doubt that the economy was likely to be coming in for trouble.

The Bank also built its own “tourism index.” This was a linear average of the indexes for: (1) tourist arrivals; (2) tourist nights; (3) the average actual occupancy rate of Cairo's three largest hotels; (4) sales of bottled water of the most popular brand; and (5) sales of photograph films (Kodak). The raw data were provided by the Tourism Development Authority, the managers of the hotels in question, and the CEOs of the bottled water and film companies.

Data on monthly fiscal accounts were obtained from the IMF's office in Cairo. Monthly balance of payments accounts were estimated both from Customs Department data (based on physical crossings of the customs line) and from Central Bank data on foreign payments/receipts and transfers. The Central Bank information covered a somewhat different time period vis-à-vis the data on shipments obtained from the Customs authorities, so the two series were not congruent. However, the Central Bank data were available with much smaller time-lags and thus were better for short-term analysis, while the Customs data were more detailed (especially in terms of commodity breakdown) and thus more helpful for structural investigations.

Data on inflation were obtained from CAPMAS, and from information that embassies and international agencies collected in order to adjust the salaries of their local employees. The latter, of course, only provided a partial picture because their consumption baskets contained a substantial weight of commodities not consumed by the poorer sections of the popu-

lation. However, some cross-checking of the CAPMAS data was necessary, because that agency surveyed only one-third of the consumer basket each month.

For data on interest rates, the World Bank surveyed five private and joint-venture banks (as they were more likely to price money freely). Estimates of the market foreign exchange rate were obtained from foreign exchange brokers as well as banks. The Stock Brokers Association helped to point out “regularly traded stocks” (most of the stocks listed on the Cairo bourse are closed companies profiting from the tax advantages of listing). The World Bank then computed its own monthly stock exchange price index, mainly to use as a forward indicator.

The foregoing indicators, while helpful in forming judgments and suggesting some likely turning points in the economy’s trajectory, were inadequate substitutes for series based on comprehensive data or on statistically rigorous sampling techniques. The World Bank ultimately discontinued the exercise because of the amount of time and effort required to produce even reasonably meaningful results. It is unfortunate that the government did not develop its own bank of reliable short-term data to support expeditious macroeconomic policymaking.

A further area in which problems with data could hinder the effectiveness of policymaking concerns fiscal policy and the budget. Fiscal policy is a potent tool for helping guide the economy, particularly so in Egypt where for much of 1952–2000 monetary policy was relegated to a secondary role. The state budget covers central government, local governments, the public services authorities, and the investment projects of the economic authorities and their financing. Revenue and non-investment expenditure are reported in the budget on a cash basis, while investment expenditure is reported on an accrual basis, i.e. when a bill is received and the receipt of the good or service has been verified. However, a number of entities, principally the National Investment Bank (NIB), the social insurance funds, and the Social Fund for Development, whose combined activities were large enough to have substantial macroeconomic consequences, were not treated consistently in the budget. A significant portion of the expenditures of the Ministry of Defense is also outside the budget.

In the late 1990s, the operations of the NIB were consolidated with those of the government and the fiscal data for 1999 were reviewed. As a result of the review, the authorities more than tripled the estimate of the budget deficit for 1999, from 1.3 percent of GDP to 4.2 percent; indeed, if the financing of net lending by the NIB were included, the deficit would rise to nearly 6 percent of GDP. Inquiries by international organizations suggested that data for earlier years were affected by similar discrepancies. Needless to say, such problems with data make it difficult to assess the true fiscal stance and to conduct fiscal policy.

The data on the labor force and employment constitute a major weakness. This is of particular concern, because providing meaningful

employment to a rapidly growing labor force has risen to top priority in the agenda of Egyptian policymakers.

The two main sources of data on labor and employment are the decennial population census (PC) and the quarterly Labor Force Sample Survey (LFSS) conducted by CAPMAS. Fergany (1991) has pointed to a number of methodological and definitional problems that limit comparability across the two instruments, as well as within the same instrument over time. First, the LFSS is not carried out during census years, and therefore no direct comparison can be made between the two sources. Second, the PC includes army personnel and conscripts in both the population and the labor force, as opposed to the LFSS, which includes only the civilian population. Third, the reference period for unemployment is one day in the PC, as opposed to one week in the LFSS; this leads the PC to overestimate the magnitude of unemployment. Fourth, until 1986, the PC results were produced for employment and unemployment both defined on the age group six-plus. In 1996, these tabulations were produced for the age 15-plus, thereby reducing the reliability of trend analysis. On the other hand, employment in the LFSS is typically defined for the age group six-plus, while unemployment is defined only for the age group 12–64. Fifth, both instruments inadequately measure economic activity, especially of female informal home-based activities.²⁸ Sixth, both the PC and the LFSS, by requiring “active search” for employment (during a relatively short reference period) as a condition for being included in the labor force, tend to exclude “discouraged unemployment” in periods of high and persistent unemployment.

Owing to the greater frequency with which it is conducted, analysts generally place greater reliance on the LFSS. However, this survey suffers from two main weaknesses. First, the definition of who is a member of the labor force poses a serious problem. The question posed in the survey is essentially: Do you work? If not, have you looked for a job during the past week? If you have not, you are not in the labor force.

This definition effectively excludes the “discouraged” workers, that is, the ones who would have liked to search for a job, had they had the money and means to do it, and those who have got so fed up of looking unsuccessfully for a job that they did not “actively search” for one in the reference period covered by the LFSS. Once (in the third quarter of 1988), CAPMAS used an alternative definition in the LFSS: it included in the labor force those workers who had searched for a job during the entire duration of unemployment. This factored into the labor force the “discouraged unemployment” portion of the population and obviously gave a higher figure of unemployment as a percentage of the labor force than had been provided by the earlier definition.²⁹ CAPMAS has now reverted to the original definition.

Second, there is a weakness in the measurement of female participation in the labor force. Here, again, the special round of the LFSS in October

1988 marked a change with previous surveys: any individual engaged in subsistence activities either for own or household consumption was considered economically active and hence part of the labor force. This modification alone resulted in a significant increase in the measure of female participation, especially in rural areas, compared with those reported in earlier surveys. However, Assaad (1999) reported that by 1995, measurement practices of participation in informal and home-based activities had reverted to their pre-1988 standards.

By assuming that the activity rate (i.e. labor force divided by population) of October 1988 remains at least constant (an innocuous assumption in a country with a fast-growing population and rising education levels) and applying it to the current population levels that are officially published, researchers can try to estimate the “real” labor force. The difference between the “real” and the government’s reported labor force figure is provided by the discouraged, unemployed workers and a higher participation rate for women. That, when added to the unemployment and labor force figures published by the authorities, gives the “real” rate of unemployment.³⁰ The application of this (or a similar) procedure is essentially what produces most of the differences between estimates of unemployment provided by the government and by independent research workers.

Measurement of the capital stock

The value of fixed assets reported in accounts is based on historical costs. Because of inflation, the book value of assets often grossly understates the replacement value of those assets. This has two consequences: first, the actual rate of return is overstated; and second, depreciation allowances are inadequate to maintain the real value of assets. In order to avoid these distortions in the measurement of the capital stock, the book value of capital estimates is revalued using a methodology known as “perpetual inventory technique.” Under this procedure, the value of the real gross capital stock at time t is estimated by summing the value of the gross investment (measured in constant prices) undertaken each year prior to t and subtracting the value of capital goods that have been scrapped. Thus, provided that we have data on investment extending further back than n years (n = the fixed life of each piece of capital equipment), we can construct a measure of the capital stock without having to obtain a valuation of all the capital stock in existence in the base year. See McCombie and Thirlwell (1994: 130–33).

The version of this technique frequently followed is due to Arnold Harberger (1977). This technique, or a variant of it, has been used by the World Bank for deriving the real capital stock and estimating financial and social rates of return for many developing countries.

Harberger’s methodology for measuring the net capital stock essentially involves the following procedure:

- Compile a series on annual gross capital formation (i.e. annual investment);
- Decompose the series into three components: machinery and equipment, buildings, and inventory;
- Apply appropriate price indices to revalue annual investments in terms of the prices of the base years;
- Apply appropriate depreciation rates. (Harberger assumed an average life of 40 years for buildings, and 12.5 years for machinery and equipment, yielding annual depreciation rates of 2.5 and 8.0 percent respectively);
- Derive an initial estimate of the capital stock for each of the three components by using the following relationship:

$$K_t = [(1 + r) / (d + r)] * I_t$$

where K is the capital stock, r is the rate of growth of the capital stock, d is the rate of depreciation, and I_t is the investment in time t . The main assumption required to derive the value of “ r ” is that the economy was operating in “normal” circumstances in the base period. This implies that the different types of capital stock grew at the same rate as output. Also, in order to avoid random fluctuations, the base year value of investment is taken as an average of three years.

- Apply the perpetual inventory technique to derive the capital stock series for the period concerned.

5 The external sector

For most of 1960–2000, Egypt struggled to simultaneously achieve both internal equilibrium (a balance between domestic demand and supply at an acceptable level of inflation) and external equilibrium (a continuously financeable level of current account deficit). Growth of the GDP triggered an earlier and sharper increase in Egypt's imports than in her foreign exchange earnings, while debt servicing – itself the product of external deficits – added to the resource requirements. The external disequilibrium *had* to be controlled, because the available financing fell short of the demands. Egypt sought to contain the disequilibrium chiefly by restricting imports, but the cost was underutilized capital stock and under- and unemployed labor. Internal equilibrium, thus, was subordinated to the external. The balance of payments, therefore, must be seen as the ultimate constraint on Egypt's growth during this period.

Major developments in the balance of payments

During 1965–2000 Egypt's balance of payments was characterized by severe structural weaknesses. Foreign exchange earnings were narrowly based and depended largely on oil, worker remittances, tourism, and the Suez Canal. Imports for the most part remained 2.5 to three times merchandise exports, and the resulting gap was financed chiefly through earnings from services. Income from services (including worker remittances) considerably exceeded proceeds from physical exports, and accounted for about two-thirds of foreign exchange earnings. Interest payments on the country's external debt constituted a substantial burden until the rearrangements of 1991–96. For most of 1965–2000 the current account balance remained negative, and it was only towards the second half of the 1990s, when debt rearrangements eased the servicing burden, that improvements in the current account balance were not necessarily related to a slowing down of the economy.

Excluding official transfers, the current account balance ranged from +6.6 percent to –20.0 percent of GDP at market prices; after taking into account official transfers, the balance varied from +10.4 percent to

–11.3 percent. The large current deficits were financed mostly by official transfers and external borrowing by the public sector, supplemented by private capital inflows. Direct foreign investment contributed only minimally to the country's financing requirements. The structure of the balance of payments was thus dominated by services, transfers, and capital transactions.

Other notable trends in the balance of payments were the following:

- 1 For almost the entire 1965–2000 period, Egypt ran a deficit on the current account of the balance of payments. The major cause was a persistent and large excess of merchandise imports over exports. The deficits on merchandise trade were to a substantial extent offset by surpluses on the services account. Egypt's "invisible" earnings outweighed expenditures, except for years in which the Suez Canal was closed and before worker remittances began rising sharply. The latter occurred after the oil price increases of 1973, which increased incomes and the demand for Egyptian labor in the Arab oil-producing countries. Invisible earnings were crucial for Egypt: during 1965–2000, they accounted for about 69 percent of total foreign exchange earnings, compared with 31 percent for merchandise exports. Thus considering the period as a whole, Egypt was principally an exporter of services.
- 2 An important source of foreign exchange for most of 1965–2000 was foreign assistance. Until 1973, the chief providers of these resources were the Arab countries and the Soviet bloc; thereafter the United States increasingly assumed the dominant role. The purchasing power conferred in foreign exchange was considerable – during 1970–2000, net official transfers amounted to almost 18 percent of Egypt's own foreign exchange earnings from merchandise exports and invisibles. Data on external assistance remain incomplete, but the available information indicates that net official transfers during 1970–2000 averaged nearly 6 percent of GDP annually. Without these transfers, aggregate consumption would have been roughly 7 percent, or private consumption about 12 percent, or investment almost 30 percent less than its actual level. The impact of external aid is likely to have been even greater, because the figures do not reflect military assistance, which is known to have been substantial. Thus, during 1984–2000, the USA provided \$1.3 billion a year in military grants, equivalent to about 8.5 percent of Egypt's foreign exchange earnings during that period. The trend in the current account balance, with and without official transfers, can be seen in Figure 5.1.
- 3 For most of 1965–2000, trade policy failed to significantly accelerate the growth of non-oil exports. Egypt's earlier dependence on cotton exports changed after 1975 (with the recovery of the oil fields in 1973) to heavy dependence on oil exports, which accounted for almost half of total merchandise exports.

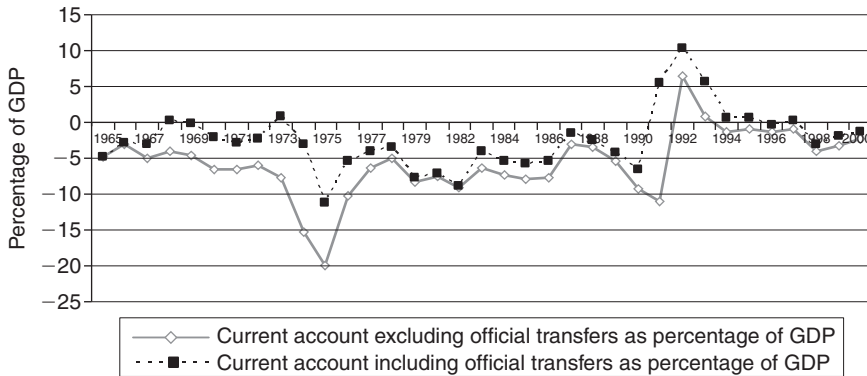


Figure 5.1 Current account balance, 1965–2000 (percent of GDP at market prices) (source: CBE; World Bank LDB).

- 4 Until the 1990s, import policy generally remained restrictive, with high tariffs supplemented by import controls. The latter became especially prominent in compressing imports during periods (such as the late 1980s) in which the country found it difficult to obtain trade financing.
- 5 The direction of external trade changed markedly. By the end of the period, the share of the West European market in Egypt's total exports doubled compared with 1965–67, while that of the United States increased more than three-fold. Correspondingly, the share of the East European market dropped nearly 36 percentage points, from about 45 percent in 1965–67 to less than 10 percent in 1998–2000.
- 6 On several occasions, arrears on external debt payments became unmanageable. Rescheduling arrangements had to be reached in 1966 regarding arrears on credits from commercial banks; similar arrangements were made in 1968 with governments and the major suppliers in France, Italy, Germany, Sweden, and the Netherlands, followed in 1969 by agreements with Mexico, Japan, and the United Kingdom. In all these rescheduling arrangements Egypt sought to avoid a net capital outflow by having the creditors agree to provide new credit facilities. However, as these new facilities were extended mostly on supplier credits terms, they provided only a short-term respite from the burden of debt service. The shortness of the maturities on which Egypt borrowed external capital during this period may be gauged from the fact that, even after the reschedulings, between 1969 and 1974 Egypt would have to repay 74 percent of its existing debt. In 1976, accumulations of short-term debt had to be paid off by the Gulf Organization for the Development of Egypt, set up by Saudi Arabia, Kuwait, Abu Dhabi, and Qatar. Major reschedulings and write-offs of external debt to official creditors occurred in 1987 and 1991–96 (discussed below).

The broad development of the external position is summarized in Table 5.1; a more extended version appears in Table 5.6 at the end of the chapter.

The balance of trade

Within the external sector, the balance of visible trade requires particular attention. During 1965–2000 its most important characteristics were the following:

- 1 For the entire period, Egypt ran a large deficit on its balance of visible trade. This deficit increased steadily and by the end of the period reached 13 percent of GDP.
- 2 Throughout the period merchandise imports grew much faster, averaging 9.6 percent a year in current terms, than merchandise exports, which increased at an average rate of about 6 percent per annum. Since imports from early in the period became substantially higher than exports and continued to grow at a significantly faster rate, an increasing discrepancy between the two series was inevitable.
- 3 The large and increasing divergence between imports and exports became most noticeable after 1974, when the greater availability of foreign aid enabled a larger expansion in the volume of imports (Figure 5.2).
- 4 Imports fluctuated more widely than exports, with a coefficient of variation of 67.2 percent compared with a corresponding coefficient of 54.6 percent for merchandise exports.
- 5 The composition of imports changed. Imports of intermediate goods increased from less than 50 percent of total merchandise imports in 1965 to over 60 percent in 2000. Import of capital goods peaked at nearly 30 percent of merchandise imports in 1985, but fell thereafter to 20 percent in 2000. Imports of consumer items shot up during the

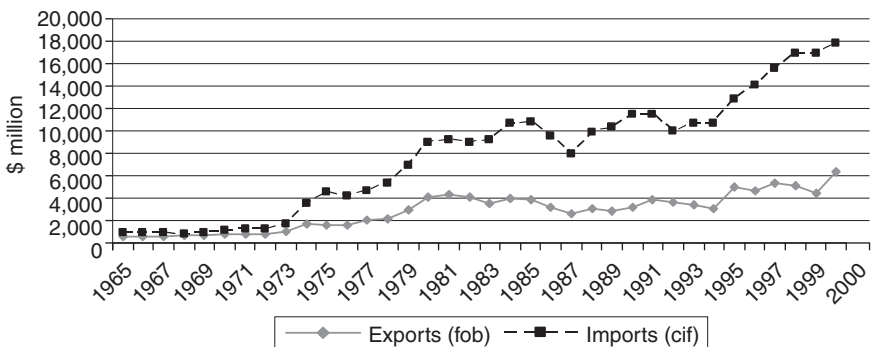


Figure 5.2 Merchandise exports and imports, 1965–2000 (\$ million) (source: World Bank LDB).

Table 5.1 Summary balance of payments: selected years, 1965–2000 (\$ million)

	1965	1970	1975	1981	1985	1990	1995	2000
<i>Trade balance</i>	-382	-374	-2,928	-5,078	-6,633	-8,297	-7,854	-11,473
Exports, fob	568	817	1,569	3,985	3,883	3,144	4,957	6,388
(Petroleum and products)	-	-	(337)	(2,857)	(2,589)	(1,229)	(2,176)	(2,273)
Imports, cif	-950	-1,191	-4,497	-9,063	-10,516	-11,441	-12,811	-17,861
<i>Services balance</i>	129	-88	282	618	-326	866	4,046	5,624
Receipts	358	176	1,250	3,609	3,982	6,094	9,560	11,420
(Suez Canal dues)	(198)	-	(85)	(780)	(897)	(1,472)	(2,058)	(1,781)
(Tourism)	(108)	(133)	(-332)	(512)	(410)	(1,072)	(2,299)	(4,314)
Payments	-229	-264	-800	-2,991	-4,308	-5,228	-5,514	-5,796
(Investment income)	(-40)	(-68)	(-309)	(-1,550)	(-2,486)	(-2,960)	(-1,237)	(677)
<i>Transfers</i>	-	308	1,245	2,855	4,594	4,837	4,198	4,679
Official	-	308	1,079	-	1,097	1,094	919	932
Private	-	-	166	2,855	3,497	3,743	3,279	3,747
<i>Current account balance</i>	-253	-154	-1,401	-1,605	-2,365	-2,594	390	-1,171
(excluding official transfers)	-253	-462	-2,389	-1,605	-3,462	-3,688	-529	-2,103
<i>Net capital and financial account</i>	186	83	649	1,157	1,418	47	1,346	-1,199
<i>Net errors and omissions</i>	12	13	-	315	-	1,336	-65	-658
<i>Overall balance</i>	-55	-58	-752	-133	-947	-1,211	1,671	-3,027
External arrears	-	-	-	-	1,353	2,314	-	-
<i>Net international reserves (- = increase)</i>	55	58	752	133	-406	-1,103	-1,671	3,027
<i>Memorandum items</i>								
Current account balance as percent of GDP	-4.7	-2.2	-11.3	-12.9	-10.1	-11.4	0.6	-1.2
Including official transfers	-4.7	-6.6	-19.2	-12.9	-14.8	-13.1	-0.8	-2.3
Excluding official transfers	2.4	1.7	1.8	2.6	1.1	2.1	15.8	10.2
Foreign assets of Central Bank of Egypt in months of imports (end of period)								

Source: CBE; World Bank (1978: Volume VI); Ikram (1980); IMF, *International Financial Statistics*.

Note

Petroleum exports resumed only after the recovery of the oilfields following the 1973 war.

infitah, reaching 35 percent in 1975, but by 2000 had dropped to under 20 percent (but of course out of a much higher total import bill); see Figure 5.3.

The continuing deficits on the balance of payments stemmed from the failure of exports to keep pace with world trade. Between 1965–2000, world exports increased by more than 10 percent per annum in current prices; during the same period Egypt's exports grew at a little over half that rate. Thus Egypt lost considerable ground in the international market – in 1965, out of every \$100 of world exports, Egypt accounted for 37 cents; in 2000, Egypt's share had dropped to seven cents. Figure 5.4 shows the secular decline, which was even more marked if exports of petroleum

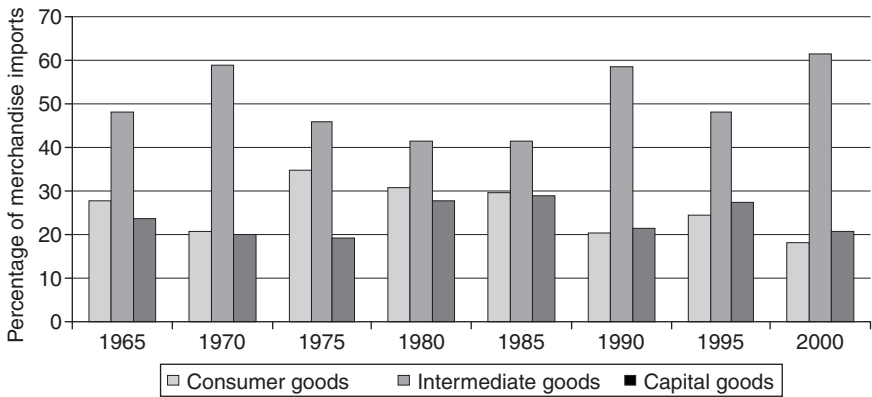


Figure 5.3 Composition of imports, 1965–2000 (percent of merchandise imports) (source: World Bank LDB).

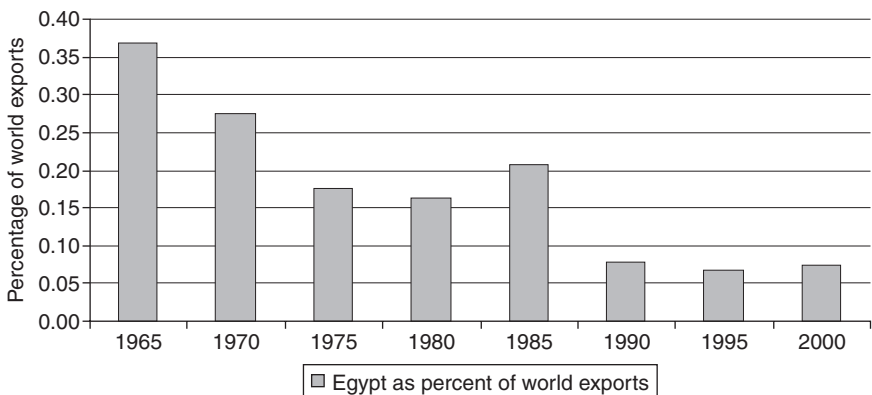


Figure 5.4 Egypt's share of world exports, 1965–2000 (percent) (source: IMF, *International Financial Statistics* (various issues)).

are excluded. The reduction internationally was paralleled by the decreasing significance of exports in the GDP, dropping from 11.2 percent in 1965 to 6.5 percent in 2000. The ratio reflected the performance of oil sales; for example, there was an upward blip to 12.9 percent in 1981 when international oil prices reached their peak.

In itself, a decline in share of world exports might not be crippling. Logically, a declining share of world exports is not necessarily incompatible with a healthy balance of payments at a reasonable growth rate. However, in Egypt's case the continuing pressure on the balance of payments and the measures that the country frequently adopted to hold down imports limited the country's access to capital goods, technology, and intermediate products to a level below what could have been attained with greater availability of foreign exchange. This limited the country's ability to productively absorb its labor force, and thus restricted its capacity rate of growth (the Harrodian "natural" rate of growth). More detailed analyses in this chapter and in Chapter 10 show that the declining share was caused by a number of underlying weaknesses, such as the nature of the products offered for export.

The loss of share in a growing market resulted from an export structure that was skewed towards products with low price and income elasticities of demand.¹ Most econometric and quantitative work in international trade has emphasized the importance of price elasticities and, indeed, much of the argument against exchange rate devaluation in Egypt arose from a pessimistic view of the price elasticity of foreign demand for Egypt's exports. However, an equally, if not more, important reason was that the composition of Egypt's export basket, in terms of commodities and quality, held little appeal to markets in which incomes were rising.

Merchandise exports

A key change in the structure of Egypt's exports can be seen from Table 5.2. In the early part of the period, exports were dominated by raw cotton

Table 5.2 Composition of merchandise exports, 1965–2000 (percent)

	1965	1970	1975	1981	1985	1990	1995	2000
Merchandise exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cotton and textiles	69.9	65.9	56.1	16.1	12.0	27.8	31.1	12.9
<i>Cotton</i>	55.9	49.1	36.7	9.1	7.0	7.0	6.9	2.6
<i>Textiles</i>	14.0	16.7	19.4	7.0	4.9	20.8	24.2	10.3
Oil and oil products	8.0	2.1	9.5	75.7	42.9	39.1	36.6	35.8
<i>Oil</i>	4.0	1.9	4.2	59.5	35.9	27.6	18.8	19.0
<i>Oil products</i>	4.1	0.2	5.3	16.2	7.0	11.5	17.8	16.8
Non-oil exports	92.0	97.9	90.5	24.3	57.1	60.9	63.4	64.2

Source: CBE; IMF, *International Financial Statistics*.

and some elementary cotton-based manufactures. After 1975, oil exports rapidly became very important and in 1981 (when oil prices reached their peak) accounted for over 75 percent of earnings from merchandise exports. With the decline in world oil prices from 1982, oil's share in the composition of exports remained important, but not dominant. However, the crucial point is that Egypt's export trade was vulnerable in the 1960s because it relied disproportionately on a single commodity, namely, cotton; towards the end of the twentieth century it remained vulnerable because it still relied excessively on a single commodity, namely, oil.

Changes in the composition of merchandise exports, divided between oil and non-oil, are shown in Figure 5.5. In the period from 1975 (when oil exports first became significant) to 2000, earnings from merchandise exports were almost equally divided between oil and non-oil exports. This overall equality, however, did not translate into a steady division during the 25-year period. Fluctuations in the share of oil and its products in total merchandise exports were quite significant, with a coefficient of variation of nearly 38 percent.

The main contributors to foreign exchange earnings in 1975–2000 are shown in Figure 5.6.

For much of the entire period 1965–2000, little effort was directed towards stimulating agricultural exports. Exchange rate and trade policies discriminated against the expansion of farm exports. Policymakers appeared to take as axiomatic that such exports would grow only slowly because of the low elasticity of foreign demand. This view was largely shaped by the falling exports of raw cotton. It was accepted that demand for some other agricultural products, such as fruits and vegetables, might be more buoyant, but earnings were expected to be limited by restrictions imposed by the importing countries as well as by supply elasticities in Egypt.

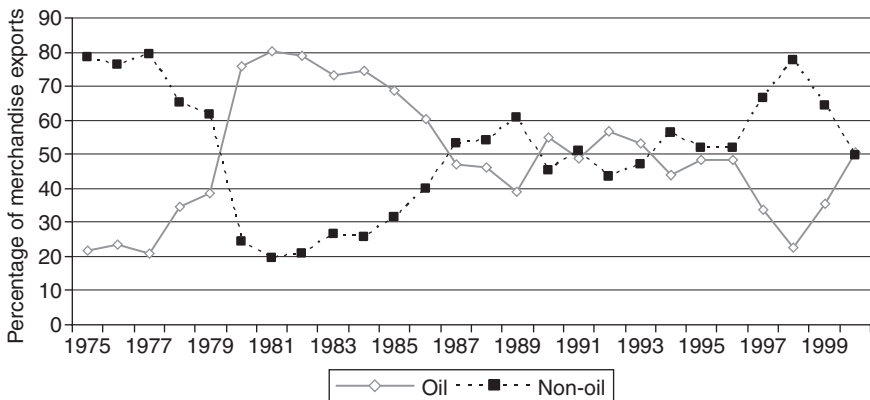


Figure 5.5 Oil and non-oil exports, 1975–2000 (percent of merchandise exports) (source: CBE; World Bank LDB).

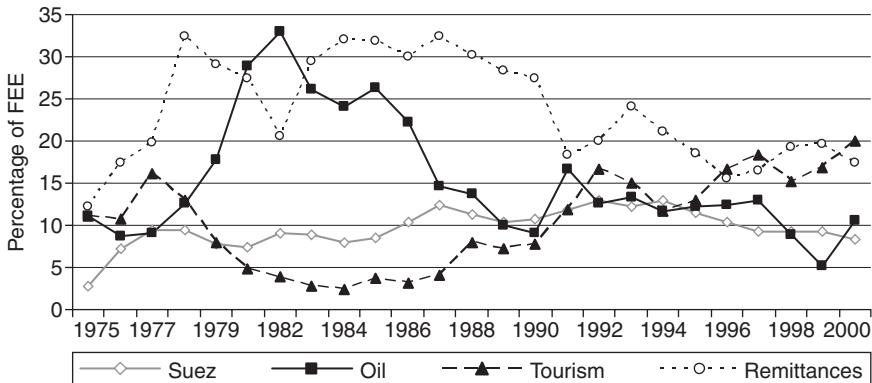


Figure 5.6 Main contributors to foreign exchange earnings, 1975–2000 (percent of foreign exchange earnings) (source: CBE; World Bank LDB).

Major issues

One of the major conclusions of this chapter is that difficulties on Egypt's balance of payments were caused to a significant degree by the inadequate growth of exports, and particularly of non-oil manufactured exports. The argument for an export-led development strategy and the major issues related to export development are explored in the chapter on sustainable development. That chapter concentrates on the more recent years and conducts the discussion for the most part in terms of the data, policies, and institutional arrangements of the 1990s. For a more complete understanding of issues relating to Egypt's external sector, the relevant section of Chapter 10 should be read together with the discussion in the present chapter.

Throughout 1965–2000, policymakers remained concerned about the gap on the external accounts and on how to finance it. The government itself prepared numerous reports, and Egypt's balance of payments problems were dissected in several studies – for example, Hansen and Marzouk (1965), Mabro (1974), Hansen and Nashashibi (1975), Mabro and Radwan (1976), Ikram (1980); by multilateral and bilateral institutions – in particular, World Bank (1978, 1983, 1995b), Nathan Associates (1997, 1999); and from investigations conducted jointly by the Government of Egypt and international agencies – for instance, GOE/World Bank (2000). This plethora of enquiries focused chiefly on different aspects of a single underlying problem: the failure of Egypt's foreign exchange earnings, particularly from merchandise exports, to grow at rates that would support sustained, high-level growth by the economy. A concomitant of this problem was the issue of external debt, which resulted because of the continuing shortfall in foreign exchange earnings.

The major issues that concerned these studies can be sorted into four broad groups (which, of course, overlap at certain points):

- a The structure and competitiveness of the sources of foreign exchange earnings.
- b The exchange rate.
- c The tariff regime.
- d The management of external debt.

(a) Foreign exchange earnings

During 1965–2000, Egypt’s foreign exchange earnings fell short of its required foreign exchange payments. One of the characteristics of the Egyptian balance of payments was that merchandise exports covered only about one-third of merchandise imports. Therefore, throughout these 35 years, the authorities were concerned with issues relating to the structure of the country’s foreign exchange receipts, with questions of how to raise these earnings, and particularly to those that related to increasing physical exports.

During 1965–2000, the overwhelming portion of total foreign exchange earnings came from the so-called “invisible” items, comprising earnings from Suez Canal tolls, tourism, worker remittances, and investment income. The invisibles together accounted for about 69 percent of total foreign exchange earnings, while merchandise exports provided 31 percent. Decomposing the sources of the foreign exchange receipts for the period 1975–2000 (i.e. starting from when earnings from oil became significant), Figure 5.7 shows that worker remittances were the most important single item and provided nearly a quarter of total foreign

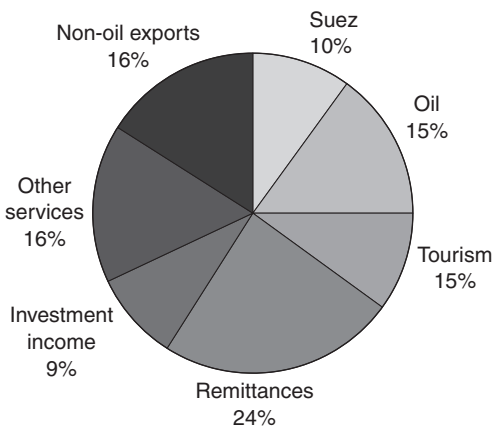


Figure 5.7 Composition of foreign exchange earnings, 1975–2000 (percent) (source: CBE; World Bank LDB).

exchange earnings; oil exports provided 15 percent; while Suez Canal tolls and tourism contributed 10 percent each.

The earnings responded to different influences:

- Suez Canal dues were sensitive to the level of, and changes in, international trade.
- Oil prices depended on world supply and demand, with an important determinant of supply being the decisions taken by the Organization of Petroleum Exporting Countries (OPEC). In general, international prices for Egyptian oil tended to be somewhat lower (on average roughly \$2 per barrel) than those for Brent marker crude.
- Worker remittances responded to economic conditions in the Gulf countries, which determined the amount of labor migration to that area and the incomes received by the workers. The officially measured figures could be somewhat misleading, as the flow of remittances was sensitive to the exchange rate and could come into Egypt through both official and non-official channels. The entire increase in the flow after exchange rate devaluation would not necessarily represent additional amounts for the country as a whole, but might simply reflect a switch from unofficial to official channels. Increases in the domestic interest rate together with perceptions of greater financial security in the country could also lead to an inflow of earnings previously held abroad; the latter could be considerable – Abu Ali (1987) estimated them at \$60 billion.
- Tourism receipts were sensitive to the exchange rate and the security situation in Egypt and the Middle East region. Tourism revenues during the period 1965–2000 were estimated by a variety of methods, none fully satisfactory. Initially, the Ministry of Tourism used a formula in which the average tourist expenditure of \$64 a night in 1977 was taken as a base. For subsequent years, the average expenditure was assumed to have increased by 15 percent per annum; this average was multiplied by the number of registered tourist nights spent in the country. This procedure was later modified, but as Tohamy and Swinscoe (2000: 4–5) point out, because the spending of the large number of expatriate Egyptians taking their vacations in Egypt are not included in tourism receipts (contrary to the World Tourist Organization’s guidelines), the recorded figures might significantly understate the actual revenues.

Most of the sources of foreign exchange earnings were highly volatile. Annual fluctuations in the “Big Four” (Suez Canal, oil, tourism, worker remittances) from 1975–2000 are shown in Figure 5.6. All the items display a fair degree of variability, but the most volatile were earnings from oil and from tourism, which had coefficients of variation of 47.2 and 52.7 percent respectively. These coefficients were roughly twice those of the other items.

Export competitiveness

An indication of export prospects is provided by the index of revealed comparative advantage. The revealed comparative advantage (RCA) for country *i* for product *j* is measured by the item's share in the country's total exports relative to its share in world trade. The interpretation is that if the RCA index is greater than unity, the country possesses a comparative advantage in that commodity; if it is less than unity, a comparative disadvantage. A value of, say, 3.5 for a commodity indicates that its share in exports of country *i* is 3.5 times its share in world trade.²

The RCA has been estimated for several Egyptian products over different time periods.³ Table 5.3 summarizes the overall results by broad product groups. During the two decades covered by the data, a number of changes in revealed comparative advantage occurred.

Generally speaking, the calculations showed that Egypt's comparative advantage lay mainly in sectors related to food (including processed foods such as preserved fruits and vegetables, pasta, confectionery, and cheeses), textiles and clothing products (including textile yarn and thread, cotton fabrics, and non-fur clothing). A comparative advantage also existed at times in aluminum, ferrous metals, and fertilizers. The country's comparative advantage was least in capital-intensive industries, such as machinery and transport equipment; however, some apparently labor-intensive manufactures, such as furniture and footwear, also (somewhat surprisingly) have RCA indexes less than unity.

These conclusions are reinforced by an examination of the type of commodities entering into Egypt's export trade. The analysis shows that changes did occur in the pattern and direction of Egypt's exports, but the changes did not keep up with the pace of changes globally.

While oil exports represented slightly less than half of total merchandise exports, the share of manufactured goods in total merchandise exports rose considerably (from 11 percent in 1980 to 40 percent by 1998), particularly the share of textiles and clothing manufactures that

Table 5.3 Revealed comparative advantage by product groups, 1970, 1980, 1992

<i>Product groups</i>	<i>1970</i>	<i>1980</i>	<i>1992</i>
Foods and feeds	3.23	2.20	1.07
Beverages and tobacco	0.38	0.38	0.10
Crude materials	0.21	0.31	0.00
Refined fuels	0.13	4.57	9.06
Animal and vegetable oils	0.55	0.11	0.00
Chemicals	0.72	0.25	0.62
Manufactures by material	2.22	1.69	1.75
Machinery and transport equipment	0.13	0.25	0.34
Miscellaneous manufactures	1.07	0.50	0.87

Source: World Bank (1995b: vol. 2, Table 5.7).

rose from 7 percent of total merchandise exports in 1980 to 24 percent in 1998. Furthermore, the importance of Egypt's trading partners changed somewhat in the last decade, with the share of the European Union decreasing from 59 percent to 48 percent, the share of the USA increasing from 9 percent to 13 percent and a strengthening of regional trade with the share of the Middle East and North Africa sub-region doubling from 6 percent to 12 percent.

The effects of these changes can be examined using "constant market share analysis," which decomposes growth in exports into the different factors that would affect its loss or gain of market shares.⁴ The technique assumes that a country's export growth can fall behind the average of world export growth for three reasons: (1) its export composition may be too heavily concentrated in commodities for which world demand is growing relatively slowly; (2) its exports may be going disproportionately to regions that are growing slowly; and (3) its exports might not be able to compete with other sources of supply.

An application of this technique to Egypt's exports at the three-digit level for the 1990–2000 decade shows that while during this period world exports were growing at close to 6 percent a year, Egypt's export growth averaged less than 2 percent.⁵ Egypt was unable to benefit from the buoyancy in international trade because her export basket was insufficiently weighted by the fast-growing commodities, and because she lost ground even in the export of her traditional commodities as a result of decreasing ability to compete with other suppliers of those products; thus the effects of (1) and (3) above were negative. The direction of exports changed somewhat, with a decrease in the share of the European Union and an increase in those of the United States and the Middle East region; thus such growth as did occur resulted largely from the general expansion of world trade and a change in the direction of exports, i.e. the impact of factor (2) was mildly positive.

It is not surprising that a TradeCAN (Trade Competitiveness Analysis of Nations) analysis for the 1990s – breaking down exports into four categories: rising stars, declining stars, missed opportunities, and retreats – confirmed that Egypt's export composition had a significant percentage of "declining stars." This not only provides an explanation of past performance, but also raises some concerns about future export possibilities and missed opportunities. These findings are summarized in Table 5.4.

The basic reason for the lack-luster performance of exports was the incentive framework and deficiencies in the trade-related infrastructure and services. The major impeding factors in the incentive framework included: (1) an exchange rate regime, tied *de facto* to the US dollar, that led to a 70 percent appreciation of the real exchange rate between 1992 and 2000, and acted as a significant export tax; (2) high nominal and effective tariffs, which increased the profitability of producing for the

Table 5.4 Egypt's Trade Positioning Matrix, 1990–2000.

	<i>Product's share in world import is growing</i>	<i>Product's share in world import is declining</i>
<i>Product's share in Egypt's export is growing</i>	<i>Rising stars (27%)</i> [Main products: cutlery; rice; outer and under garments; textile materials; ores and concentrates of precious metals; waste and scrap].	<i>Declining stars (32%)</i> [Main products: briquettes; coke and semi-coke of coal, lignite/peat; floor coverings and related products].
<i>Product's share in Egypt's export is declining</i>	<i>Missed opportunities (17%)</i> [Main products: perfumery and cosmetics; essential oils, perfume and flavor materials; spices].	<i>Retreats (24%)</i> [Main products: vegetable textile fibers; cotton; petroleum oils and crude].

Source: Government of Egypt/World Bank (2000); Mohammed (2001).

home market rather than for export; (3) significant non-tariff barriers (particularly customs procedures and administrative controls on imports) that raised the transaction costs for exporters; and (4) inefficient systems of duty drawback and temporary admissions that failed to provide exporters timely access to imported inputs at world prices.

(b) The exchange rate

During 1965–2000, exchange rate policy underwent a number of transformations. Three concepts of the exchange rate are generally used in the literature.

- 1 The “*nominal exchange rate*” is the price of any one currency in terms of another. The nominal exchange rate is therefore a bilateral exchange rate.
- 2 The “*nominal effective exchange rate*” (NEER) provides a summary measure of the value of any one currency in relation to a basket of other currencies against which it enters into trade. It is therefore a multilateral exchange rate. The NEER is expressed in index number form relative to its value in a base year, while the weights used in the index generally reflect the importance of the various currencies in the trade of the home country.
- 3 The “*real effective exchange rate*” (REER) measures the rate at which output from the home country exchanges for outputs from other countries, rather than the prices at which the currencies are exchanged. It is thus more properly regarded as a measure of the competitiveness of tradable goods than an exchange rate.

In the context of multilateral Egyptian trade, the REER is defined as the nominal effective exchange rate (NEER) multiplied by the price ratio of Egyptian, $P(EG)$, to foreign, $P(F)$, goods:

$$REER = NEER * P(EG)/P(F)$$

A further concept, the “*equilibrium real effective exchange rate*” (EREER), measures the REER that would provide equilibrium in both the internal and external markets is sometimes calculated, using econometric models.

Each of these concepts is illustrated in the discussion that follows.

The REER is important because trade competitiveness depends not only on changes in the exchange rate, but also on the relation between the inflation rates in Egypt and in the countries with which it trades. However, more than the usual care is required in interpreting measures of the REER in Egypt. The downward bias introduced into Egyptian price indexes by widespread price controls means that the measurement of the REER in the usual manner (using the consumer price index) is likely to show competitiveness for the country that might be quite spurious. Moreover, measures of the REER during the 1960s and early 1970s are especially shaky, since they do not include trade with the communist countries, which bulked so large in total trade during these years.

The REER can be defined in two principal ways: (1) in *external* terms, as the nominal exchange rate adjusted for price level differences between countries (as in the equation above); or (2) in *internal* terms, as the ratio of the domestic price of tradable to nontradable goods within a single country.⁶ In this book, the REER is defined in external terms.

The nominal exchange rate

The previous chapters described changes in Egypt’s foreign exchange system from the 1960s until the early 1980s. The present examination focuses on the period since 1987, when a degree of liberalization of the exchange system was introduced. Abdel-Khalek (2001: 61) sums up the overall experience of Egypt’s exchange rate until 1991 as “one of repeated failed attempts at establishing a unified exchange rate.”

Before May 1987, the interbank foreign exchange market was divided into two pools. The Central Bank pool was responsible for foreign exchange dealings relating to exports of petroleum, cotton, rice, and the Suez Canal. It also dealt with imports of essential foodstuffs, insecticides, fertilizers, and most public sector capital transactions. The commercial bank pool was fed by receipts from worker remittances, tourism, and exports that were not covered by the Central Bank pool; foreign exchange payments for the public sector that were not covered by the Central Bank pool were also made through the commercial bank pool. The exchange rate in the Central Bank pool was officially determined and was set for the

most part at the official rate of LE 0.7 per US dollar. The rate in the commercial bank pool (LE 1.36/US\$) was closer to a market rate, but was nevertheless heavily influenced by official intervention.

In 1985 the rate in the commercial bank pool was devalued by about 60 percent. In May 1987 a new bank foreign exchange market (in which all authorized commercial banks were allowed to operate) was created, with the exchange rate initially set at LE 2.165/US\$. Thereafter, the rate in this market was set by a committee on the basis of supply and demand conditions in the interbank market, and by the end of 1990 had reached LE 3.0/US\$. The devaluations of the exchange rate in the Central Bank pool to LE 1.1/US\$ in August 1989 and LE 2.0/US\$ in July 1990 were not very significant, since this rate accounted at the time for barely 15 percent of total transactions. Moreover, foreign exchange receipts in this market were taxed and users subsidized, so that the rate effectively remained at LE 0.7/US\$.

On February 27, 1991 the multiple exchange rate system was replaced by a dual exchange rate system consisting of a primary and a secondary market. The original intention was to unify the primary and secondary markets after one year. However, the unification was accelerated and occurred on October 8, 1991; the unified rate involved a further devaluation of about 15 percent, to LE 3.3/US\$.

The Real Effective Exchange Rate

The REER was not used as a policy instrument but, as Hansen (1991: 204) says, resulted from “the fortuitous outcome of other countries’ exchange rate policies and of price developments outside the control of the Egyptian government.” Hansen estimates that the REER appreciated strongly during 1965–68. It depreciated thereafter until 1979, with a minor appreciation in 1974–76. The main reason for the real effective depreciation was the depreciation of the nominal exchange rate against the dollar in 1973 and again in 1979. In 1973–79, the joint result of developments in the nominal exchange rate, Egyptian price levels, and changes in inflation rates in partner countries was an estimated real effective depreciation of 28 percent.

From 1980 to 2000 movements in the REER again depended more on variations in partner country prices than on changes in the nominal exchange rate. For virtually the entire decade of the 1980s, the nominal exchange rate remained fixed at LE 0.7/\$, and for most of the 1990s it hovered around LE 3.4/\$. The REER, on the other hand, appreciated quite sharply until 1984 and then steadily depreciated until 1991, before beginning another appreciation that continued until 2000.

Movements in the Nominal Exchange Rate, the Nominal Effective Exchange Rate (NEER), and the Real Effective Exchange Rate (REER) for the period 1980–2000 are shown in Table 5.5.

Table 5.5 Indexes of nominal and real effective exchange rates, and international competitiveness, 1980–2000 (1990 = 100)

	<i>Nominal rate</i> (LE/\$)	<i>NEER</i> (1990 = 100)	<i>REER</i> (1990 = 100)	<i>Index of International</i> <i>Competitiveness</i> (1990 = 100)
1980	0.7000	254.44	123.22	81.16
1981	0.7000	281.91	134.28	74.47
1982	0.7000	284.32	140.59	71.13
1983	0.7000	313.10	166.54	60.05
1984	0.7000	350.46	202.55	49.37
1985	0.7000	239.36	144.13	69.38
1986	0.7000	195.27	138.60	72.15
1987	0.7000	161.29	129.94	76.96
1988	0.7000	110.97	97.23	102.85
1989	1.1000	108.89	103.41	96.70
1990	2.0000	100.00	100.00	100.00
1991	3.3322	86.38	96.90	103.20
1992	3.3386	85.24	102.17	97.88
1993	3.3718	92.24	116.95	85.51
1994	3.3910	87.79	121.17	82.52
1995	3.3900	78.04	120.04	83.30
1996	3.3880	93.68	128.61	77.75
1997	3.3880	103.60	142.37	70.24
1998	3.3880	107.78	148.99	67.12
1999	3.4050	110.59	153.38	65.20
2000	3.6900	117.80	162.01	61.72

Source: Calculated from IMF data.

Notes

- 1 An increase in the REER index reflects an appreciation.
- 2 The Index of International Competitiveness is the reciprocal of the REER. An increase signifies greater competitiveness.

Was exchange rate policy managed in a manner that kept the real exchange rate consistent with the fundamentals of the economy? This question cannot be answered simply by examining divergences between the real and nominal exchange rates, because changes in the REER can result either from a change in fundamentals or from a misalignment of the exchange rate. This question is particularly difficult to answer in a period of rapid structural change when no clear reference point can be indicated as being in line with the fundamentals. The REER only expresses changes relative to some base year; to interpret movements from that base year as representing and over- or under-valuation requires one to posit that the base year value of the REER was in equilibrium.

One approach to getting round this difficulty is to construct a reference rate, the *Equilibrium Real Exchange Rate* (ERER), that is consistent with the country's economic fundamentals, and to compare movements in the actual REER with movements in this reference rate. The ERER is defined as the relative price of tradables to nontradables that, other things

being equal, results in the simultaneous attainment of internal and external equilibrium. Internal equilibrium means that the nontradable goods market is cleared with no unemployment above its "natural" level, i.e. the rate of unemployment below which shortages in the labor market will generate wage increases and lead to price inflation. External equilibrium means that the present and future current account balances are compatible with long-term sustainable capital flows. The fundamentals that determine the EREER include international prices; international transfers (including foreign aid flows); external debt relief (which is a form of aid); world real interest rates; import tariffs, quotas, and export taxes; exchange and capital controls; other taxes and subsidies; the composition of government expenditure; and technological progress.

In a study for the IMF, Mongardini (1998) compared the path of an estimated EREER with the REER for the period 1987–96. The EREER was derived from the empirical estimation of a simplified theoretical model of the economy originally developed by Edwards (1994). While the results ultimately depend on the quality of the theoretical model, the comparison between the actual and the equilibrium rate will be independent of the base year, because it is the difference between the two rates that is relevant.

Mongardini concluded that the real exchange rate was substantially overvalued during 1987–93, but thereafter moved closer to the equilibrium rate and by 1996 was only moderately (about 7 percent) overvalued. The REER and the EREER converged during 1991–95 because of the appreciation of the latter rate, and resulted chiefly from the 1991–96 Paris Club debt rearrangements. The debt restructuring caused the debt:service ratio to fall sharply, which improved the sustainability of the current account and led to an appreciation of the EREER. However, later calculations suggest that after 1996 Egypt's REER again increased vis-à-vis the equilibrium rate, because the US dollar (to which the Egyptian currency was pegged) continued to appreciate against most other currencies, and because Egypt's inflation rate was higher than that of the United States.⁷

Did the appreciation of the REER hinder the growth of exports? Subramanian (1997: 46–7), in common with the analyses of the IMF, considered that increases in the REER had been detrimental to exports. He argued that if the appreciation of the REER were caused by productivity improvements, then one should expect some gains in the performance of tradable goods, and particularly that of non-oil exports. He did not find such gains, even though demand conditions in the partner countries remained buoyant. He therefore concluded that the explanation for declining merchandise exports was likely to be rooted, inter alia, in price increases that were not offset by productivity gains.

Some other commentators have been more skeptical of the harmful effect on exports of an appreciation in the REER, and the policy prescription of correcting this by a devaluation of the nominal rate. These views

reflect two main lines of thought. One is that devaluation would raise the cost of capital, thereby discouraging investment and production; these contractionary effects on the supply side are judged to be more damaging to the growth of exports than the expansionary effect generated by foreign demand following a price reduction; see, for example, Abdel-Khalek (1997); Korayem (1997). The other line of enquiry focuses on the elasticities of demand for some Egyptian exports and finds them to be low or not statistically significant. This suggests that the relationship between Egyptian export growth and movements in the REER is weak, and that devaluation of the exchange rate would be unlikely to correct the current account deficit.

This elasticity pessimism appears to have arisen, at least in part, because the external imbalance did not right itself after the episodic devaluations that occurred. But such a view underemphasizes two factors. First, non-oil manufactured exports (the items most likely to respond to changes in prices via the exchange rate) accounted for only about 30 percent of merchandise exports in the decade 1991–2000. Thus even a fairly large growth on the part of these commodities could not be expected to quickly eliminate the current account deficit; this is expecting the tail to wag the dog. Second, the authorities paid scant attention to improving the institutions and structures that would support the export incentive produced by the exchange rate depreciation.⁸ The caution of policymakers worked against a multi-pronged approach (such as reforming institutions *pari passu* with exchange rate adjustments). A World Bank minute reported a Minister saying that, “You do not test the depth of a river with both feet.” This ignored the fact that an economy consists of closely interrelated parts, and that therefore piecemeal reforms have weaker effects, because they do not reinforce each other. The upshot was that opportunities created by exchange rate adjustments were likely to have been significantly abridged, even if not completely annulled.

Proponents of the elasticity pessimism view believed, in effect, that the Marshall–Lerner condition for a devaluation to improve the trade balance was not met in Egypt.⁹ Formally, the condition states that if trade is initially balanced and the elasticities of supply of exports and imports are infinite, devaluation will improve the trade balance if the absolute sum of the foreign elasticity of demand for exports and the home elasticity of demand for imports (measured in the same currency) exceeds unity. That is, devaluation will improve the current account of the balance of payments if:

$$|E_m| + |E_x| > 1$$

where E_m is the price elasticity of demand for imports, and E_x is the price elasticity of demand for exports. The formal Marshall–Lerner condition is based on the assumptions of perfect competition, one export good and

one import good, and the maintenance of full employment. The condition becomes more complex if trade is not initially in balance.¹⁰

Egyptian debates on the effectiveness of exchange rate devaluation may have been rendered less than conclusive because elasticities have been estimated in a manner that is methodologically suspect. This is for a number of reasons.

A classic paper by Orcutt (1950) demonstrated why the results obtained in most estimations of trade elasticities had to be viewed with serious reservations. He showed that the data and methods employed tended to bias the estimates downwards. Orcutt provided five reasons for the existence of a bias towards zero.

IDENTIFICATION

The observed values of the price and quantity of exports result from the simultaneous interaction of factors affecting both foreign demand and domestic supply. But if the elasticity is estimated using single equation models, demand and supply factors will be mixed up. The estimate of the elasticity will then be the outcome of adding the negative demand elasticity to the positive supply elasticity, and will thus be lower than it is in reality. Therefore, Orcutt argued that in order to avoid the “identification” problem, export demand and supply elasticities must be estimated in a simultaneous equation framework.

AGGREGATION

Orcutt argued that price changes, for example for imports, were largest for goods with low price elasticities of demand. Thus, when many commodities are aggregated together, the biggest weight in the average price index will be of commodities with inelastic demand. Since the quantity changes for such commodities tend to be small, the estimated price elasticity of the total aggregate is likely to be low. Because such aggregative indexes might understate the true elasticity by giving undue weight to goods with lower elasticities, Leamer and Stern (1970: 41–9) argue that price indexes should be reweighted proportionally to the individual demand elasticities.

TIME LAGS

Orcutt demonstrated that long-run price elasticities of imports and exports were likely to be substantially larger than short-run price elasticities. However, elasticity estimates frequently relate the volume of current imports or exports with current prices. If, as the empirical evidence suggests, quantity adjustments in response to a price change are spread over a number of years, then the measured effect of price changes on quantity will underestimate its actual long-run effect.

ERRORS OF MEASUREMENT

Orcutt showed that if errors occur in the measurement of price changes, the average estimated response to price changes will be biased downwards. Measurement errors are particularly likely in work on international trade, because elasticity estimates overwhelmingly use unit values and not price indexes. The use of unit values can create errors because it does not allow for quality differences; thus changes in the demand for goods of different quality (within the same overall total) can lead to changes in unit values, even if the prices of the goods demanded have not changed.

THE SIZE EFFECT

Orcutt suggested that the price elasticity of demand for imports or exports depends on the size of the change, and is probably much larger for large price changes than for small. Exporters and importers will tend to ignore small price changes, because they do not wish to lose market shares, and because the costs of changing suppliers can be significant. Hence, the elasticity of demand schedules for exports and imports will not be independent of the size of the price change, and will be more elastic for large than for small changes.

Orcutt's paper gave rise to a large amount of discussion and empirical testing in, to cite only some of the best known, Neisser and Modigliani (1953: 226–30), Harberger (1957: 5089), Haberler (1958: 3–9), Klein *et al.* (1961: 126–36), Prais (1962: 260–70), and more recently Winters (1991: 276–8), Thirlwall and Gibson (1992: 166–8), and Joshi and Little (1994: 284–91). The conclusion appears to be that some of the reasons advanced by Orcutt for a downward bias (in particular, the size effect) are not very important quantitatively, but his main finding holds, namely, that regressing total exports on their average price will in general not give a fair estimate of the elasticity of demand. In particular, the downward bias created by not using a simultaneous equation framework is likely to remain significant, and short-term elasticities will tend to be lower than their long-term estimates.

Estimates of elasticity for Egypt's exports (and imports) are prone to one or more of the maladies identified by Orcutt. Virtually all the estimates involve the use of single equation models estimated by ordinary least squares, and are thus subject to the identification problem. It is therefore likely that the estimates are biased downwards. The estimates also suffer from the problems of aggregation and probably from errors of measurement, both of which are again likely to produce a downward bias in the estimate. Finally, the studies have paid only rather cursory attention to the time-lags between the adoption of the policy and the response of exports, and to the differences between short- and long-run elasticities.

Apart from the criticisms raised by Orcutt, other weaknesses in most of the statistical procedures used in the analysis of Egypt's foreign trade have been pointed out. Perhaps the most important is that the time series have

not been tested to see if they are “stationary,” i.e. that the key properties (such as the mean and the variance) do not change systematically with time.¹¹ If the data are “nonstationary,” regression analysis can provide spuriously inflated values of R^2 , the Durbin–Watson, and t statistics of the independent variable, thereby erroneously suggesting that a meaningful relation exists among the regression variables.

An exception to the use of single equation demand estimates was Pearson (1997) who used a simultaneous equation procedure, and whose approach explicitly followed Virmani (1991) and Joshi and Little (1994). He found that demand for Egypt’s exports, and for non-resource-based manufactured exports (i.e. excluding SITC [Rev 1] categories 0–4, 61, 63, 66, 68–69) was reasonably price-sensitive. His estimate of the elasticity of export demand with respect to the ratio of export to domestic prices was -1.03 and to world income -1.05 ; corresponding figures for manufactured exports were -1.09 and -1.06 . Import elasticity was estimated at 0.89 .

Some caveats apply to the study. The time period covered (1981–94) might be too short. The use of unit values to represent prices is subject to limitations. Further, the export supply function used here does not take account of export subsidies. Incorporating the effect of subsidies would change the specification of the equation, because the price received by an exporter is not PX , but rather $PX(1 + s)$, where s is the rate of export subsidy. In recognition of this, several studies, such as Joshi and Little as well as Virmani, doctor the export price in this manner to reflect the subsidy. Finally, domestic prices in the export supply equation are better represented by the wholesale rather than the consumer price index, because of the problems with the latter.

An even more methodologically-careful study was carried out by Nathan Associates (1999). This study examined the period 1980–98 and estimated both import demand and export demand functions. For both imports and exports, the average real effective exchange rate elasticities were relatively high.

On the import side, income was found to be statistically significant (generally at the 99 percent level of confidence) in explaining the demand for imports. For income, the unweighted average elasticity was 0.95 in the short run and 2.2 in the long run. The average trade-weighted elasticities for 1997 were substantial: 1.1 in the short run and 2.5 in the long. Thus, in Egypt as in other countries, import demand was income-inelastic for most products in the short run, but income-elastic in the longer run. The average real effective exchange rate elasticities were also relatively high. For all products, the 1997 trade-weighted average elasticity was 0.7 in the short run and 0.9 in the long run. The study found that, overall, the absolute values of the price and exchange rate elasticities of Egypt’s import demand were similar to one another, though there were considerable differences for individual products.

On the export side, foreign income was always statistically significant

(again at the 99 percent confidence level) in explaining demand. The average real effective exchange rate elasticities were also relatively high; furthermore, the effective exchange rate had a greater impact on export markets than it did on imports. For all products and markets, the 1997 trade-weighted average elasticity was -0.89 in the short run and -0.81 in the long. In short, the absolute sum of the export and import elasticities was much larger than unity, and the Marshall–Lerner condition was comfortably met.

Egypt's external trade in services is dominated by transportation-related activities and other distributive services on the import side, and by tourism on the export side; these activities responded to the exchange rate. A World Bank report found that year-to-year variations in Egypt's tourist arrivals by origin could be associated with variations in the originating region's income and Egypt's real exchange rate, as well as with proxies accounting for the effect of the security situation. As a rough indication, a 1 percent increase in world GDP was associated with an increase in tourist arrivals of 2.2 percent, and a 1 percent real appreciation in the exchange rate reduced arrivals by 0.4 percent. The security situation (whether external or internal) obviously played the dominant role; for example, the first Gulf war reduced arrivals by 28 percent in 1990. Another sharp fall in tourist arrivals and earnings occurred after 58 tourists and four Egyptians were killed at Luxor on November 18, 1997.

The Nathan Associates (1999) study found that the elasticity of import services to the real effective exchange rate was high in the short run. For exports, the real effective exchange rate elasticity worked out at -0.2 in the short run (one-period lag) and -0.4 in the long run. Thus, for example, a 10 percent devaluation in the REER would lead to a 2 percent increase in export earnings from services after one year, but 4 percent after a few years.

The study simulated the real effective exchange rate that would yield an overall balance in the balance of payments in 1998. The results indicated that the real effective exchange rate that prevailed in 1998 would need to have been devalued by 14 percent to eliminate the deficit. According to the simulation, imports adjusted quickly to the devaluation while exports took several years to adjust fully. However, because exports continued to respond to a one-time devaluation while the import response was completed in a much shorter period, the cumulative response to the 14 percent devaluation ended up by being more than twice as high for exports (8.3 percent expansion) than for imports (3.5 percent contraction).

Apart from the findings of econometric studies, the experience of high-exporting countries also has not been kind to the notion that fast export growth can be correlated with an appreciating real exchange rate. All the East Asian high performers (China, Korea, Taiwan, Thailand, Malaysia, Singapore, Hong Kong) followed a conscious policy of keeping their exchange rates undervalued. But Egypt's REER appreciated steadily for most of the two final decades of the twentieth century. The effects of the

appreciation became even more important after the East Asian financial crisis of 1997, when Egypt's REER appreciated by over 40 percent against the exchange rates of its main East Asian competitors (Korea, Thailand, Malaysia, and Indonesia).

There is no reason to suppose that Egyptian exports are exempt from the connection between low prices and increased demand. Most of Egypt's foreign exchange earnings derive from tourism, worker remittances, and other services, and these items have shown themselves sensitive to the exchange rate. Moreover, any export-promotion policy must give clear signals to entrepreneurs to increase the supply of tradables, and the exchange rate has been an important source of such signals for investment allocations in the high-export countries. Through their reluctance to use the exchange rate actively for managing the balance of payments, Egyptian policymakers denied themselves an effective weapon that, used in conjunction with others, has played a major role in the export success of many countries.

However, the elasticities approach to the balance of payments represents a partial equilibrium model that examines the effects of changes in the exchange rate only on the external balance. It is not complete because it does not take into account the macroeconomic effects on domestic economic activity and the effects that these, in turn, have on the balance of payments. An attempt by the World Bank to model the effects of domestic absorption on exports, in addition to the effects of world demand, found that the elasticity of exports with regard to world trade, while significant, was lower than the elasticity with respect to domestic absorption. Periods of higher export growth rates were associated with periods in which world trade had grown and domestic absorption had contracted, and the export growth tended to follow depreciations of the currency with a one-year lag. There is room for a more complete study that would integrate the elasticities approach with Alexander's (1952) "absorption" approach, and also incorporate the effects of capital movements, as in the analysis due to Mundell (1963) and Fleming (1962).

Even if the Marshall-Lerner condition is met, one must allow for a lapse of time before quantities adjust sufficiently to offset the change in the price of foreign exchange. Thirlwall and Gibson (1992: 166-7) attribute this lapse of time to the longevity of pre-devaluation contracts, and to lags in recognition, decision, production, and delivery on the part of importers and exporters. The time-lags can be substantial – in a detailed analysis of the 1967 devaluation of the British pound, Masera (1974) estimated that it took 18-24 months for the current account to move into balance. Williamson (1982: 154) reports the evidence as showing that trade responds within months to changes in income, but reasonably complete adjustment to price changes may take three years or so. Some calculations by the World Bank on Egypt's experience with exchange rate depreciations suggest that it took 12-18 months for non-oil manufactured exports to rise in a significant manner.

A number of conclusions follow from this review of the effects of exchange rate changes on Egypt's foreign exchange earnings. First, some careful studies indicate that Egypt's trade (including the important services component) is sufficiently responsive to changes in the real effective exchange rate as to meet the elasticity conditions for an improvement in the balance of payments. Second, significant effects from the exchange rate changes begin to show after a lag of at least one year. Third, the pull of the domestic market remains strong, and a successful export policy must include measures to reduce the domestic absorption of exportables. Fourth, exchange rate devaluation may not be sufficient to induce investment in export capacity or in international distribution channels unless the devaluation is made durable. This would require the government to carry out a consistent set of structural and institutional reforms (along the lines discussed in Chapter 10) and thereby reinforce its credibility with the private sector and strengthen the effectiveness of its policies. If such reforms are not implemented, experience shows that the effects of exchange rate depreciation are likely to be erased in two to three years by inflation.

(c) The tariff regime

Tariffs have three main consequences. First, import duties enable final goods to be sold at higher-than-world prices, thereby providing larger profits in the home compared to the international market. This tends to divert production and investment towards serving the domestic market and towards the production of nontradable items. Moreover, the higher prices that can be extracted from consumers may make it profitably feasible to produce commodities in which the country is not an efficient producer. Tariffs, therefore, form an important part of the incentive system that influences the decisions of entrepreneurs whether to produce for the domestic or the export market. Second, tariffs add to the cost of intermediate inputs. Unless rebated quickly, they will raise production costs for exports and make them less competitive; indeed, a key element in the Korean export drive was the swift rebate of tariffs on imported inputs. Third, tariffs can be major sources of revenues for the government – in 1991–2000, for example, customs duties provided over 20 percent of the Egyptian government's tax revenues and about 15 percent of its total revenue. They are thus likely to be retained for revenue reasons, even though the authorities might recognize their effects in distorting incentives.

Throughout 1965–2000, Egyptian tariffs remained high and were generally higher than those of its neighbors. World Bank studies estimated average trade-weighted tariffs in Egypt at about 48 percent in 1976 and 45 percent in 1981. In spite of reductions and consolidations, especially in the early 1990s under the restructuring program, the World Bank estimated that in 1996 the trade-weighted average was 31 percent and that

the rates remained widely dispersed. The overall tariff level significantly exceeded the world average of 8.2 percent as well as the average for developing countries (21.4 percent).

Madani and Olarreaga (2002) found that the most salient feature of Egypt's tariff structure was the degree of tariff escalation, i.e. tariffs were higher for fully-processed products than for raw materials or semi-processed items. Most distorting tariffs were found in the manufacturing sectors, with tariffs ranging between 0–135 percent (excluding alcoholic beverages). This has important effects on the effective rate of protection, that is, protection to value-added.

In the analysis of trade protection it is the effective, not simply the nominal, tariff that provides the more relevant measure.¹² The nominal tariff rate is the rate announced in the tariff schedule. It is useful in assessing the extent to which the price to the consumer is likely to be raised by the imposition of the tariff, and thus chiefly influences decisions taken by the consumer. The effective rate of protection, on the other hand, is defined as the percentage change in domestic value-added that results from the imposition of the tariff and other protective measures on the product and its inputs, as compared with world market value-added. It therefore indicates the effects that tariffs on the product and its inputs have on the processing activity, and thus on the choices of producers. An industry with an effective protection rate of, say, 50 percent can afford to be 50 percent less efficient (i.e. use 50 percent more inputs) than its foreign competitors and still maintain its domestic sales. Moreover, a given duty on any finished product has a greater protective effect if it is combined with low tariffs on the inputs of the protected industry than if the tariffs on these inputs are high. The tariff escalation found for Egypt therefore meant that the degree of protection provided to manufacturing in Egypt was substantially higher than the published tariff rates, and permitted the sector to live with a significant degree of inefficiency vis-à-vis its external rivals.

Effective rates of protection in Egypt have varied significantly between agriculture and industry and between different sectors within these activities. Hansen and Nashashibi (1975: 159–62, 309–12) estimated that in the early 1960s agriculture did not appear to need protection; if anything, the effective rates of protection and measures of the domestic resource costs to earn a dollar showed a slight negative protection.¹³ Industry, on the other hand, showed a very mixed picture. Sugar and cement appeared to be competitive, but most of the others, including cotton textiles, were definitely noncompetitive at the existing official exchange rate. The latter industries showed high effective rates of protection as well as high domestic resource costs to earn a unit of foreign exchange. Hansen (1991: 539) also showed that high rates of protection led to significant declines in competitiveness in both agriculture and industry in 1974–82.

A detailed study of effective rates of protection and domestic resource

costs by the World Bank (1983) for Egyptian agriculture and industry in the early 1980s showed several important sectors that were very highly protected. Indeed, a number of these activities – such as chemicals, metals, transport equipment, china, and glass – could not sustain themselves with the existing techniques and levels of productivity, if their products were to carry international prices. A number of other sectors also showed high rates of effective protection, ranging up to 89 percent. The relative pattern of effective protection in the private sector was similar to that encountered in public sector industry.

High effective rates of protection in industry continued until 2000. Nathan Associates (1998: i-ii) reported that the average effective rate of protection in manufacturing in the mid-1990s was over 34 percent, with some rates well over 80 percent. The effective rate was considerably higher than the nominal rate; thus, producers were able to set domestic prices well above international prices of the same items, giving them a substantial incentive to sell in the home market rather than to export. The study estimated that the tariff structure provided, on average, a 21.7 percent premium to potential exporters of manufactured goods for not exporting, but selling domestically.

The Egyptian tariff structure effectively taxed exports at high rates; Nathan Associates (1998: 9) estimated that across the board the average 31 percent tariff acted as an export tax of 19.4 percent. Even a substantial lowering of the average tariff would still retain a sizeable anti-export bias. Kheir El Din and El Shawarby (2002: 15–16) estimated that if the average tariff were reduced to 20 percent, the equivalent export tax would still be 13.9 percent. The supplementary import levy of 3–4 percent and the General Sales Tax (GST) must be added to the tariff, thus increasing its protective (and anti-export) impact. Moreover, the authors noted that the GST fell on the gross value of exports, not just on profits, and so its effects in discouraging exports would be magnified. Similar results of high protection against imports, and thus a disincentive to export, were confirmed by other studies. The World Bank (2001: 27) estimated that the combined cost of fiscal barriers (tariffs and levies) added 32.3 percent *ad valorem* on average to the cost of an import.

But tariffs were not the only source of protection. Throughout 1965–2000, Egypt also had an extensive system of non-tariff barriers, generally masquerading as quality control or health protection measures. Even by 1996, over 1,500 tariff lines (about a quarter of the tariff schedule) consisted of items that were subject to inspection for quality control, and the Government Organization for Export and Import Control examined a sample of every consignment of such goods. This was said to be necessary to ensure compliance with Egyptian standards. “In practice, however,” commented the World Bank (1998a: 32), “quality control has become [another] means to protect local industry.” Nathan Associates (1998: 5) estimated that in the 1990s, the system of quality control

increased costs to affected producers and importers by 5 to 90 percent; the latter figure applied to food products and imported consumer goods. As a result of these costs, exports were estimated to decrease by at least 9 to 12 percent and GDP reduced by more than 1 percent.

The effects of bureaucratic interventions could be inefficient, and hence costly – the World Bank (1999: 159) estimated that in the mid-1990s each Egyptian customs official cleared an average of \$600,000 worth of imports a year, while in Singapore the average was \$666 million a year. For the economy as a whole, the World Bank estimated that the delays caused by bureaucratic and inspection procedures added (conservatively) 15 percent to the import cost. CAPMAS (1996) reported that imported intermediate inputs typically accounted for 45 percent of production cost; thus a 15 percent increase in the cost of imported intermediate goods would by itself add nearly 7 percent to the cost of production.

(d) External debt and its management

Current account deficits have to be financed, and one of the major sources of financing for Egypt was borrowing from abroad.¹⁴

During most of the 1950s, Egypt's balance of payments was kept very close to equilibrium and deficits were generally financed from the country's foreign exchange reserves. At the beginning of 1955, virtually all of Egypt's external public debt had either been converted into internal issues or paid off through the Debt Conversion Plan of 1943. The only amount known to be outstanding was approximately \$482,000 due on the 4 percent City of Alexandria 1903–63 bonds.

The balance of payments picture began to change in the early 1960s with the introduction of the first Five-Year Plan. The import requirements of this Plan exceeded the country's payment capacity and about 30 percent of the investment program had to be financed through external borrowing. Ikram (1980: 356–7) estimated that by the end of 1965, the total disbursed and outstanding external debt amounted to \$1,516 million, with an additional \$103 million in short-term liabilities against banking facilities. This trend continued: for most of 1965–2000 Egypt ran a deficit on the current account, and the use of loans to finance part of this deficit was reflected in the country's growing foreign debt.

The adoption of the *infitah* led to a surge in imports. In part these additional exports were financed by the growth in exports, but substantial recourse was had to external credits. From 1975 to 1980, external debt increased from \$6.3 billion to \$19 billion, rising to almost 90 percent of GDP and 207 percent of exports of goods and services in the latter year.

A feature of Egypt's borrowing between 1970 and mid-1977 was the use of short-term correspondent bank facilities, in the form of trade-related lines of credit, for the opening and confirmation of letters of credit and acceptance of drafts arising out of export–import transactions. These were

normally for periods of 90 to 180 days, but in some cases maturities were extended for as long as 18 months to two years. The 1973 war, the sharp rise in world prices of food and other commodities, and the lack of sufficient amounts of quick-disbursing foreign aid all compelled Egypt to resort heavily to borrowing short-term funds to meet the cost of essential imports. At the end of 1976, disbursed and outstanding banking facilities amounted to \$1,396 million, i.e. just under 20 percent of the total outstanding debt. Arrears on banking facilities had emerged early in the 1970s and continued to increase until they reached a peak of nearly \$1,000 million in mid-1977. An impending crisis was only warded off by sizeable inflows of cash aid, principally from the Gulf Organization for the Development of Egypt, comprising Saudi Arabia, Kuwait, Abu Dhabi, and Qatar, that enabled the Egyptian authorities to clear all payments arrears and also to significantly reduce reliance on short-term facilities in the future.

Continued heavy external borrowing in the 1980s created a substantial debt overhang. In general, Egypt received quite favorable terms on its foreign borrowing through the 1980s. The average maturity on Egyptian loans during the 1980s was over 25 years, more than double those of the main borrowers from Latin America; the grace periods averaged almost 10 years; the average interest rate charged on Egyptian loans was substantially lower than that charged on loans to countries at comparable levels of per capita income. Nevertheless, a sizeable part of Egypt's external borrowing remained on supplier credit terms, and the stagnation of Egypt's export earnings (especially after the fall in oil prices) made it difficult to service these credits. Suppliers disbursed significant amounts of credits to Egypt through the first half of the 1980s. However, on a net basis (disbursements minus amortization), such disbursements were largely matched by amortizations, so that on a net transfers basis (disbursements minus both amortization and interest payments), suppliers became net takers from the mid-1980s.

Medium- and long-term debt peaked in 1988 at about \$42 billion, but a near doubling of short-term debt, from \$4.5 billion in 1988 to \$8.6 billion in 1990, caused total external debt to continue to rise until it reached \$46.1 billion in 1990. According to most of the widely used measures, Egypt's debt burden until 1991 was among the highest in the world. With debt to GNP ratios in the 100 to 150 percent range through the 1980s, touching 175 percent in 1988, Egypt was more heavily burdened with debt than many other, more prominent, debtor countries, including all the major Latin American countries.

Even more to the point, the servicing of the debt created severe liquidity problems. Total debt service (including arrears) due in 1986 exceeded 100 percent of current account receipts. As a result, Egypt could not service the debt and accumulated further arrears. The country became uncreditworthy and lost access to international capital markets.

Table 5.6 Balance of payments, 1965-2000 (\$ million and percent)

	Exports (<i>job</i>)	Imports (<i>cif</i>)	Trade balance	Services (<i>net</i>)	Official transfer (<i>net</i>)	Current account including transfer	Net capital movement	Current account (<i>inc official transfer</i>) as % GDP
1965	568	-952	-384	130	-	-254	186	-4.71
1966	598	-945	-348	172	13	-166	149	-2.92
1967	595	-950	-355	68	117	-173	116	-2.98
1968	664	-849	-185	-58	254	10	3	0.17
1969	735	-962	-227	-77	296	-8	-23	-0.12
1970	817	-1,191	-374	-88	308	-153	109	-2.18
1971	850	-1,244	-394	-92	279	-206	48	-2.77
1972	814	-1,286	-473	7	295	-171	145	-2.19
1973	1,003	-1,664	-661	7	731	77	-91	0.92
1974	1,674	-3,491	-1,817	186	1,305	-326	-210	-3.04
1975	1,569	-4,497	-2,928	449	1,079	-1,401	649	-11.28
1976	1,612	-4,214	-2,602	1,084	712	-806	526	-5.41
1977	2,042	-4,715	-2,673	1,460	445	-768	639	-3.98
1978	2,170	-5,300	-3,129	2,032	346	-751	373	-3.42
1979	2,951	-6,987	-4,036	2,558	89	-1,389	1,496	-7.77
1981	4,299	-9,201	-4,902	3,108	63	-1,731	1,589	-7.21
1982	4,144	-8,978	-4,834	2,211	51	-2,572	2,329	-8.87
1983	3,555	-9,153	-5,598	3,366	791	-1,441	2,029	-4.07
1984	4,033	-10,738	-6,705	3,795	772	-2,138	1,757	-5.37
1985	3,883	-10,819	-6,936	3,281	947	-2,708	1,081	-5.83

1986	3,215	-9,527	-6,312	2,306	1,209	-2,797	1,953	-5.43
1987	2,585	-7,952	-5,367	3,388	974	-1,005	-525	-1.55
1988	3,098	-9,838	-6,740	4,055	698	-1,987	121	-2.55
1989	2,820	-10,285	-7,465	4,203	756	-2,506	786	-4.20
1990	3,144	-11,441	-8,297	4,609	1,094	-2,594	1,383	-6.57
1991	3,887	-11,425	-7,538	4,291	4,842	1,596	398	5.39
1992	3,634	-10,054	-6,420	8,738	1,352	3,669	2,271	10.37
1993	3,417	-10,728	-7,312	7,602	1,902	2,193	1,828	5.64
1994	3,065	-10,716	-7,651	7,058	829	236	1,494	0.55
1995	4,957	-12,811	-7,854	7,321	919	386	1,285	0.64
1996	4,609	-14,107	-9,498	8,590	724	-185	-252	-0.27
1997	5,345	-15,565	-10,220	9,449	890	119	885	0.16
1998	5,129	-16,899	-11,770	8,409	882	-2,479	-1,115	-2.99
1999	4,445	-16,969	-12,524	9,719	1,097	-1,709	-409	-1.92
2000	6,388	-17,861	-11,293	9,371	932	-1,171	-1,854	-1.28

Source: CBE; World Bank (1978; vol. 6); IMF *International Financial Statistics*; Ikram (1980).

Notes

- 1 Net Capital includes SDR allocations, direct foreign investment, errors and omissions, and balancing items. Worker remittances are included in Services (net).
- 2 Overall Balance was financed by movements in Central and commercial banks' assets and liabilities, and by accumulating arrears.
- 3 Slight discrepancies between the figures in this table and in Table 5.1 are due to differences in aggregating figures from different sources.

Debt-servicing due and that actually paid compared with the country's foreign exchange earnings are displayed in Figure 5.8, while Table 5.7 shows the development of total debt and debt-servicing in absolute amounts.

The table and the figure underscore a number of important points regarding Egypt's external debt and debt-servicing.

- 1 Over the period 1970–2000 as a whole, external debt grew at a rate of 10.2 percent a year. However, this overall figure conceals two different growth paths. Between 1970 and 1989, external debt grew at a rapid pace, averaging 22.0 percent a year. In the second period, 1990–2000, the growth was barely 1 percent a year because of the application of the debt rescheduling agreements and Egypt's policy of holding down fresh borrowings. The apparent leveling off between 1986 and 1987 was the result of the debt rescheduling agreement of 1987. The drop in the stock of debt from \$45,684 million in 1989 to \$33,017 million in 1990 reflects the effect of the debt forgiveness and reschedulings that were finalized in the agreement with the Paris Club in 1991. The reduction in the debt stock in the next few years resulted from the application of the second and third phases of the Paris Club agreement.
- 2 From the early 1980s Egypt began to accumulate arrears on principal and interest related to long-term debt. Most of these arrears were accumulated by public sector enterprises whose major share of funding came from supplier credits. Arrears of interest and principal mounted swiftly until they reached \$8.7 billion in 1986.
- 3 The rising stock of debt was a source of disquiet to policymakers, but of even more concern was the rise in the debt service requirements.

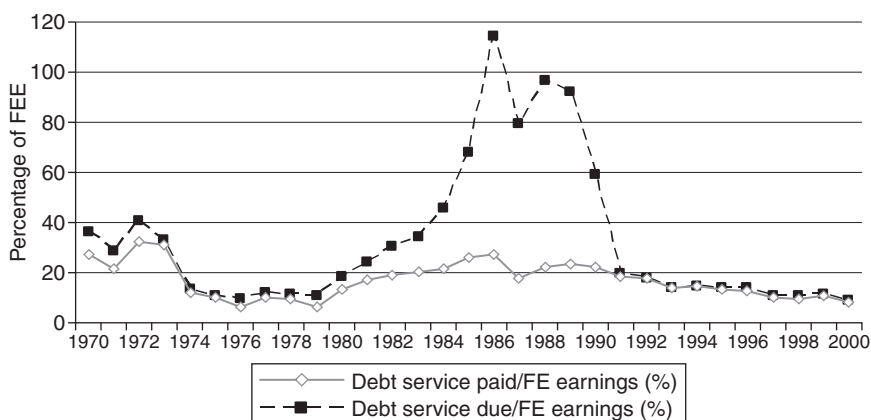


Figure 5.8 Debt service due and paid as percent of foreign exchange earnings, 1970–2000 (source: World Bank Debtor Reporting System).

Table 5.7 External debt and debt servicing, 1970–2000 (\$ million and percent)

	<i>Debt outstanding (\$ million)</i>			<i>Debt service due (including arrears)</i>	<i>Debt service due (including arrears)/XGS (%)</i>	<i>Debt service paid/XGS (%)</i>
	<i>Long term</i>	<i>Short term</i>	<i>Total</i>			
1970	1,400.4	401.2	1,801.6	356.6	36.0	27.3
1971	1,570.4	478.7	2,049.1	294.9	28.6	21.8
1972	1,476.3	476.2	1,952.4	454.9	40.6	32.5
1973	1,465.8	525.8	1,991.6	466.9	32.9	31.1
1974	1,614.6	594.9	2,209.5	341.1	13.5	11.9
1975	3,711.3	1,124.1	4,835.4	327.4	11.1	10.3
1976	4,836.0	1,521.3	6,357.3	391.7	9.4	6.4
1977	7,385.3	4,348.2	11,733.5	603.7	12.3	10.2
1978	9,471.4	3,386.5	12,857.8	678.5	11.3	9.7
1979	11,113.9	3,792.0	14,905.8	864.0	10.6	6.4
1980	15,103.6	4,027.1	19,130.7	1,691.9	18.4	13.4
1981	18,437.5	3,640.1	22,077.6	2,193.3	24.1	17.0
1982	22,263.1	5,068.8	27,331.8	2,691.8	30.3	19.3
1983	25,031.4	5,203.6	30,235.1	3,563.3	34.5	20.1
1984	26,419.5	5,783.0	32,202.5	5,143.6	45.4	21.4
1985	29,940.7	6,196.6	36,137.3	7,393.2	67.6	25.8
1986	32,772.8	7,123.6	39,896.4	11,409.8	114.1	27.0
1987	37,785.8	6,361.6	44,147.3	7,402.8	79.7	17.9
1988	39,273.0	6,873.9	46,146.9	10,848.7	96.6	22.1
1989	37,790.3	7,893.4	45,683.7	11,466.2	91.9	23.5
1990	28,563.2	4,453.3	33,016.5	8,056.5	58.9	22.5
1991	29,509.1	3,121.7	32,630.9	2,719.4	19.5	18.7
1992	28,611.7	2,517.7	31,129.3	2,701.8	17.9	17.8
1993	28,562.8	2,004.6	30,567.4	2,221.0	14.0	13.8
1994	30,446.1	1,932.6	32,378.7	2,244.5	14.7	14.6
1995	30,964.6	2,372.2	33,336.8	2,529.6	14.2	13.4
1996	29,017.7	2,348.0	31,365.6	2,477.7	13.7	12.9
1997	26,935.0	2,992.6	29,927.5	2,143.1	10.8	10.0
1998	28,006.2	4,261.7	32,267.9	2,046.2	10.6	9.8
1999	26,507.8	4,294.0	30,801.8	2,252.3	11.7	11.0
2000	24,852.2	4,104.5	28,956.6	1,959.1	9.1	8.4

Source: World Bank Debtor Reporting System.

Notes

XGS = Exports of goods and services; IMF transactions are included in long-term debt.

The debt service ratio (the annual debt service due as a proportion of foreign exchange earnings) rose steadily and quickly. There are no rules to define at what point these ratios become critical, but the World Bank for the most part has used a guideline of 25 percent as a point beyond which special attention needs to be paid.

While the stock of debt grew at a more steady pace (of just over 10 percent a year during 1970–2000), the debt service ratio fluctuated

considerably. These fluctuations had no correspondence with the growth of foreign exchange earnings, and created major problems for servicing the debt. Over the period 1970–2000 the ratio (due and including arrears) averaged 32.4 percent, with a coefficient of variation of 89.8 percent. The first subperiod (1970–89) showed an average debt service ratio of 40.4 percent, and a coefficient of variation of 79.7 percent. In the second subperiod (1991–2000) the debt service ratio was, not surprisingly, much lower at an average of 17.7 percent, but the coefficient of variation was close to 100 percent.

The debt service ratio reached its zenith in 1986, when paying all the debt servicing and clearing the accumulated arrears would have consumed 114 percent of the country's total foreign exchange earnings. The country would therefore have had to use all its foreign exchange earnings and to borrow additional amounts simply in order to meet its debt obligations; even more borrowing would have been required to pay for imports.

At all times, the authorities sought to limit the amounts actually paid. Over the entire period, the (paid) debt service ratio averaged 17.1 percent; it was somewhat higher in the first subperiod at 18.9 percent, but only 13.9 percent in the second. Drastically limiting the levels in the first subperiod also, of course, damped down the volatility: the coefficient of variation dropped to 41.8 percent. The greater variability in the second subperiod did not much matter, because the amounts to be paid were much smaller.

- 4 The solution to the debt problem of recent times was brought about by debt forgiveness, and resulted from the political circumstance of Egypt's participating in the Gulf war. Thereafter, controls on borrowing prevented it from re-emerging. The 1991 agreement with the Paris Club caused the debt service ratio to drop to 17.9 percent in the following year. The steady decline in the ratio in subsequent years resulted from the second and third phases of the Paris Club agreement and from a decision by Egypt to restrict the contraction of new debt – fresh borrowing in any year was not to exceed the amount repaid in that year. The debt service ratio was also limited by the adoption of strict conditions (couched in terms of the grant element) on the terms of new debt; these issues have been discussed in a previous chapter.

Why did Egypt's external debt increase relentlessly? Four factors accounted for this trend. First, Egypt failed to accelerate the growth of non-oil manufactured exports and thus lost the benefits of the expansion of international trade. Second, the pattern of Egypt's growth was heavily import-substituting. This type of strategy tends for considerable periods to be, in fact, import-intensive, because for several years the country must

import both the capital goods required to set up the import-substituting facilities *as well as* the finished commodities, until such time as the industrial plants are fully functioning. Third, especially after 1973, Egypt had to import large quantities of equipment in order to refurbish an infrastructure that had almost completely been run down during the war years. Fourth, the growing population and the limited scope for agricultural expansion meant that large quantities of food and agricultural items had to be imported. For all these reasons, Egypt was faced with a growing import bill that was not covered by the country's foreign exchange earnings, even when these were supplemented by external assistance.

The debt situation remained difficult for most of 1965–91, requiring a number of debt rearrangements (described at the beginning of this chapter). Major crises erupted in 1987 and 1991. Egypt's experience with the two crises differed significantly.

The debt crisis of 1987 was not brought about by a sudden or unexpected jolt, nor did banks abruptly lose confidence and recall their short-term credits. Rather, it resulted from a circle of gradually increasing indebtedness (total debt outstanding increased by about 50 percent between 1982 and 1987), growing debt service obligations (a tripling during 1982–87), and an inability of the economy to generate sufficient foreign exchange earnings. The problem was not simply that Egypt was borrowing too much, it was also that it was borrowing on increasingly harder terms. In 1983–90, the share of debt on concessional terms (defined as providing a grant element of at least 25 percent) had dropped to about one-third of Egypt's total debt, compared with an average of nearly half in 1975–82.

The continued squeezing of Egypt's ability to service its debt leached away the confidence of foreign creditors, in particular of those providing supplier credits. It created a vicious circle by slowing down the pace of new commitments and disbursements and intensified the pressure on the foreign exchange situation, so that a substantial portion of the foreign resource inflow was diverted to service existing debt. In 1979, foreign debt service obligations used up about 60 percent of the gross disbursement of foreign loans. With a sharp increase in debt service payments and the continuing decline in disbursements from external borrowing, by 1982 debt service had reached almost 100 percent of gross new borrowings. The situation continued to worsen. In 1987, the gross inflow of new loans had declined by nearly half in nominal terms from its peak five years earlier; new loans did not cover even half the debt service payments actually made (and these payments amounted to less than two-thirds of the debt service due). By 1987, Egypt had become a net exporter of loan capital.

Although a debt crisis had long been in the making, the process was given a sharp fillip in 1986 and 1987 by a steep fall in oil prices, which halved from \$26.4/barrel in 1985 to \$13.5/barrel in 1986. Prices rose somewhat in 1987, but at \$17/barrel still remained about 35 percent

lower than in 1985. As a result, earnings from oil exports in 1987 were less than half their level in 1985. These losses were compounded by a fall in tourism receipts of 23 percent in 1986 (compared with a year earlier), as tourists were scared off by riots that occurred in February in which elements of the security forces were involved. The combined receipts from oil, tourism, and remittances in 1986 and 1987 were respectively 19 and 30 percent lower than in 1985, and total foreign exchange earnings had fallen 15 percent between 1985–87.

Confronting this fall in receipts was a growing bill for debt servicing. The worsening foreign exchange situation had led to a steady build-up of arrears on debt repayments (both interest and principal). The situation had reached such a pass in 1986 that had Egypt actually paid all obligations falling due, including accumulated arrears, the payment would have amounted to 114 percent of the country's earnings from the export of goods and services in that year.

In May 1987, Egypt reached a rescheduling agreement with the Paris Club, whereby outstanding arrears of \$6.9 billion were rescheduled, together with all interest and amortization payments on public medium- and long-term loans falling due until June 30, 1988; this amounted to \$4.4 billion. The Paris Club creditors also agreed, in principle, to meet again with the Egyptian authorities to consider debt service payments falling due after June 1988, provided that Egypt was in compliance with a number of conditions. These conditions included maintaining an arrangement with the IMF, signing bilateral agreements with Paris Club creditors in accordance with the Paris Club agreement, and securing comparable treatment from other creditors. However, most of these conditions were not fulfilled and the next round of successful negotiations on the debt issue did not take place until four years later.

The crisis that culminated in 1991 should also have been predictable. A connection between the continuing deficits in Egypt's budget and in its balance of payments had not escaped the notice of observers. Hansen (1991: 213), in particular, identified loose budgetary policies and the resulting budget deficits as the "villains" for the country's persistent balance of payments problems. Unless the underlying problems were addressed by taking measures to rein in the budget deficit (17 percent of GDP in 1991), or to boost foreign exchange earnings, the 1987 rescheduling could serve as only a temporary analgesic. The arrangements had bought Egypt some time, but this had not been used to attack the structural difficulties. Fortunately for Egypt, the 1991 economic crisis occurred at a time when the donors, because of Egypt's support in the Gulf war, were inclined to look favorably at a more enduring solution.

On May 25, 1991, Egypt concluded an agreement with members of the Paris Club to reorganize and reduce, by up to 50 percent in net present value terms, its debt to the members of the Club. The debt arrangements were subject to three main conditions. Egypt was required:

- to have an agreed program with the IMF;
- to keep current during 1991–94 with payments due under the terms of the agreement; and
- to obtain comparable terms of debt relief from non-Paris Club creditors.

The Paris Club restructuring took a variety of forms (such as forgiveness of principal, reduction of interest rates, and restructuring of payments), depending upon the preference and legal obligations of the creditor. The total amount covered by the agreement was estimated at \$28 billion, including \$7 billion of debt cancellation by the United States. The debt reduction or restructuring was to take place in three phases. The initial phase was a 15 percent immediate reduction, with effect from July 1, 1991. The second phase, also incorporating a 15 percent reduction, had to take place on completion of the second economic reform agreement with the IMF, by December 31, 1992. In the event, the second phase became effective in October 1993, after the IMF approved the three-year Extended Arrangement. The third and final phase of a further reduction of 20 percent had to be carried out from July 1, 1994, after evaluation of the second phase and with the agreement of the IMF. This final phase took place in the second half of 1996.

The unprecedented amounts of debt forgiveness from the major bilateral donors and the 1991 Paris Club debt-relief package provided Egypt with an historic opportunity to break the shackles of foreign indebtedness. The Paris Club relief package had a major influence on the balance of payments, the fiscal balance, and recovery from the debt hangover. The World Bank estimated that, as a result of the 1991 agreement, Egypt saved an average of nearly 2.5 percent of GDP a year in debt service payments in

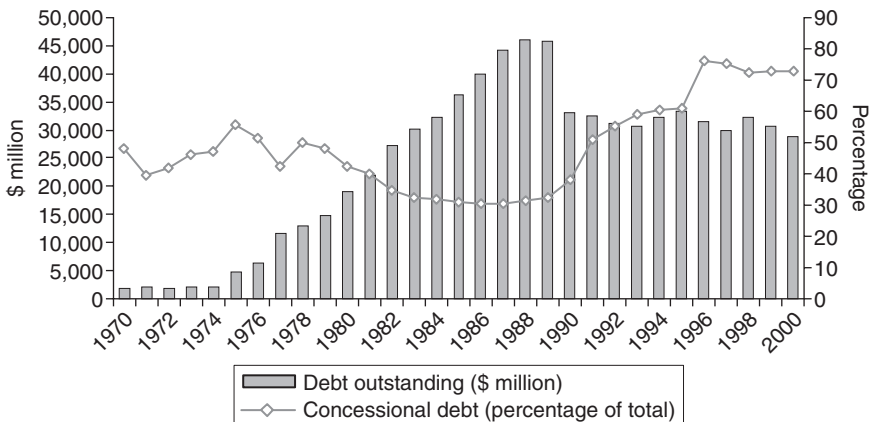


Figure 5.9 Total debt (\$ million) outstanding and share of concessional debt (percent), 1970–2000 (source: World Bank Debtor Reporting System).

the five years from 1992–96. The impact on the balance of payments and the budget was, of course, proportionately greater.

Egypt took advantage of the relief and held down fresh external borrowing – for the period 1991–2000 as a whole, Egypt’s net borrowing averaged only \$339 million a year. With the restrictions on new loans, from 1996 Egypt’s repayments exceeded disbursements and net external medium- and long-term borrowing became negative. Moreover, from 1992, Egypt repaid more than its drawings of medium-term suppliers’ credit. As a result of these measures, the stock of debt outstanding fell steadily. The country also put greater emphasis on securing external funds in the form of grants and soft loans. The share of concessional debt increased sharply from about 37 percent of total debt in 1990 to nearly 73 percent by 2000. The combination of generous debt arrangements and Egypt’s more careful attitude towards fresh borrowing ensured that the pressure of external debt abated. Figure 5.9 displays developments in the amounts and concessionality of Egypt’s external debt.

6 The public finances

Public finance policy concerns decisions regarding the revenue, expenditure, and debt operations of the government. The importance of public finance in the Egyptian economy arises from the overwhelming role of the government in the economic system.

The government's fiscal and regulatory actions permeated the entire economy in 1960–2000. The state's domination of the economic system is reflected in the proportion of GDP originating in the public sector; this increased from an estimated 13 percent in 1952 to about 40 percent in 1973 (the eve of the *infytah*), to 50 percent in 1981, before dropping to 34 percent in 1990. As late as 2000 it was still 30 percent. Government expenditure reached nearly 60 percent of GDP in 1982, and even in 2000 was nearly 30 percent of GDP. Moreover, government interventions in some sectors (especially in agriculture) remained so widespread that they virtually determined the level and composition of output, even though formally these sectors remained in the hands of private decision-makers.

Chapter 1 described how the role of the government increased, especially after 1961. In order to attain its goals, the government made a major effort to mobilize resources. Current government revenue, including receipts of the social security system, were raised and remained high compared with that of other countries of similar per capita income, structure, and degree of openness of the economy. However, because of claims on the expenditure side, savings generated by the public sector were inadequate, dropping from 8 percent of GDP in 1967 to –11 percent in 1975, though by 1978 they recovered to about 3 percent. The main reasons for the decline were the vastly increased allocations for defense after the war of 1967 and the rapid growth of subsidies after 1973.

With the public sector occupying a dominant role in the economy, the government's budget and fiscal policy was one of the most important tools of resource allocation and economic management. A further implication of Egypt's being a government-controlled economy was that monetary policy lost much of its traditional role, thus automatically increasing the role of fiscal policy.

The nonfinancial public sector comprises four major bodies: the central government, local and regional government, public enterprises, and a number of extra-budgetary entities.

- a The central government includes the central administration and public service authorities. The central administration consists of the presidency, ministries, and the legislature. The public service authorities, as distinct from the public economic authorities, are essentially nonprofit public agencies such as universities, research institutes, and hospitals. Their operations are integrated into the government budget.
- b Local and regional government is organized into 26 governorates and the city of Luxor. Although local and regional government is administratively separate, it has very limited financial autonomy; its budget is part of the consolidated government budget and is approved by the national legislature as part of the state budget. Local government possesses jurisdiction over some types of tax and non-tax revenues, but depends on central government transfers for financing the bulk of its expenditures.
- c Public enterprises are grouped into economic authorities and public companies. The public economic authorities consist of about 60 fully owned public companies, such as the Egyptian General Petroleum Company (EGPC), the Suez Canal Authority (SCA), various public utilities, and the General Authority for Supply Commodities (GASC). In 1990 they accounted for about 23 percent of GDP and 3 percent of the labor force. Their operating budgets are not included in the government budget, but cash transfers to and from the government, such as tax payments and subsidies, are incorporated into the consolidated budget. With the notable exception of the EGPC and the SCA, most of the economic authorities operate at a loss. Investment expenditures of the economic authorities and the associated financing are also part of the consolidated budget. Financing for the economic authorities comes from internal generation (especially investment self-financing), foreign economic assistance transferred from the government, and loans from the National Investment Bank.

The public companies are public enterprises engaged in a variety of processing, manufacturing, or service functions. They constitute a major presence in the economy; in 1990, on the eve of the structural reform program under which most of these companies were scheduled for privatization, their net value-added was 12 percent of GDP, they employed over 6 percent of the labor force, and their tax and profit transfers amounted to 14 percent of central government revenue. From 1990 their investment budget was removed from the government budget.

- d The main extra-budgetary entities are the social insurance funds, the National Investment Bank (NIB), and the Social Fund for

Development (SFD). Their operations are not consolidated into the government budget.

- 1 The social insurance system is operated by two funds: the National Organization for Insurance and Pensions, which covers government workers; and the General Authority for Social Insurance, which covers public and private enterprise workers, farmers, and the self-employed. The cash surpluses of the social security funds are invested with the NIB.
- 2 The National Investment Bank was established in 1980 and is responsible for financing projects included in the government's investment program. It is financed primarily by the surpluses of the social insurance funds, but also from postal savings and the sale of investment certificates.
- 3 The Social Fund for Development was set up in 1992 to provide a safety net, initially for workers affected by the 1991 stabilization program, and to develop programs aimed at poverty alleviation. It is funded mainly from foreign aid.

Overall fiscal developments

Until the late 1970s, two major themes ran through Egyptian public finances. First, Egypt had been in a state of war for a quarter-century after 1948; this meant heavy expenditures on defense. Second, with the adoption of the *National Charter* in 1962, Egypt began the largest-scale experiment in "Arab Socialism." The main objective of this economic policy was greater equity in the distribution of income and in consumption capability, which was to be largely effected through fiscal measures. Another important goal was increased production. With the economy dominated by the government, this meant an increase in public investment.

The relative importance of these factors differed over time. In 1960, defense expenditures accounted for about 5 percent of GDP at market prices; by 1970 they had increased to 16 percent, and by 1978 they had dropped to about 9 percent.¹ With defense and administration costs consuming so much of the revenues, public investment outlays had largely to adapt themselves to the available resources. The impact of defense spending on the resource allocation process can be seen by the gyrations in the rate of public investment (which represented about 80 percent of total investment). In 1960, public investment was about 11 percent of GDP, in 1964 it rose to 19 percent, in 1970 it declined to 12 percent, but increased thereafter to 27 percent in 1978.

In order to achieve greater equity in consumption, many commodities considered essential were subsidized. These cost-of-living subsidies became an important item in the budget after the sharp rise in international

wheat prices in 1973; total subsidies rose from less than 2 percent of GDP in 1971 to about 5 percent in 1973 and 10 percent in 1978. Thus, if during the 1960s and early 1970s defense needs had competed with investment for resources, after 1973 an aggressive new claimant appeared on the scene.

From 1965 until about 1990, resource allocation could be represented as what Scioli (1976: 2) called the “three-cornered hat” with defense, investment, and welfare representing the three corners. These corners altered somewhat in recent years in response to changes in the international environment and to new directions in economic strategy. The most important of the changes was the decline in the relative importance of defense spending following the settlement with Israel, and an easing up of the government’s investment expenditures following the emphasis on the private sector to furnish the impetus for growth. An increasing role in expenditure came to be occupied by debt-servicing and payment for administration, especially salaries and benefits.

Throughout 1965–2000, the overall balance of the budget remained in deficit, the shortfall at times exceeding 25 percent of GDP at current market prices.² Moreover, the deficit as a proportion of GDP fluctuated widely around an average of about 13 percent, varying between 28.6 percent in 1975 and 1.2 percent in 1995. Over the entire period, the ratio of total revenue to GDP at market prices averaged 28 percent, that of total expenditures to GDP about 41 percent. The overall deficit improved between 1965 and 2000, but the evolution did not follow a consistent path. The development of revenues, expenditures, and the overall budget deficit are shown in Figure 6.1.

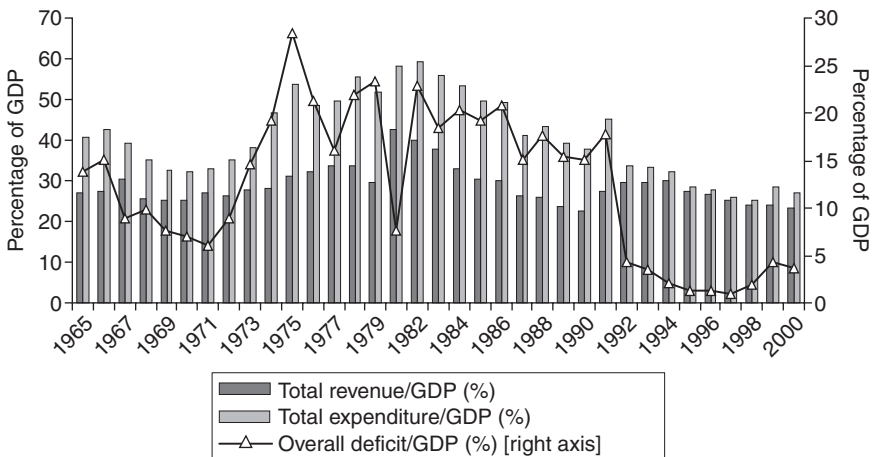


Figure 6.1 Revenue, expenditure, and budget deficit, 1965–2000 (percent of GDP) (source: MOF; World Bank LDB).

It is more useful to look at the period in two parts. The first, 1965–91 (i.e. before the stabilization program) was dominated by three features:

- an increase in total government expenditure as a proportion of GDP,
- a high level of overall budget deficit, and
- considerable fluctuations in revenues and expenditures.

The second sub-period, 1992–2000, is distinguished from the first because it witnessed a sharp decline in the budget deficit in the 1990s (although the precise extent of the reduction is not clear). This change resulted from the implementation of the stabilization and structural adjustment program discussed in Chapter 3.

The overall budget deficit averaged 13 percent of GDP over the entire period, with averages of 16 percent and 3 percent in the two sub-periods. Between 1965 and 2000, total expenditure as a percentage of GDP averaged 41 percent, but the figure for the first sub-period was 45 percent while for the second it was 29 percent. The corresponding performance for revenues was 28 percent of GDP for the entire period, 29 percent in the first part, and 26 percent in the second. A summary of fiscal operations for selected years is shown in Table 6.1 and displayed graphically in Figure 6.1.

The year 1991 saw a number of developments that had substantial repercussions on public finances. With the 1991 budget, the authorities intensified their efforts to control the fiscal deficit and to improve the structure of revenue. The budget also included a one-time exceptional expenditure (equivalent to about 6 percent of GDP) to recapitalize the publicly owned commercial banks. Three other measures also played an important role in influencing the fiscal outcome: a substantial depreciation of the exchange rate, the freeing of interest rates, and the debt rearrangements with the Paris Club. The exchange rate depreciation increased the revenues of the EGPC and the SCA in terms of domestic currency and thereby boosted the amounts transferred to the budget. It also increased the domestic currency value of imports and thus increased collections from customs duties. On the expenditure side, the Paris Club agreement substantially lowered the debt service obligations. Reductions in food subsidies, begun in 1987, accelerated in 1991 with the removal of subsidies on fish, tea, and rice.³ The budget outturn in 1992 was even better, because it was the first full year to benefit from the reforms.

During 1992–2000 total expenditure was kept under stricter control than in the preceding period, although the precise extent of the reduction is moot because of ambiguities in the treatment of some items. It appears that the reduction can almost entirely be explained by lower capital expenditure. Current expenditure, as a proportion of GDP, continued to increase because of higher domestic interest payments and a rising civil service wage bill. The latter was occasioned by the employment of additional numbers – between 1991 and 2000 the share of government

Table 6.1 Summary of fiscal performance, selected years, 1965–2000 (LE million at current prices)

	1965	1970	1975	1981	1985	1990	1995	2000
<i>Total revenue</i>	598	750	1,524	7,363	11,312	21,876	55,719	79,416
Taxes	317	524	948	4,015	5,923	11,742	34,279	52,200
Transferred profits	84	40	154	1,697	1,944	2,304	16,266	29,371
Other non-tax revenue	113	94	120	345	796	1,596	2,138	3,970
Investment self-financing	40	36	210	964	2,012	4,829	2,794	7,186
<i>Total expenditure</i>	906	956	2,628	9,892	18,476	36,393	58,256	91,689
Current expenditure	612	604	1,765	6,125	11,900	22,446	47,632	68,585
Of which: subsidies	—	—	622	2,166	2,749	4,659	3,818	5,401
Investment expenditure	294	352	863	3,767	6,544	14,251	11,299	24,074
Increase in arrears	—	—	—	899	—	—	—	—
<i>Overall deficit</i>	308	206	1,388	1,630	7,165	14,517	2,537	12,273
<i>Financing (net)</i>								
External financing	81	-15	210	612	1,530	3,248	-278	-2,568
Domestic financing	227	221	1,178	1,018	5,635	11,269	2,815	14,841
Of which: from banking system	72	80	731	-232	2,764	7,696	-1,117	6,566
<i>Overall deficit as percent of GDP (market prices)</i>	13.16	6.73	28.55	9.39	22.04	15.10	1.24	3.64

Source: Ikram (1980); World Bank LDB; IMF, *Government Financial Statistics*.

employment in the civilian labor force rose from 22.7 percent to 26.9 percent.

Over the period 1965–2000, about 12 percent of the deficit was financed from external sources, the rest from domestic. This figure conceals wide fluctuations: between 1965 and 1991 (before the stabilization program) external financing covered, on average, 22 percent of the deficit, and in some years exceeded 150 percent. During 1992–2000 the pattern of financing changed considerably, with domestic sources financing 115 percent of the deficit.⁴ The larger domestic financing of the deficit led to a rise in the public domestic debt, which increased from 52 percent of GDP in 1990 to 60 percent in 2000 (see Figure 6.2).

The principal sources of domestic finance were the banking system, which financed about a quarter of the deficit over the entire period (about one-third in 1965–91) and accounted for almost 40 percent of domestic financing, and the social security funds (see Figure 6.3). The bank financing of the deficit had significant consequences for the growth of the money supply and inflation – the latter averaged about 10 percent a year in 1965–2000 and was close to 17 percent annually in 1965–90. The growth of money supply at a rate faster than the demand for money contributes to increases in the rate of inflation which, in turn, influences the level of expenditures in the next fiscal period, thus sowing the seeds of further deficits. From this perspective, the fall in bank financing to 15 percent of domestic financing in 1992–2000 strengthened the government’s anti-inflationary stance.

The high level of deficit and the instability in the budget resulted from a basic structural weakness. Budgetary revenues were very susceptible to exogenous influences while budgetary expenditures responded more to domestic inflation. Thus revenues and expenditures were liable to fluctuate widely, with very little correspondence between the movements of the

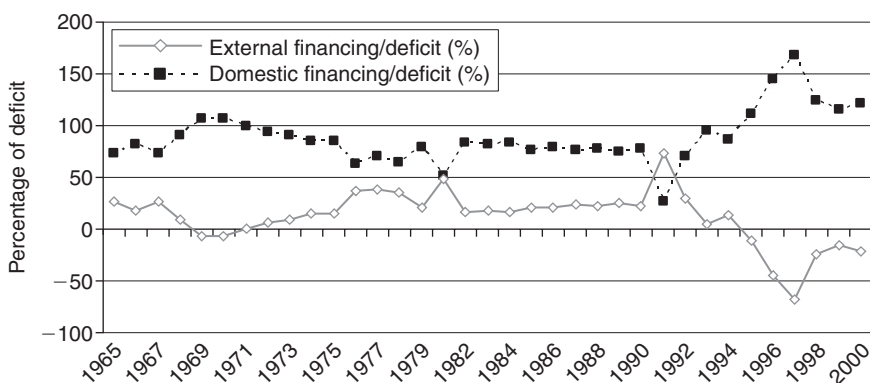


Figure 6.2 External and domestic financing of fiscal deficit, 1965–2000 (percent of deficit) (source: MOF; World Bank LDB).

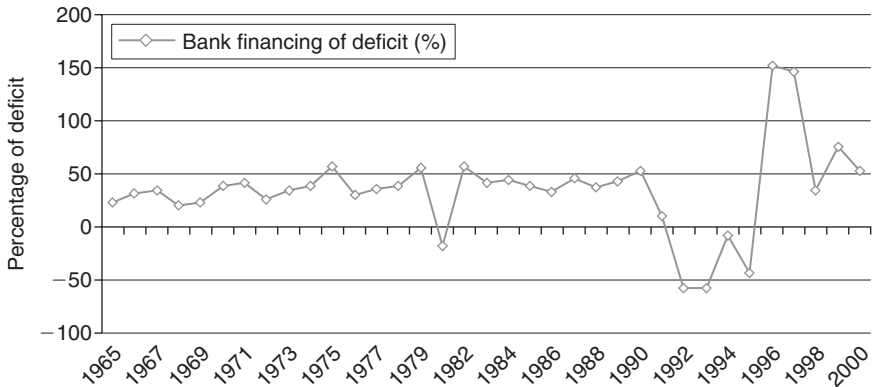


Figure 6.3 Bank financing of budget deficit, 1965–2000 (percent of deficit) (source: IMF, *Government Finance Statistics*; World Bank LDB).

two series. Over 1965–2000 as a whole, the coefficient of variation of revenue as a proportion of GDP was 15.8 percent, while that for expenditure as a proportion of GDP was 24.7 percent, indicating that the latter showed more variability in relation to its mean. However, at times the variability could go the other way; for example, for 1976–86, the coefficient of variation for expenditure/GDP was 10 percent while that for revenue/GDP was nearly 15 percent. The differential fluctuation between revenues and expenditures, both in amplitude and timing, was a major issue for policymakers throughout 1965–2000.

The external influences impacting on budgetary receipts were fluctuations in the international price of oil (and hence in the revenues of the EGPC), and in the levels of economic activity in the industrialized countries (and therefore in international trade and earnings from the Suez Canal). The high volatility of the revenue series in 1976–86 can thus easily be explained. This period witnessed a steep rise in oil revenues as the oil fields that Egypt had recovered after the Arab–Israel war attained full production and benefited from the oil price hike of 1973, another sharp increase in oil prices (in 1979), a slowing down of the international economy towards the end of 1981 with a consequent decline in oil prices and in Suez Canal traffic, and then a sharp drop in oil prices in 1986.

The expenditure side was also affected by exogenous influences, principally the price of wheat. These changes were passed on to the budget in the form of variations in the subsidy bill, because the selling price of subsidized commodities remained more stable than the procurement price. Added to this was the budget's response to the domestic rate of inflation. Current expenditure largely became hostage to cost-push factors, to the open-ended nature of consumer subsidies, and to guaranteed employment in the public sector for all persons discharged by the

armed forces and all university graduates. Given the determination of the authorities to protect the standard of living, the domestic rate of inflation introduced a substantial degree of rigidity into the expenditure side of the budget. This severely cramped the government's room for maneuver. Some studies – e.g. Ahmed (1984: 13–14) – showed that more than half of total government expenditure might be regarded as “autonomous,” in the sense that the degree of discretionary influence over it was very small, and highly sensitive to domestic inflation. Moreover, control over expenditure was diffused as a large block of public outlays (for example, by the National Investment Bank and the Ministry of Defense) was outside the discretionary control of the Ministry of Finance. These structural differences translated into very different movements of the two sides of the budget.

Revenue issues

Until the early 1980s, Egypt's efforts at resource mobilization did not compare badly with other countries at comparable levels of per capita income, structure of production, and openness of economy. Examinations using comparable methodology by Chelliah (1971), Tait *et al.* (1979), and Ahmed (1984) of the tax performance of 45 developing countries between 1969–80 showed Egypt to be occupying 3rd to 11th places, except for the period 1972–76 when it fell to 30th place.⁵ However, expenditures grew even faster. In 1965–2000, revenues on average accounted for 29 percent of GDP, while expenditures averaged 41 percent. Expenditures continually outpaced revenues; it was said that Egypt's fiscal problem was that of “earning in Centigrade but spending in Fahrenheit.”

The composition of revenues was dominated by taxes and from profits transferred by a small number of public organizations, such as the Suez Canal Authority and the Egyptian General Petroleum Company. Other contributors to revenue were relatively minor (see Figure 6.4). Indirect taxes, such as import duties and the sales tax, remained much more important than direct taxes, such as income tax.⁶ This is not surprising. The tax system developed in an uncoordinated manner over the years with revenue mobilization as its principal motivation; considerations of equity, transparency, and efficiency in administration came a distant second.

Over the period 1965–2000, the relative contribution of individual taxes to the total changed. The most important feature was the fall in the share of taxes on international trade (principally customs duties on imports) as a consequence of gradually lowering import tariffs. While this meant that additional revenues had to be sought from other sources, it did push matters in the direction of greater international competition and in helping the country to reap more of the benefits of trade. However, the overall structure of tax revenue remained skewed towards the external

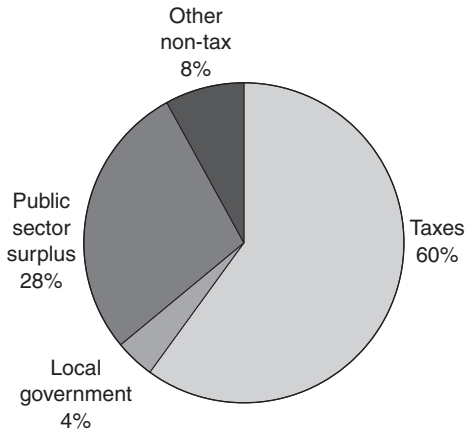


Figure 6.4 Composition of revenues, 1965–2000 (percent of total) (source: MOF; World Bank LDB).

sector (depending heavily on customs duties, consumption duties on imports, taxes from the EGPC and the SCA), which even in the final five years of the period accounted on average for about 40 percent of total tax receipts. There was some increase in the contribution of taxes on goods and services and in revenues from the tax on business profits, but the share of taxes on personal incomes showed virtually no variation.

The fluctuations in the fiscal contribution of petroleum and the Suez Canal were caused by two interrelated factors: changes in the international price of oil, and the state of economic activity in the industrialized countries. These fluctuations could be quite abrupt. International crude oil prices peaked in 1981 at \$33.60 a barrel (weighted by the price and share of each of Egypt's oilfields in exports) before collapsing to \$14.29 per barrel in 1987. These price variations largely reflected changes in demand conditions resulting from changes in the level of economic activity in the industrialized world. Changes in international economic activity also heavily influenced the movement of shipping, and hence revenues from transit fees, through the Suez Canal. Figure 6.5 shows the growth and fluctuation in the main sources of tax revenues.

Most of the revenue came from two sources: taxes and transferred profits from public enterprises; in both sources the EGPC and the Suez Canal Authority bulked large. Between 1965 and 2000, taxes accounted for about 60 percent of total revenue, while transferred profits and investment self-financing contributed 28 percent. The tax system remained inelastic and did not provide much automaticity in mobilizing revenues. The system also paid insufficient attention to considerations of efficiency and equity. Taxes on personal income throughout the period remained



Figure 6.5 Development of major taxes, 1965–2000 (percent of total tax revenue) (source: MOF; World Bank LDB).

unimportant: in 1974, the year of the announcement of the *infitah*, they amounted to 4.7 percent of total tax revenues; by 2000 the figure had dropped to 4.2 percent. This relative decline resulted from the rapid increase in the business profits tax (reflecting chiefly revenues from oil and the Suez Canal), which grew so much faster that it lowered the share of other taxes.

How effective was the tax system at raising revenues? Tax revenues can change between two dates because of (a) changes in the variable on which the tax is based; and (b) changes in the rate at which the tax is levied, or changes in its base, or special administrative efforts. The response of tax collections to the first source of change is often called “automatic,” and is measured by the *elasticity* of the tax; the source of the second change is termed “discretionary.” Tax *buoyancy* denotes the total response, automatic and discretionary, of tax revenues to changes in the underlying variables.⁷

Estimates of the buoyancy of total revenues, tax revenues, as well as of some of the major individual taxes and other sources of revenue are presented in Table 6.2. As with all estimates that rely on national accounts figures over such a long time-span, the numbers should be taken as indicative rather than definitive. However, they do point to a rather consistent story.

Total revenues in 1965–2000 expanded at a rate slower than nominal GDP, as did total tax revenues. Revenue from customs duties grew less quickly than did the value of imports. Taxes on goods and services apply overwhelmingly to non-agricultural items; hence, non-agricultural GDP

Table 6.2 Buoyancy of major revenue sources, 1965–2000

<i>Revenue source</i>	<i>Determining variable</i>	<i>Buoyancy</i>
Total revenue	GDP	0.95
Total taxes	GDP	0.96
Customs duties	Imports	0.94
Goods and services	Non-agricultural GDP	0.81
Personal incomes	Non-agricultural GDP	0.78
Business profits	Non-agricultural GDP	0.82

Source: MOF; MOP.

was taken as the determining variable, and the result showed a significantly sluggish response. Taxes on personal incomes and business profits, for the same reason, were also compared with non-agricultural GDP, and demonstrated a similar lack of buoyancy. In fact, if taxes from the EGPC and the SCA are excluded, the buoyancy of total revenue falls to 0.75 and of the profits tax to 0.64. Thus, the overall picture is that revenues, particularly those from taxes, fell short of the growth in the variables on which they were based. This can be attributed to exemptions (including tax holidays), non-compliance, the use of specific as opposed to *ad valorem* rates, and weaknesses in tax administration that lowered the amounts collected.

Was the tax system effective in promoting equity? The principle of equitable taxation is that people should contribute to the cost of government in line with their ability to pay. This raises two considerations. The first, sometimes known as “horizontal equity,” says that people with equal capacity should pay the same; the second, sometimes termed “vertical equity,” holds that people with greater ability should pay more.⁸ Of course, the implementation of either rule requires a comprehensive measure of “ability to pay.” This, in turn, has sparked a considerable discussion of issues such as the basis on which ability to pay should be measured (should it be income, total expenditure, consumption, or wealth?), how should one include the option of leisure, and so on. In practice, however, annual income has been used as the most widely accepted index of the ability to pay.

The structure of the Egyptian tax system during 1965–2000 was largely regressive. Between 50–60 percent of tax revenues came from taxes on commodities (tariffs and sales taxes). The principal aim of the system was to raise revenues; considerations of incentive, efficiency, and equity were less in evidence.

The structure of taxes is shown in Table 6.3, and displayed graphically in Figure 6.6. In the period 1965–2000, direct taxes (business income tax and personal income tax) provided about 36 percent of tax revenues, while 64 percent was provided by indirect taxes. The overwhelming part of direct taxes came from the taxation of business profits (with the Suez

Table 6.3 Structure of taxes, 1965–2000 (percent of total taxes)

<i>Indirect taxes</i>	64
Taxes on foreign trade	22
Taxes on goods and services	28
Other indirect taxes	14
<i>Direct taxes</i>	36
Taxes on personal incomes	4
Taxes on business profits	32

Source: MOF; World Bank LDB; IMF, *Government Finance Statistics*.

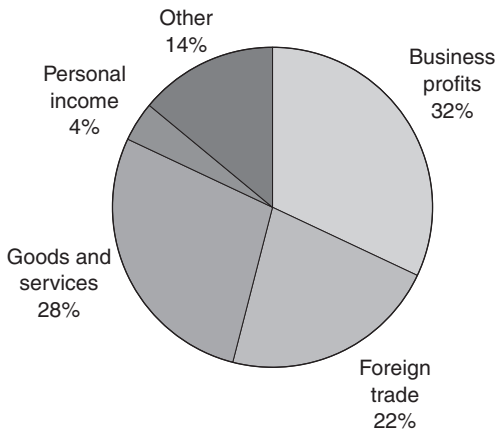


Figure 6.6 Composition of tax revenues, 1965–2000 (percent of total tax revenue) (source: MOF; World Bank LDB).

Canal Authority and the EGPC contributing about 45 percent of the total, the rest coming from the Central Bank of Egypt, and public and private enterprises). Profit transfers provided about 18 percent of total revenues, about two-thirds being provided by the Suez Canal Authority, the EGPC, and the Central Bank of Egypt. Taxes on personal incomes amounted to only 3–5 percent of total tax revenues. The dominance of indirect taxes in the fiscal structure has negative consequences for equity.

A satisfactory study of the distributive effects of the Egyptian tax system has yet to be carried out. El Edel (1982) argued that the tax system, including consumer subsidies (defined as negative taxes), lowered the Gini coefficients of income after taxes both in 1965 and 1975. The Gini coefficients in 1965 were: income before taxes, 0.4313; income after total net taxes, 0.4170. In 1975 the corresponding figures were 0.4043 and 0.3792 respectively. This suggested that the tax system had reduced income concentration and thus had had a progressive effect. However, the methodology and findings of this study have been called into question, for example by Ahmed (1984: 36) and Hansen (1991: 225), who

have disputed the validity of some key assumptions, particularly concerning the shifting of taxes.

On other evidence, the Egyptian tax system does not appear to be very effective in furthering the government's equity goals. Ahmed (1984: 36–7) and Dinh and Giugale (1991: 17–18) have pointed out that in order to satisfy the principle of horizontal equity, the tax rate should vary according to income levels rather than income sources. But the taxation of income in Egypt is largely based on a schedular system with the tax rate varying according to the source of income: “earned” income (e.g. that from wages and salaries) is taxed at a higher rate than “unearned” income (e.g. that from dividends or bonds), and taxes on property are almost negligible. Moreover, large tax exemptions were granted in order to stimulate private investment. These factors, together with the substantial tax evasion, indicate that the tax base for particular income groups has been eroded. The principle of vertical equity is given more support by the progressive rate structure of the tax system. However, the extremely low collections of personal income taxation (between 1965–2000 stagnating at an average of 4 percent of total tax revenue) suggest that in practice the tax system suffered from considerable weaknesses in terms of vertical equity as well. Musgrave's (1959: v) comment that “the effects of a tax depend upon what it is, not what it is meant to be,” is particularly relevant in these circumstances.

Additional resources were generated through methods that were not entirely transparent, and the burden of which did not necessarily correspond to the income of the tax payer. Two such principal sources were the “inflation tax” and the taxation of agriculture.

Keynes (1923: 52) had argued that “what is raised by printing notes is just as much taken from the public as is a beer duty or an income tax.” Inflation dilutes the real value of the public sector's domestic debt, and this erosion of the public debt is equivalent to a tax because, like other taxes, it lowers the private sector's real disposable income. Keynes (1923: 37) commented further that, “It is the form of taxation that the public finds hardest to evade and even the weakest government can enforce, when it can enforce nothing else.” After all, it is a tax that Parliament does not have to vote for and it requires no agency to administer.

Throughout much of 1965–2000, the budget ran a substantial deficit. During 1965–90 (i.e. before the stabilization program) the deficit averaged nearly 17 percent of GDP, while for the entire period (1965–2000) it averaged about 12.5 percent. A large part of the deficit (amounting on average to 4.7 percent of GDP during 1965–2000, and nearly 6 percent of GDP in 1965–90) was financed through borrowing from the domestic banking system. The rate of inflation, as reflected in the growth of the Consumer Price Index, averaged about 10 percent annually over the entire 35-year period, and nearly 14.5 percent during 1965–90. These developments permitted the authorities substantial recourse to the infla-

tion tax, namely, the real revenue obtained by the government when inflation erodes the real value of its nominal liabilities, i.e. the money base (the Central Bank of Egypt's liability) and the domestic public debt (the Ministry of Finance's liability).⁹

Studies of inflation in Egypt are handicapped by weaknesses in the Consumer Price Index, which is the measure generally used to indicate movements in the overall price level. Important problems in the construction of this index are the weight of commodities that are recorded at controlled prices (and which may not, in fact, be available at these prices); the infrequent adjustment to the consumption basket which, given the use of a Laspeyres type price index, would heavily overweight past consumption patterns; and the collection of price data on only a partial basis (for several years, only one-third of prices in the consumption basket were surveyed each quarter). Further issues arise from splicing together series of price indices computed on different base years, and the additional difficulties of allowing for quality changes in the goods included in the consumption basket over such a long period. In view of these complications, the following breakdown is offered only as a rather rough summary.

Broadly speaking, inflation during 1965–2000 can be divided into four periods:

- from 1965–73 Egypt underwent low inflation, averaging about 5.7 percent annually;
- from 1974–86 the inflation rate increased, averaging 12.3 percent a year;
- between 1987–92 the annual inflation rate spurted to 20.2 percent;
- in 1993–2000 the stabilization program brought down the rate to about 6 percent a year.

Decompositions of the sources of inflation, such as by the IMF (1998: 19–23), into the contributions of “broad money” (M2), real activity, and velocity of circulation, show that the rate of inflation in Egypt for the most part has been influenced by the growth in broad money. The major cause of the growth of M2 was growth in credit to the public sector, reflecting budget deficits. However, between 1993–2000 budget deficits declined and consequently credit to the public sector became relatively unimportant; the main reason for the increase in the money supply was the surge in credit to the private sector. The second most important factor was the growth of real output. The significance of changes in real output in offsetting the inflationary impact of monetary growth varied; the growth of real GDP made its greatest contribution in the first two periods noted above. Changes in the velocity of broad money consistently made the smallest contribution to changes in the inflation rate.

Revenue from the inflation tax for the period 1975–91 (when the inflation rate was nearly 18 percent annually) averaged over 4 percent of GDP.

In particular years it was much higher. Dinh and Giugale (1991: 10) found that in 1987 it reached 10.6 percent of GDP; this compared with total conventional tax revenue in the central government's budget of that year of about 17 percent of GDP.¹⁰ As expected, the incidence of this tax fell most heavily on the household sector and the private business sector. Moreover, a comparison with other countries at the same level of development showed that Egypt managed to extract a higher rate of inflation tax, even though the country's (officially measured) rate of inflation was significantly lower. The explanation is that Egypt had the largest base on which the tax was levied – during the entire period 1965–91 the ratio of money to GDP was much higher in Egypt than in comparably developed countries.¹¹

For much of the period 1965–90, Egyptian public finances were a beneficiary of inflation. After 1991, the importance of the inflation tax began to drop as the rate of inflation declined with the implementation of the stabilization program. But it was also becoming more difficult to maintain the base to which this tax applied. The inflation tax can apply only to the domestic money base, and this was steadily eroding with the increasing rate of dollarization. As a result of continuing inflation, real interest rates had turned negative and the expected remuneration on foreign currency deposits far exceeded that on domestic currency. Dailami and Dinh (1991: 13) calculated that during 1980–89 the mean nominal return on time deposits in local currency was 10.6 percent, while the corresponding return on foreign currency (including the realized devaluation of the Egyptian pound against the US dollar) was 25.6 percent. Nevertheless, Egyptian savers had continued (or been compelled) to accept instruments, principally bank deposits, with declining real values. In effect, lenders to banks (i.e. the depositors) were paying for the “privilege” of lending!

The most plausible explanation for this behavior, offered by Dinh and Giugale (1991: 16–17), is that Egyptian savers suffered from a money illusion during the beginning of the 1980s. When this waned, alternative assets were not readily accessible because the most obvious option, namely, holding deposits in foreign exchange accounts, was limited to traceable remittances from bank accounts abroad. Holders of domestic currency could not easily convert it into foreign currency. This could not go on indefinitely. Zaki (2001: 1877) shows that the more seigniorage was exploited, the more it encouraged the substitution of dollars for domestic currency; he describes this process as a sort of “market-enforced monetary reform.” Over time, an increasing proportion of the money supply was “dollarized”; in 1990 almost 50 percent of money and quasi-money was held in foreign currency. These developments diminished the base for the inflation tax.

Dinh and Giugale (1991: 20–2) examined the equity impact of the inflation tax paid by the household sector. They found that the magnitude

of this tax in the 1980s was quite considerable, peaking at 8.3 percent of GDP in 1987; this compared with 0.5 percent of GDP actually paid as the formal income tax in that year. They concluded that the inflation tax was more regressive than other income taxes, because the inflation tax is effectively a flat rate income tax with no deductions and no exemptions. Because it is a flat rate tax, it is more regressive than other forms of income taxes that have progressive rates built in. Moreover, Dinh and Giugale judged that the rich were more able to keep assets in foreign currency, as were workers from abroad. To that extent, it was most likely that the middle- and low-income groups paid a high proportion of the inflation tax.

The mobilization of revenues from taxes labored under a special disability throughout 1965–2000. Agriculture constituted the largest single economic sector for much of the period, but because of the very large number of persons involved with low levels of literacy (and presumably numeracy), the direct taxation of agriculture could not be cost-effective. Thus the main form of “direct” taxation of agricultural income was effected through a proxy, namely, a tax on land holdings. The yield from this tax was extremely limited, amounting to less than 1 percent of agricultural value-added.

Resources from agriculture were therefore extracted through indirect means: the compulsory procurement of crops by the government at controlled prices that were well below international prices, and the determination of the cropping pattern through area restrictions. This meant that only a part of the resultant taxation was available to the Treasury as cash revenue (mainly through profits from raw cotton exports); the major part appeared as subsidies on industrial inputs (as in the sale of raw cotton at less-than-world prices to public sector textile mills) and on final consumption goods.

Expenditure issues

Expenditures remained high throughout 1965–2000, at times approaching 50 percent of GDP. The expenditure side was dominated by current expenditures, which during the period averaged almost 68 percent of the total. Most of these expenditures consisted of payments for salaries and cost of living subsidies (Figure 6.7). The government continued to provide a large measure of employment: in 2000, employment in central and local governments and the public service authorities accounted for nearly one-third of the total labor force. Not surprisingly, expenditure on wages and salaries accounted for 23 percent of total expenditure during 1965–2000.

The weight of the cost of living subsidies decreased over the period as the number of subsidized items was brought down from 18 in 1977 to only four by 2000. In 1965–90, i.e. before the stabilization program, subsidies absorbed 18 percent of total expenditure; in the next decade the average fell to 7 percent. Over the entire 1965–2000 period, expenditure on cost

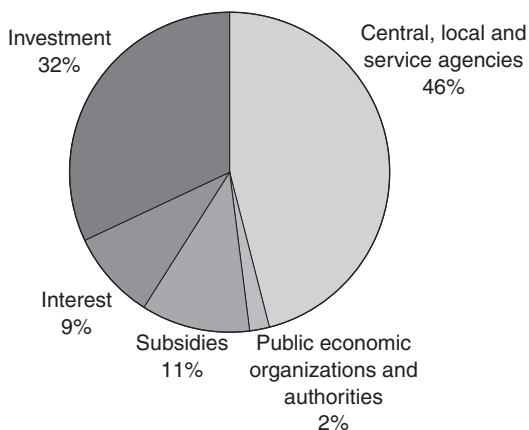


Figure 6.7 Composition of expenditures, 1965–2000 (percent of total expenditure) (source: MOF; World Bank LDB).

of living subsidies constituted just over 11 percent of total expenditures. In certain years it could, of course, be very much higher; for example in 1975–81 subsidies took about 22 percent of budgetary expenditures.

During 1965–2000, budgetary expenditures on investment accounted on average for about 32 percent of total expenditure. With the introduction of the stabilization program from 1991 and the necessity of restoring balance in the fiscal accounts, expenditures were held back well below the growth of GDP. Total budgetary expenditure dropped from 38 percent of GDP in 1990 to 29 percent in 1995. The main impact of expenditure cuts fell on investment: budgetary expenditures on investment dropped from 39 percent of total expenditure in 1990 to 19 percent in 1995. They recovered somewhat thereafter, but even in 2000 (at 26 percent of total expenditure) were a substantially smaller proportion than at the start of the decade.

While Figure 6.7 showed the composition of total expenditure during 1965–2000, a picture of the annual fluctuations can be obtained from Figure 6.8.

In addition to the fall in the share of total expenditure on investment and subsidies, other structural changes occurred on the payments side of the budget between 1965 and 2000. The costs of administration, as shown by the figures for central, local, and service agencies, were brought down from their levels in the 1960s, even though in 2000 they still consumed 50 percent of total expenditure. Another notable change was the sharp rise in interest payments on government debt. In the 1990s, about 70 percent of these payments were on domestic debt, reflecting two factors. One, the stock of domestic debt had increased rapidly in the 1980s and early 1990s in order to finance the budget deficits of those years, while the external debt stock had been written down in the rearrangements of 1991–96. The

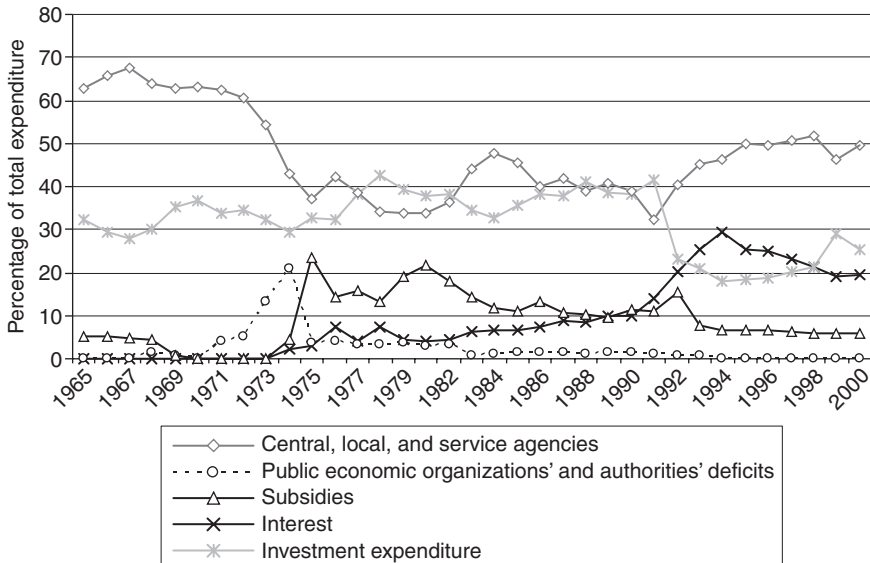


Figure 6.8 Development of government expenditures, 1965–2000 (percent of total expenditure) (source: MOF; World Bank LDB).

share of domestic debt had consequently surged from 39 percent of total government debt in 1990 to 70 percent in 2000. Two, much of the external debt had been contracted on concessional terms while domestic debt had attracted much harder terms.

Public expenditures were buoyant with respect to the underlying variables. An estimate of the buoyancy of the various heads of expenditure is shown in Table 6.4.

Almost all the expenditure items showed greater buoyancy than those on the revenue side. Indeed, the increase in expenditure virtually kept up

Table 6.4 Buoyancy of major expenditures, 1965–2000

Expenditure	Determining variable	Buoyancy
Total expenditure	GDP	0.99
Current expenditure	GDP	0.99
Current expenditure (1982–2000)	Inflation (CPI)	1.02
Central, local, and regional	GDP	0.98
Subsidies	GDP	0.94
Interest	GDP	1.07
Interest (1982–2000)	Inflation (CPI)	1.08
Investment	GDP	0.98

Source: MOF; MOP; IMF, *Government Finance Statistics*.

with the increases in GDP. Special mention must be made of expenditure on interest, which exhibited a buoyancy of greater than unity in relation to GDP. Both current expenditure and interest payments also showed high buoyancy with respect to inflation. The consistently higher buoyancy values for expenditures tends to confirm that Egypt's budgetary problems were largely structural, and arose from the more rapid response of expenditure items than of revenue sources to the growth of the economy.

Fiscal sustainability

So far the analysis has largely focused on the *overall balance*, i.e. the difference between total revenues and expenditures. This balance, if in deficit, measures how much the government must borrow in order to cover its total outlay. However, alternative measures of balance may be more suitable for other aspects of fiscal analysis. Thus the *current balance* – the difference between the budget's current revenues and expenditures – provides an estimate of the government's saving (or dissaving). Another measure is the *primary balance*, which represents the difference between total government revenues and outlays, except interest payments.

The concept of the primary deficit is useful for two reasons. First, interest payments reflect the consequences of past fiscal policies (i.e. they represent the costs of debt accumulated to finance past overall deficits). Hence, excluding them in computing the primary balance enables one to clarify whether the government can afford its *present* programs. If the primary balance is zero, the government is generating just enough revenue to cover the costs of its purchases of goods and services and its transfer payments. If, on the other hand, a primary deficit exists, then present government purchases and social programs cost more than present revenues can cover. Second, the primary balance enables one to address the crucial issue of a sustainable fiscal policy.¹² A primary balance indicates that the government is just covering its non-interest expenditure, and it must borrow in order to service past borrowing.

Domar (1944) showed that in the long run the debt:GNP ratio will be stabilized if the primary surplus (i.e. a negative primary deficit) at least equals the product of the debt:GNP ratio and the difference between the rate of interest and the rate of growth of nominal GNP. Following Leddin and Walsh (1992: 102–4) these conditions can be recast so that the primary deficit required to meet the conditions of stability can be written as:

$$-p = (r - g)d = 0$$

where p = the primary deficit to GDP ratio [i.e. (total borrowing – interest payments)/GDP]; r = the rate of interest; g = growth rate of nominal GDP; and d = the ratio of debt at the beginning of the period to GDP.

For 2000, the debt:GDP ratio was 0.85, the growth rate of nominal GDP about 11 percent, and the average interest rate on the government's debt about 6.9 percent. Inserting these figures into the equation:

$$p = -(6.9 - 11.0)0.85 = 3.48$$

This means that with the foregoing GDP growth rate and interest rate, the Egyptian economy could run a primary deficit of about 3.5 percent of GDP with a stable debt:GDP ratio. A primary deficit greater than this would lead to a rise in the debt:GDP ratio, while a lower deficit would decrease the ratio. The primary balance in 2000 was reported as showing a modest surplus of 1.64 percent of GDP, which would lead to a decrease in the debt:GDP ratio. But a fall in the GDP growth, a rise in the interest rate on government paper, or a shock to the system (such as devaluation) that increased the value of the debt stock in Egyptian currency, could substantially alter the results. Moreover, given the caveats attached to the fiscal accounts, I must reiterate that the purpose of the calculation is only to suggest an approach to thinking about fiscal sustainability.

The crucial numbers are the growth rate of nominal GDP and the interest rate. If the growth rate of nominal GDP had been, say, 5 percent, the outcome would have been: $p = -(6.9 - 5.0)0.85 = -1.62$. The minus sign means that Egypt would have to run a primary *surplus* (since p was defined as a primary deficit) of 1.62 percent of GDP in order to stabilize the debt:GDP ratio. The relatively low actual interest rate reflects the weight in total debt of the country's external debt, which carried highly concessional terms (particularly after the 1991–96 debt rearrangements). The overall interest rate, however, was rising – it was about 5.5 percent in 1991 – reflecting the increasing proportion of domestic debt in total debt (Figure 6.9). This proportion had increased rapidly from about

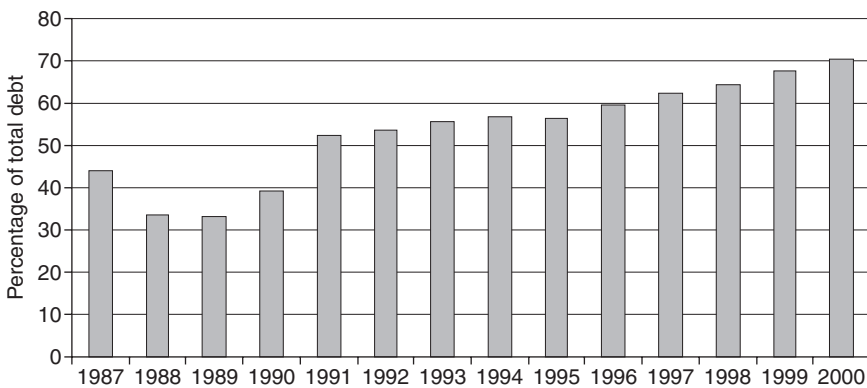


Figure 6.9 Domestic debt as percent of total debt, 1987–2000 (source: MOF; World Bank LDB).

40 percent of the total (carrying an effective interest rate of 8.3 percent) in 1991 to over 70 percent in 2000 with an effective interest rate of 8.9 percent (in real terms the difference was even greater, as inflation in 2000 was substantially lower than in 1991). Between the same years, the effective interest rate on external debt had dropped from 3.7 percent to 2.2 percent.

The foregoing measure of fiscal sustainability, however, shows only a partial picture. A more complete discussion of the issue requires a consideration of the sources of future fiscal risk and their effects on the debt:GDP ratio.

Risks to the sustainability of the fiscal equilibrium can arise from a number of sources. In the case of Egypt, the most likely generators of risks are: a decline in the GDP growth rate; an increase in real domestic interest rates; a depreciation of the currency; a decline in fiscal revenues; and an increase in budgetary spending.

Some international organizations, such as the World Bank, have simulated the long-term effect on the budget of variations in the foregoing risk generators. While the detailed conclusions rely on the validity of the assumptions, some of the more important conclusions can be briefly stated.

The essential variable related to fiscal sustainability and the risk to it is the debt:GDP ratio. An increase in this ratio beyond a certain point is likely to lead to a crisis of confidence – financing would not be available, the deficit would have to be monetized, thus providing an impetus to inflation. The critical point for the debt:GDP ratio differs between studies, but 60 percent is a commonly used figure; it is, for example, the ceiling for government debt in the Euro area set by the Maastricht Treaty. Although the ratio of public debt to GDP in Egypt declined rapidly in the 1990s, in 2000 it was still close to 85 percent. The simulation exercises assumed that this should not worsen – with good reason: the IMF (2003: 54) reported that about 55 percent of debt defaults that occurred in the last 30 years were in countries with debt:GDP ratios below 60 percent and about 35 percent in those with debt:GDP ratios of less than 40 percent.

The simulations estimated that a sustained decline in the 2000 growth rate of GDP by 1 percentage point would increase the debt:GDP ratio by almost 5 points in 2010. On the other hand, an increase of the GDP growth rate to between 6–7 percent during 2000–10 would improve the ratio by nearly 6 percentage points at the end of the decade. Domestic interest rates also had an important impact – an increase of 2 percentage points in domestic interest rates would increase the ratio by about 6 percentage points, and worsen the budget balance:GDP by about 1 percentage point in 2010.

Depreciation of the pound would have an important effect by raising the real external interest rate and hence the cost of servicing external debt. A depreciation of 5 percent a year could, in the simulations of the

model, add more than 10 percentage points to the debt:GDP ratio by 2010. Parenthetically, one might note that between 2000 and 2003, the Egyptian pound depreciated by more than 30 percent.

A major fiscal risk in Egypt is the potential for a decline in budgetary revenues. This chapter has already highlighted the extent to which Egypt's revenues are dependent on external sources and the wide fluctuations to which these revenues are subject. These facts underscore the vulnerability of Egypt's budgetary resources. Moreover, the government might be in the position of losing a significant source of revenue. As Egypt enters a free-trade agreement with the European Union, tariffs on imports from Europe will be reduced and finally eliminated. Devarajan *et al.* (1999) estimated the fiscal impact of trade reform in 60 countries. Their results indicate that the direction and magnitude of the fiscal consequences depend on the elasticities of substitution and transformation between foreign and domestic goods. Their empirical estimates suggest that in most cases these elasticities fall short of the point at which tariff reform could be self-financing. For Egypt, the estimated elasticities were only 0.10 and 0.11, implying that the reduction in tariff rates was likely to lead to a reduction in fiscal revenues. If fiscal equilibrium is to be sustained, Egypt will have to replace the lost tariff revenues from other sources.

The World Bank simulations found that the major risk to fiscal sustainability arose from potential increases in government spending. An increase in the expenditure:GDP ratio of 5 percentage points a year had the potential of adding almost 50 percentage points to the debt:GDP ratio and almost 10 percentage points to the budget balance:GDP ratio in 2010. An annual increase in the primary expenditure:GDP ratio by 1 percentage point would increase debt:GDP and budget balance:GDP ratios by 10 and 2 percentage points respectively in 2010 over the levels projected if the model assumptions obtained.

The foregoing results from the simulations suggest that the fiscal situation, although much improved between 1990 and 2000, was still vulnerable. Two further issues add to the need for watchfulness. First, the simulations showed that while the effects of changes in each of the risk factors singly was likely to be significant, the effects of changes in more than one variable at the same time had disproportionately large effects and could seriously jeopardize fiscal sustainability. And in Egypt's situation a simultaneous change in several variables is not at all unlikely. Second, an important potential threat to fiscal sustainability is posed by contingent liabilities, which under Egyptian fiscal conventions are excluded from the budget and left unfunded. These are latent risks that may or may not occur, but which, if they did occur, would force the government to increase its borrowing and thus its debt burden. Several sources of contingent liabilities could affect the Egyptian budget: making up losses of public enterprises; paying on government guarantees of loans to public enterprises and to local governments; making good losses on

foreign exchange guarantees; paying for bailouts and recapitalizing the banking system; and increased payouts to the social insurance system as the demographic structure changes, and as privatization and its associated retrenchment impacts on the assets of the pension funds. Each of these areas carries substantial potential risks that might be realized.

Extending the analysis to beyond 2000 confirms the dangers of some of these risks. A study by Alba *et al.* (2004) decomposed the growth of the public debt into structural and cyclical components. The study found that Egypt's deficits and debt were being pushed up more by structural than by cyclical factors. It found that a cyclically-adjusted (or neutral) fiscal deficit would have fluctuated between 2.8 percent and 3.2 percent of GDP during 1999–2003. However, the actual fiscal deficit during this period varied between 2.8 percent and 6.5 percent. This suggested to the authors that policymakers should not expect to “outgrow” the debt problem during the next upswing of the business cycle, but that specific actions would be needed to reduce the structural fiscal deficit. The structural weaknesses in the fiscal accounts included a declining revenue ratio, a declining capital expenditure ratio, and a rising current expenditure ratio dominated by wages and interest payments.

The most important effect of deficits in the longer run arises from the reduction in public savings. The conventional view is that private saving rises by less than the fall in public savings, so that aggregate saving declines.¹³ Thus total investment declines as well. The reduced domestic investment will result in a smaller domestic capital stock, which in turn implies lower output and income. Thus the principal long-run effect of continued budget deficits is a reduction in national wealth.

However, another view of the effects of government debt is the so-called “Ricardian equivalence,” which maintains that consumption is independent of the timing of taxation. According to this view, families are fully aware that government debt that has been issued to finance expenditure has to be repaid, and thus represents only a postponement of the tax burden. Families do not increase their consumption in response to a budget deficit, because they recognize that they will be required to pay higher taxes in the future. Therefore, debt finance and tax finance are equivalent, and it is irrelevant whether the government finances its expenditure through taxes or borrowing.¹⁴

Empirical investigations to support or refute this proposition have been inconclusive. As Elmendorf and Mankiw (1999: 1640–59) point out, this is largely because the Ricardian view makes some fiscal policies irrelevant but allows other fiscal policies to matter.¹⁵ Thus, whether one accepts or rejects the Ricardian hypothesis largely depends on how plausible one believes the assumptions underlying the theory to be. And in Elmendorf and Mankiw's (1999: 1659) summing up of the current state of the debate, “Most economists are incredulous about the assumptions that are needed to support the Ricardian view of government debt.” Indeed, examinations

by the World Bank (1993a) and by Haque and Montiel (1987) rejected the validity of Ricardian equivalence in the context of Egypt.

To briefly sum up the main points in the fiscal area. Progress was made on structural reform, especially on the revenue side; for example, the General Sales Tax was introduced in 1991 and the Global Income Tax in 1993. The expenditure side was also reformed: the food subsidy system was restructured, with both the number of items and the cost being reduced. However, the reliance on rent revenues (from oil and the Suez Canal), the continuing growth of government employment, the rising domestic debt and the high and rising level of interest payments on it, and the potential for the realization of contingent liabilities, remained areas of vulnerability. There are indications that fiscal reforms have not gone far enough. The vulnerability of the budget owes more to structural than to cyclical factors, and the authorities will have to deal with the problem of steadily rising public debt.

7 The financial sector and monetary policy

The financial sector plays a key role in development by mobilizing savings, by allocating investable resources, and by providing a mechanism for making payments. Inefficient financial markets are likely to damage the economic prospects of a country by increasing the cost of mobilizing savings, and thus diverting real resources away from investment and growth.

The Egyptian financial sector consists of the banking system and the nonbank financial intermediaries. The Central Bank of Egypt (CBE), the commercial banks, and a number of specialized banks constitute the main monetary institutions. The Central Bank of Egypt is the overseer of the banking sector. Nonbank financial intermediaries chiefly comprise savings institutions and insurance companies. The capital market is dominated by the Cairo and Alexandria stock exchanges, which are electronically linked and operate as a single exchange. Other participants are brokers and fund managers. The Capital Markets Authority (CMA) is the main supervisor of the financial services sector.

The banking sector

Throughout 1960–2000, the financial system was dominated by the banking sector. At end-2000, total domestic credit was roughly equal to one year's GDP. By way of comparison, the free-float of equities available for trading on the stock exchange at current market prices, and the total value of listed bonds (mainly government bonds) was each less than 3 percent of GDP. Similarly, investments by the insurance and private fund sector, the bulk of which was in turn held in the form of bank deposits or listed shares, amounted to less than 5 percent of GDP.

The main source of funds for the banks during the period was deposits from the household sector. In 2000, such deposits accounted for more than 60 percent of total deposits. Domestic residents continued to hold much of their savings in the form of bank deposits, even though real interest rates on deposits were consistently negative from 1970 until 1991. The negative rates could reach punitive depths; for example, in 1979 and

again in 1985, real deposit interest rates dropped to almost –10 percent. After 1991 they increased, but turned continuously positive only from 1995. Foreign exchange-denominated deposits in the banking system fluctuated a good deal from the time that the public was permitted to hold such deposits. Foreign exchange-denominated deposits (i.e. “dollarization”) in 1991 reached 50 percent of total deposits. They dropped sharply after the economic reforms of 1991, falling to 28 percent by 1994 and to about 20 percent by 2000.

Between 1960 and 2000, the destination of lending changed significantly. In 1960, nearly 60 percent of domestic credit constituted net lending to the government; by 2000 the figure had dropped to about 25 percent. The remainder went chiefly to the domestic business sector, with significant proportions flowing to the household sector and the public enterprise sector; the former component was growing, the latter declining.

The structure and operating environment of the banking system also changed. Following the nationalization of the major economic units in the 1960s, the Egyptian banking system remained small and under the control of the public sector. In the 1970s the banking system was centralized in eight banks, of which four were commercial banks and the remaining four specialized banks. As part of the *infitalh* policy, a banking law was enacted in 1975 (Law 120/1975) that identified three types of banks:

- 1 Commercial banks, which could accept deposits and provide finance for a wide variety of transactions.
- 2 Business and investment banks, which carried out medium- and long-term operations, such as the promotion of new businesses and the financing of fixed investments. They would also be allowed to accept deposits and to finance foreign trade operations.
- 3 Specialized banks, which would support specific types of economic activity; for example, the Principal Bank for the Development of Agriculture and Credit (PBDAC), which was designed to channel credit to the agricultural sector.

The banking system expanded rapidly and in 1985 consisted of 83 banks, of which 74 were private. The latter included 23 branches of foreign banks and 24 local banks. However, despite this plethora of banks, the system continued to be dominated by the four public sector commercial banks which accounted for nearly 75 percent of deposits and about two-thirds of loans. Starting in 1990, several reforms were introduced that liberalized many aspects of the banking sector. During the 1990s, some consolidation of the banking system took place and a number of joint-venture banks were privatized. As a result, at end-2000 there were 63 banks registered with the Central Bank of Egypt. These included 28 commercial banks, 31 business and investment banks, and four specialized banks. The four

public sector commercial banks continued to dominate the banking scene, with about 70 percent of deposits and almost 50 percent of loans.

As part of the ERSAP adopted in 1991, Egypt introduced a number of reforms in the banking sector: The principal measures were the following.

Interest rates on the Egyptian pound were liberalized. Foreign exchange controls were significantly reduced and the different exchange rates were unified at the level of the most devalued rate. Credit ceilings were abolished in October 1992 for the private sector and in July 1993 for the public sector. The unremunerated reserve balances held at the CBE were brought down to 15 percent of a bank's total Egyptian pound deposits.¹ The required reserve ratio on foreign exchange deposits was brought down to 10 percent; moreover, these reserves were remunerated. The liquidity ratio was reduced to 20 percent for local-currency and 25 percent for foreign-currency balances. Capital adequacy ratios for banks were brought into line with the Basel Accord.

Further reforms continued in subsequent years – in 1997 the Central Bank required all banks to publish financial reports on the basis of International Accounting Standards (IAS), and in 1998 legislation was enacted permitting the privatization of the public sector banks. The joint-venture banks started to be privatized. The public sector banks were required to reduce their ownership in joint-venture banks to a maximum of 20 percent; by June 2000, state ownership in 15 (out of 23) of such banks had dropped below 20 percent of capital.

Credit facilities granted by commercial banks to public sector companies and to the private sector were limited to 65 percent of the total of deposit balances and equity (paid-up capital and reserves). Claims of commercial banks on the household and trade sectors put together were not permitted to increase by more than 12 percent a year. Commercial banks were not allowed to finance the import of consumer durables. However, for several years the effectiveness of these ratios and credit ceilings was limited because the penalties for their violation were relatively minor.

How did the various groups of banks perform after liberalization? Table 7.1 shows some key measures of performance for three groups of banks: the public sector commercial banks, private banks, and specialized banks. The greater each ratio in the table, the more profitable is the bank, other factors being equal. In general, private banks performed better than the other bank groups, with the profit margin and the return on equity being particularly high. The high profit margin, defined as the ratio of net income to total operating income, indicated that private banks were more efficient at controlling expenses. This contributed to the higher return on equity, measured as the ratio of net income to equity. The private banks also showed a higher return on assets (measured as net income per unit of assets).

The interest margin (the ratio of net interest income to earning assets), is a summary measure of net interest returns on income-producing assets.

Table 7.1 Measures of bank performance, 1991–2000 (period average, in percent)

	<i>Public sector commercial banks</i>	<i>Specialized banks</i>	<i>Private banks</i>
Return on equity	5.6	2.8	18.5
Return on assets	0.2	0.2	1.3
Profit margin	2.4	2.4	14.4
Interest margin	0.7	3.7	1.1
(Provisions + equity)/assets	11.1	13.7	17.4
Deposit growth	11.9	11.1	12.8

Source: El-Shazly (2001) [updated].

El-Shazly (1999, 2001) explained the relatively lower interest margin in private banks as being at least partly due to a smaller loan portfolio relative to the deposit base. The low interest margin of the public sector banks reflected nonaccrual of interest on a large volume of non-performing loans to state-owned enterprises. The specialized banks were able to post higher interest margins because they were able to borrow lower-cost funds from state-owned financial enterprises (i.e. their interest expenses were artificially lowered).

Major issues

The role and working of the Egyptian financial sector during 1960–2000 raises a number of important issues.

How effectively did financial sector policy contribute to the development of the economy?

The answer must be: “Only moderately well.” This resulted from four factors. First, the relative size of the sector remained limited. Between 1960 and 2000, the financial sector developed in complexity and in the absolute values of its various components. However, by some important measures the growth of the sector fell short of the requirements of the economy. For most of the 1990s, money supply broadly defined (i.e. M2) grew more slowly than GDP, so that M2:GDP was falling and the ratio at end-2000 was lower than a decade earlier.

Second, for most of the three decades 1960–90, the Egyptian financial system was subject to repressive policies. Financial suppression, sometimes termed “illiberal finance,” is characterized by administrative control on most interest rates and over the allocation of credit to particular sectors, the taxation of the banking sector through unremunerated reserve requirements that are well in excess of that required on prudential grounds, repressive controls on new entry into banking, direct ownership of banks by the state, and tight controls on external capital movements.

The consequences of such repression have been well documented for Egypt – for example, World Bank (1993a), Mohieldin (1995, 1998), Roe (1998) – and for several other countries, for instance by Fry (1995). The main results of financial repression in Egypt were that nominal interest rates, both on deposits and lending, remained low (5 percent or below for most of 1960–90) even in the face of high inflation; indeed, from the mid-1970s to 1991 real interest rates were negative. This contributed to distortions in resource allocation and on incentives for saving. Moreover, because at the artificially low interest rates set by official intervention, the demand for funds exceeded the supply, and credit was rationed by administrative mechanisms, such as bank-specific credit ceilings and directions to banks as to where the credit should go. Under such a centrally directed financial regime, the public sector received on average more than 70 percent of total credit during 1960–90. With the adoption of the Economic Reform and Structural Adjustment Program (ERSAP) in 1991 and the privatization of public enterprises during the 1990s, there was a shift towards private sector lending by the banks. However, even by end-2000, nearly 20 percent of the aggregate loan portfolio of commercial banks was still advanced to state-owned companies.

Interest rates paid to depositors were kept low in order to keep down the cost of financing the government's budget deficit. Since for much of 1960–2000 inflation remained high, this meant that for extended periods real interest rates on deposits were significantly negative. The real returns on Egyptian pound deposits were even lower when the expected rate of depreciation of the Egyptian pound against foreign currencies in the free market was taken into account. These interest-rate differentials, adjusted for the expected rate of depreciation of the domestic currency, encouraged residents to hold foreign exchange receipts as foreign currency deposits, rather than converting them to Egyptian pounds. Both El-Erian (1988) and Haque (1990), using quarterly data for 1980–86 and 1984–89, respectively, found evidence of significant switching from domestic to foreign money. Both studies related changes in the currency composition of money to a difference in expected returns on domestic and foreign components, and found evidence that this was an influential factor. Some later work by the IMF in estimating money demand functions for the decade of the 1980s also indicated that foreign currency deposits performed as close substitutes for domestic money.

The diverging trends in returns on domestic and foreign currencies sharply increased the rate of “dollarization” in the economy; private sector holdings of foreign currency deposits rose rapidly from about 25 percent of total liquidity in 1981 to 50 percent at the end of the decade. The latter level must surely have diluted the effectiveness of domestic monetary policy. The negative rates also led to capital flight and to the accumulation of large balances abroad. The precise numbers are, of course, not available, but all the estimates put the figures in the tens of billions of

dollars by the mid- to the late 1980s; for example, Abu Ali (1987) estimated these funds in the 1980s at \$60 billion, while the upper end of some World Bank calculations was as high as \$80 billion.

Third, for long periods the segmented structure of the banking system led to an incongruence between the direction of economic development and the flow of resources. The market remained dominated by the large public sector banks and their network of branches. The segmentation carried over into lending. Most bank lending was directed at large enterprises in both the public and private sectors (in the latter, the smaller the firm, the less of its financing comes from banks). The public sector banks chiefly provided for the financial needs of public sector companies, although after the reforms of 1991 their role in serving the private sector increased. The joint-venture banks specialized in providing finance for large and middle-sized companies in the private sector, although they also dealt with the public sector. This segmentation of the banking market and the dominance of the public sector banks played a crucial role in the allocation of credit; the World Bank (1993a, vol. 2: 28) concluded that it crowded out the private sector in the credit market. It was estimated that during the 1990s, the private sector received less than 40 percent of the resources allocated by the banking system (including the National Investment Bank) even though it produced about 70 percent of the GDP.

For some key sectors, particularly agriculture, the allocation of credit was inadequate and the cost high. Commercial banks remained concentrated in urban areas and lending to the agricultural sector in the 1990s averaged only 3–4 percent of their total credit. Moreover, the cost of such credit was high, effectively imposing a tax on financing. Based on CBE data, the World Bank reported that the intermediation costs of the four state commercial banks averaged 3.5 percentage points, considerably above the norm for an efficient bank. The intermediation costs of the Principal Bank for Development and Agricultural Credit (the major specialized bank for the sector) were even higher, averaging about 5.5 percentage points.

Fourth, an important manner in which a financial sector supports investment is through maturity transformation, i.e. it accepts deposits from households and other sources, possibly for short terms, and lends them to businesses for the longer periods required for capital formation. But the Egyptian financial sector's role in this area was at times quite equivocal; to an extent, it engaged in reverse transformation. In 2000, more than three-quarters of the commercial banking system's liabilities had a maturity in excess of one year, but more than 70 percent of its assets were shorter term, with maturities of less than one year. Moreover, since over one-third of the insurance and private funds' investments were in bank deposits, in effect much of what should have been (as in other countries) an important supply of long-term funds for the private sector was not being passed through as such. In part this arose from reluctance by

banks to engage in other than short-term, self-liquidating loans (such as those to finance trade or working capital) because of difficulties with the judicial system in enforcing contracts and realizing the collateral on defaulted loans; in part it reflected the failure of the financial system to develop suitable instruments.

The relative inefficiency of the public sector banks

Table 7.1 showed that by virtually all measures, public sector banks, which dominated the banking system, showed a lack-luster performance. Why was this so? The most important reason was the protection afforded by the government, which shielded the public banks from competition and thus removed pressures to reduce costs and improve efficiency. This protection took the form of barriers to the entry of private banks, restrictions on the licensing of branches for non-government banks, and at least an implicit understanding that the government would protect deposits in these banks in the event of a crisis. The main barriers to the entry of new banks were the high level of minimum authorized capital and the reluctance of the CBE to license new domestic banks. The World Bank (1993a, vol. 2: 5) found that the amounts required for establishing a new bank in Egypt were well above those adopted by most developed countries, and would serve to dissuade many credible potential applicants. Although after the mid-1970s a large number of joint-venture commercial banks and business and investment banks were licensed, most of them were joint ventures between public sector banks and large international or Arab banks. In reality, therefore, the banking system remained dominated by a small number of banking groups that were linked to the public sector banks and accounted for nearly 90 percent of the total assets of commercial banks.

The absence of competition permitted the public sector banks to live with higher costs. The World Bank (1993a, vol. 2: 33) found that in the 1990s the public sector banks had about 40 staff per branch. Commercial banks in Britain, Germany, France, and other OECD countries had about 25 staff per branch. However, banks specializing in retail banking in the European countries reported levels of staff of around 10 per branch. Thus the numbers of staff per branch in Egypt were substantially higher compared with the staffing levels of most international banks that had extensive retail operations. The study judged that Egyptian banks could substantially extend their branch networks without requiring a proportionate expansion of staff.

Second, financial sector policies, knowingly or inadvertently, imposed additional taxation on the banking system. Commercial banks and business and investment banks were required to hold 25 percent of their total deposit balances in local currency at the CBE as a non-interest-bearing reserve ratio. This effectively acted as a tax and reduced the profitability of the banks. The World Bank (1993a, vol. 1: 21–2) estimated that the

implicit tax imposed on the banking industry was equivalent to about 0.2 percent of GDP in December 1990 (i.e. just before the financial liberalization), or 1.5 percent of the banks' capital. With interest rate liberalization, the implicit tax increased. The same World Bank study estimated that the tax rose to 0.35 percent of GDP, or 1.9 percent of the banks' capital in December 1991, even though the capital had almost doubled between the two dates. The absence of reserve remuneration also impaired the effectiveness of reserve requirements as a tool for liquidity management – the CBE was in effect mopping up liquidity by taxing intermediation through the banking system. This made the use of reserve requirements a distortionary instrument.

Moreover, the banks sought to make up for this loss of revenue by increasing the spread between lending and deposit rates – Roe (1998: 89) reported that the interest rate spreads averaged 4.4 percentage points after 1976, rising to 6 percentage points at times. The banks were able to do this because of the oligopolistic nature of the market. The American Chamber of Commerce in Egypt (1996: 109) estimated that even by the early 1990s, the four public sector banks directly and indirectly through their stakes in joint-venture banks accounted for over 90 percent of total commercial bank assets.

Interest rates on bank loans and on deposits in local currency were set by the CBE. These rates were generally low and, at times, negative in real terms. Nominal rates were kept low in order to minimize the government's interest payments on the amounts it borrowed from the banking system to finance the budget deficit. The implicit "financial repression tax," calculated as the difference between the shadow real interest rate and the actual *ex post* real interest rate paid, could be very substantial. In a cross-country examination, the World Bank (1993a, vol. 1: 51–2) estimated that the revenue from this tax in Egypt averaged 5.7 percent of GDP during 1989–92, and significantly exceeded the revenue obtained from interest distortions in all the countries in the sample.

Third, El-Shazly (2001) found that the weaker performance of public commercial and specialized banks (the latter were all state owned) – as measured by the indicators of asset risk, financial solvency, profitability, and so on – was not penalized by depositors in the form of a lower growth of deposits. El-Shazly concluded that this lack of market discipline in the banking system was largely explained by the government's implicit deposit insurance scheme which protected state banks from the risk of insolvency; consequently, depositors had no strong incentive to penalize asset risk in these banks. The implicit protection held out by the government to the public sector banks had the potential of creating a moral hazard, by supporting possibly imprudent behavior by these banks.

A further issue was (and is) the relative lack of transparency regarding the banks' financial position, and the uncertainty of assessing the range in which the future performance of the loan portfolio would probably lie.

Information on the quality of the loan portfolio has always been difficult to obtain; the World Bank (1993a, vol. 2: 30) complained that “their [the banking data’s] most important weakness is the lack of information on the extent of non-performing assets.” The available data show that the ratio of non-performing to total loans at end-2001 was 16.0 percent, up from 14.6 percent a year earlier. However, it was commonly suggested that bad loans at public sector banks were significantly higher than reported, that too much of their loan portfolio was concentrated on a small number of borrowers of doubtful creditworthiness, and that loan-loss provisioning might not be adequate. The aggregate amount of loan-loss provisions established in the banks’ accounts at end-2001 amounted to 69 percent of nonperforming loans. Another measure of the impact of credit quality on the banking industry’s capital is the ratio of nonperforming loans net of provisions to capital. At year-end 2001, this ratio had increased to over 53 percent from 16 percent in 1998.

The foregoing discussion of profitability, efficiency, and loan quality emphasizes that the public sector banks were not operated on a purely commercial basis. The question whether, and to what extent, public sector banks should engage in activities that are not decided on the basis of profit maximization is ultimately an issue of governance in its widest sense. This question was answered in the early 1960s by asserting that the role of the banking system was to support the economic program charted by the development plans. It was therefore natural that the banks should channel credit towards the sectors, projects, and activities that had been assigned high priority by the plan. With the new direction for the economy signaled in 1974 by the *infitah* and reiterated by the adoption of the ERSAP in 1991, that the private sector would be the prime engine of growth, the issue must be revisited.

The issue cannot be decided without making available for public discussion all relevant information. It has been suggested that one important piece of information that commercial bank auditors should make available is the likely risk to the government’s budget created by the banks’ engaging in noncommercial activities (thereby possibly requiring a bailout using public funds). It is not sufficient merely to examine the risks of these activities to the public sector commercial banks themselves; the financial risk that their noncommercial behavior creates for Egyptian society at large must explicitly be taken into account.

Safety and prudential regulation

A banking system should not only be efficient, it must also be safe. Prudential controls aim at reducing the risk of bank failure. A crisis in the banking sector could impose costs on the economy as a whole as well as on many of its components, such as shareholders in the banks, depositors, other creditors of the banks, borrowers who may not be able to obtain funds from

other sources, and taxpayers who may have to bail out banks. The costs could be very large. Hoggarth *et al.* (2002) reviewed empirical estimates of fiscal costs incurred in resolving banking crises, and estimated output losses during 47 crises in 37 countries. They found that the cumulative resolution costs of banking crises were larger in emerging market economies (on average 17.5 percent of annual GDP) than in developed ones (12 percent). However, resolution costs did not always provide a good measure of the costs of crises to the economy, because some part of the resolution costs might represent a transfer. A better measure of the real cost to the economy would be the loss of output attributable to the crisis. Using different methods of estimating the output loss (the difference between actual output and output assuming an absence of crisis) during the crisis period, they found that the cumulative decline in output during banking crises amounted on average to 15–20 percent of annual GDP.

Bank regulation and prudential measures in Egypt developed considerably from 1960 to 2000. In the earlier years, when the banking system consisted exclusively of public sector banks, the authorities did not feel the need for sophisticated supervision of the system; as Roe (1998: 99) put it, “Good bookkeeping skills were all that was required to ensure that banks did what was asked of them.” There was little need to examine the banks’ ability to assess the business risks faced by their clients. These clients were mainly public sector enterprises and it was an article of faith for the banks that such enterprises would be rescued by the government should they run into difficulties. With increasing lending to the private sector and with greater liberalization of Egypt’s capital accounts, the risks faced by commercial banks rose significantly.² These factors require much greater sophistication on the part of commercial banks to monitor risks and much greater knowledge of their clients’ abilities to deal with these risks. This means that the Central Bank must have the competence to judge the degree to which the commercial banks are able to perform this task, and the ability to enforce measures that would raise performance to the required level.

From 1991, banks were required to comply with asset classification and provisioning in accordance with the Basel Committee’s recommendations. The banks’ minimum capital requirements were raised to 8 percent of their risk-weighted assets. The reserve ratios at end-2000 were 15 percent of Egyptian pound deposits and 15 percent of total foreign currency deposits (the latter earning interest equivalent to LIBOR, the London Inter-Bank Offered Rate). These ratios were higher than those applied in developed countries and also than in many developing countries. The loan classification and provisioning criteria covered delays in interest or principal repayments from three months to over one year, and required a corresponding progression in the amount of provisioning that a bank had to make (for example, a 100 percent provision was required if the delay in servicing bank debt exceeded one year).

Limits on credit concentration, intended to constrain the banks' exposure, were strengthened. Shares or credit to a single customer were not to exceed 30 percent of a commercial bank's equity. Credit by a bank to a single customer could not exceed 25 percent of a bank's paid-up capital and reserves. A bank's holding of shares in a single company was limited to 40 percent of the company's capital, subject to the condition that the bank's total holding in companies did not exceed the bank's own paid-up capital and reserves.

Various systems are used internationally to monitor the financial condition of banks. Perhaps the most widely used system is summarized by the acronym "CAMEL," which refers to the five components of a bank's condition that are assessed: *Capital adequacy*, *Asset quality*, *Management*, *Earnings*, and *Liquidity*. Ratings on a scale of 1 to 5 are assigned for each component in addition to the overall rating of a bank's financial condition. The highest rating is 1, which shows that the bank presents few, if any, supervisory concerns; banks with ratings of 3–5 indicate moderate to extreme degrees of supervisory concern. The overall conclusion drawn from academic studies is that supervisory information, as summarized by CAMEL ratings, is clearly useful in the monitoring of bank conditions.³ In the late 1990s the CBE began to apply the CAMEL rating system, but the process has been slow and restricted by a shortage of trained personnel.

Reviews of the banking system by the World Bank in 1993 and jointly by the IMF and the World Bank in 2002 pointed to an improvement in the range and quality of the announced regulatory measures. However, there appeared to be some concern about the effectiveness with which the regulations were applied. In particular, these agencies expressed doubts on two important matters. First, they quoted, with seeming approval, the opinion of market analysts that bad loans at public sector banks were much higher than reported. Moreover, they reckoned that the public sector banks followed a policy of only minimally provisioning against delinquent loans, which would increase the vulnerability of these banks in the event of a deterioration in economic performance or a sudden change in some economic fundamentals, such as the exchange rate. Second, they questioned the sufficiency of regulations dealing with "connected exposures." The banking system had still to adopt a clearer definition of "connected parties" and of credit exposure to such parties, a limit on connected exposures, and a system to enable the CBE to monitor compliance with the regulations on such exposures. Without these steps, the effect of the regulations on concentration of credit exposure would remain weak.

The conduct of monetary policy

For much of the period 1950–90, the Central Bank of Egypt effectively had no active, independent monetary policy. Zaki (1995) examined the

impact of the three main factors – changes in net foreign assets, credit extended to the government, and credit to the private sector – that impinged on the monetary base. He found that from 1952–90 the main contractionary factor on high-powered money was the decline in net foreign assets, while the main expansionary factor was the credit extended to the central government (including the General Authority Supply Company). Both these factors were essentially outside the control of the Central Bank – the first resulted from variations in the external position of the economy, the second from the need to finance the government's cash deficit. A second expansionary factor was the credit to the private sector; this was the source of the monetary base over which the Central Bank had the most control. However, the absolute changes in the first two sources were so large that attempts to offset them by changing the amounts of credit extended to the private sector would have resulted in unacceptably large fluctuations in credit availability to the private sector and hence in that sector's output. In reality, therefore, the Central Bank had very limited control over the monetary base and the money supply.

Until the 1990s, many of the weaknesses in monetary policy arose because of the very limited range of monetary instruments available to the CBE. Banking system liquidity was not regulated by purchases and sales of government securities or by changes in reserve requirements. New issues of government securities usually carried low interest rates and banks, when they purchased them, usually discounted them with the Central Bank almost immediately. Thus, no secondary market or open market operations developed. The commercial banks' reserve requirements remained for long periods unchanged at 25 percent for Egyptian pound deposits and at 15 percent for foreign currency deposits.

During the 1980s, the traditional monetary policy instruments were a loan-to-deposit ratio and partial credit ceilings for commercial banks. Such techniques had the disadvantage of ignoring market signals. Moreover, a shortcoming of the ratio was that it did not cover credit to the government and public authorities. Equally important, however, was the nature of a loan-to-deposit ratio. Such a ratio was similar to a cash reserve requirement, because whatever assets a banks could not hold as loans had to be held as reserves with the Central Bank (or as foreign assets).⁴ An administered change in the ratio could have had a powerful impact through the multiplier effect between the banks' reserves and their deposits; however, an unchanged loan-to-deposit ratio, as was the case in Egypt, is compatible with a wide range of monetary growth rates. In such a case, monetary growth depends largely on the growth of bank reserves.

The loan-to-deposit ratio was not a very precise instrument for either controlling the growth of credit or for setting a predictable maximum to such growth. For much of the 1980s the commercial banks did not expand credit to the level established by the loan-to-deposit ratio, but held excess reserves. Several reasons accounted for this. First, the compression

of the spread between interest rates on loans and rates on deposits discouraged lending. Second, the difficulties experienced by private business in the 1980s in servicing bank loans created a degree of caution, particularly among the public sector commercial banks, in lending to the private sector. Third, shortages of foreign exchange during this decade led to delays or cancellations of projects, thereby reducing demand for credit in Egyptian pounds to finance the domestic component of these projects. On occasion, however, the actual credit extended grew faster than the ceiling. This occurred because if in certain periods the actual credit extended grew more slowly than the growth of the ceiling, it created a cushion that enabled a higher expansion of credit in subsequent periods; for example, the actual credit outstanding that was subject to the ceiling grew by 24 percent in 1985 while the ceiling itself grew by only 17 percent. This illustrates the weaknesses of the loan-to-deposit ratio as an instrument of monetary policy.

After 1990 monetary policy began to lose much of its passivity, with the Central Bank taking a more active role and adding to its arsenal of monetary weapons. Weekly Treasury bill auctions were instituted in January 1991, and the Treasury bill rate was regarded as the critical element in the new interest rate structure and the conduct of monetary policy. Direct credit ceilings on the private sector and private sector companies were eliminated, and the CBE began relying mainly on an indirect monetary policy instrument (the redemption and sales of Treasury bills) by which to regulate banks' reserves, and thereby credit expansion. Changes were introduced in the reserve requirements policy, in liquidity asset ratios, in exposure regulations, and in capital adequacy. The most favored instrument of monetary policy, by far, was repurchase operations using Treasury bills.⁵

Repurchase operations (repos) were introduced in 1993 and involved the sale of Treasury bills to the Central Bank with an agreement to repurchase. The purchase of the bills enabled the Central Bank to inject liquidity into the system; however, its capacity to absorb liquidity was more limited. In practice, the CBE relied on the short maturity of the repos to reduce liquidity by simply letting the outstanding repos mature. By the end of 2000, the Central Bank had still not introduced reverse repurchase operations (short-term borrowing from banks, collateralized with Treasury bills), which would provide an instrument for absorbing liquidity more directly.⁶

The quantitative effects of monetary policy in Egypt have been little studied. Monetary policy has multiplier effects, but the main problem is to estimate the direct response of investment and consumption expenditure to changes in interest rates. This is not a straightforward multiplier problem, and the effects are therefore generally estimated from businesses' responses to questionnaires and by econometric methods. A study by the World Bank in 1996 obtained responses from businessmen regarding the effects on their investment plans of a 1 percent cut in the interest

rate. Inserting the results from these responses into an econometric model suggested that a 1 percent reduction in interest rates was likely to lead to an increase in the GDP of about 0.35 percent over two years. This is not a very strong effect. However, the study in question was on a rather small scale, and more work is required before one can be comfortable with estimates of the relationship between interest rates and investment and the impact of monetary policy on the growth of Egypt's GDP.

The role of the Central Bank

In all free-market banking systems a crucial role is played by the moral authority of the central bank. In order to exercise this authority the central bank must demonstrate its independence and its competence. The CBE was granted an increasing degree of autonomy from the early 1990s. The process reached its apogee in 2003 when a new Central Bank law was drafted under which the Central Bank Governor would report to the country's President, and no longer be regarded as simply a satrapy of the Ministry of Finance. The changes in the CBE's relationship with the MOF have two broad implications. First, central bank independence does not mean that the institution no longer needs to coordinate its operations with the fiscal authority. In fact, as numerous studies, for instance Laurens and de la Piedra (1998), have documented, the experience of most countries is that a successful monetary policy based on central bank independence depends critically on the effective coordination of policies between the central bank and the Ministry of Finance.

Coordination is important because fiscal and monetary policies interact in several critical ways. They interact to determine output and interest rate in the short term. Fiscal policy acts directly on aggregate demand, while monetary policy affects aggregate demand through the short-term real interest rate. A second aspect relates to the financing of government expenditure over time. The Egyptian government has financed its budget deficit by printing money (seigniorage) and borrowing (issuing T-bills or bonds). The choices have implications for inflation, interest rates, and government finance over time. Fiscal policy determines the size of the public debt, but the composition and the cost of debt is decided by monetary policy; for example, the financial cost to government of creating the debt depends to a considerable extent on whether monetary policy is expansionary or restrictive (e.g. whether interest rates are low or high).

The second major issue in the relationship between the CBE and the MOF concerns the possibility of a conflict between the role of the CBE as the monetary authority and that as the manager of the government's debt. Throughout 1960–2000, the Central Bank's role as the monetary authority was subservient to its role as an accessory to the Ministry of Finance. Even after the adoption of the ERSAP in the 1990s, the CBE used its authority to serve fiscal objectives by requiring commercial banks (which in Egypt

chiefly meant government-owned banks) to accept government securities at less-than-market rates. Handy (2001) furnished an instance from as late as 2000. Tight money conditions from January 2000 caused interest rates in the interbank market to escalate to 17 percent; surprisingly, yields on Treasury paper showed no change despite the tight liquidity. The public sector banks, under the influence of the CBE, showed all the characteristics of a captive market and continued to purchase the bulk of the T-bills. Such intervention insulates the Ministry of Finance from the realities of financial stringency, and gives confusing signals as to what monetary policy is actually trying to achieve.

This example underlines the point that conflating the debt management and monetary policy functions of the central bank risks weakening the effectiveness of both. The two functions must be kept separate, and the CBE must not keep interest rates artificially low merely in order to enable the government to finance its budget deficit at the lowest cost.

In addition to requiring coordination with the MOF, the effectiveness of an independent central bank depends on clarity on what constitutes its main policy responsibility and how it will implement this policy. Between 1990 and 2000, the Central Bank's monetary policy was to pursue price stability by targeting M2 growth. The CBE usually aimed for M2 to grow in line with nominal GDP, based on expected developments in the GDP and the desired level of inflation. Although the operational target was M2, the intermediate target from 1991–2000 (and beyond) was to keep the excess reserves of the banking system as a whole at a fixed percent of domestic deposits. Initially, the CBE aimed for an excess reserves target of 1 percent of the domestic currency deposit base; in 2000, the target was reduced to 0.5 percent.

Since the banking system as a whole can only increase the volume of loans by the amount of excess reserves multiplied by the money multiplier, the targeting of excess reserves was designed to provide the CBE with an instrument with which to control the expansion of lending. During the 1980s and 1990s, the money multiplier (the ratio of the Egyptian pound component of private sector liquidity to reserve money) varied between 1.17 and 1.89. Although the trend was upward, these values were significantly lower than those in Europe, Japan, and the USA. The reason was the higher share of currency in the Egyptian money base, which reduced the reserves available to the banking system. Consequently, the main influence behind the upward trend in the money multiplier was a decline in the currency-to-deposit ratio, while variations about the trend were largely determined by the ratio of bank reserves to deposits.

A different view of the theory behind the Central Bank's procedure of targeting excess reserves is also possible. According to this view, if the Bank exactly satisfied the market's demand for excess reserves, it would not disturb money market interest rates. Moreover, these rates could be adjusted by providing more or less than the demand for excess reserves.

In reality, the policy of trying to control inflation by controlling the money supply, which, in turn, was to be managed through the control of excess reserves, was largely ineffective because there was no clear relationship linking the CBE's repo operations to the money supply and inflation. There were three complications. First, there is no evidence that the excess reserves target of 1 or 0.5 percent of domestic deposits was the level desired by banks. Second, the targeting of excess reserves appears not to have worked well in practice. Actual excess reserves each week varied widely from the presumed target; the IMF even claimed that during the 1990s there were periodic stretches of three weeks or more during which excess reserves were negative, meaning that the banking system as a whole was violating the reserve requirement. From the erratic behavior of excess reserves, the IMF inferred the existence of large forecasting errors. Third, the growth of M2 did not show a stable relationship with variations in prices, and consequently even a successful targeting of M2 was likely to have an unpredictable impact on the price level.

Nonetheless, if in the future exchange rates are to be more flexible (especially following the float of the exchange rate in January 2003), monetary policy will have to provide the nominal anchor to inflation expectations. But no clear link has anchored the CBE's monetary operations to the money supply and inflation. Moreover, the generally long lags associated with monetary policy mean that policy decisions must be anticipatory – policy measures must be taken in response to projected rather than current inflation. This requires accurate forecasts of inflation. Hence, if inflationary expectations are to be managed by monetary policy, the CBE will have to strengthen its liquidity forecasting capabilities, the design and use of its policy instruments, and will have to support policies that contribute to the development of more efficient markets in securities so that the transmission of monetary policy can be improved. A good deal of analytical work will be required, because knowledge of the working of monetary policy in Egypt is sparse and consequently the uncertainty about outcomes is high.

The experience of monetary targeting in industrialized countries – surveyed, for example, in Bernanke *et al.* (1999), Mishkin (2001a), Loayza and Soto (2002) – points to a number of serious failures of monetary-targeting policies in controlling inflation. The chief problem arises from the unstable relationship between money and nominal income, and therefore the inability of monetary aggregates to provide a reliable signal about the stance of monetary policy. This led to the abandonment of monetary targeting in several countries, including the United States, Canada, and the United Kingdom. Mishkin and Savastano (2000) found evidence of similarly unstable money–inflation relationships in emerging market countries. Monetary targeting was somewhat more successful in Germany and Switzerland, although even in these countries the target was missed on several occasions. Moreover, success depended upon some special

features of these countries, such as a sophisticated public and its belief in the explanations provided by the central bank. And even these countries abandoned the targeting of monetary aggregates from time to time when it conflicted with other important objectives, such as the desired behavior of the exchange rate.

The outcome of the experience gained over two decades was a move by several countries (starting with New Zealand in 1990) towards inflation targeting, rather than monetary targeting. It appears that, with the abandonment of the exchange rate peg in 2000, inflation targeting may become the chief policy objective of the Central Bank of Egypt. The voluminous literature on the experience with inflation targeting – important recent examples are Masson *et al.* (1997), Svensson (1997, 1999), Bernanke *et al.* (1999), Mishkin (2000), Mishkin and Schmidt-Hebbel (2001), Loayza and Soto (2002) – emphasizes five key elements:

- 1 Commitment by the government to price stability as the primary long-term goal of monetary policy. In order to maintain credibility (of sticking to the inflation target) the authorities may have to accept giving up some discretionary control over policy in other areas. This also means that the central bank will have to forgo targeting other variables, such as the exchange rate, because a multiplicity of targets can give confusing signals on the relative precedence of each.
- 2 Freedom from “fiscal dominance,” i.e. there must be virtually no government borrowing from the central bank, and domestic financial markets should have sufficient depth to absorb placements of public debt, such as T-bills.
- 3 Freedom for the central bank in choosing the instruments to achieve the targeted rate of inflation. The central bank enjoys what Svensson (1999) calls “constrained discretion” – the inflation-targeting mechanism defines the goals and the responsibilities of the different institutions involved, but the central bank is left free to choose what instruments to use.
- 4 Transparency of the monetary strategy through communication with the public and the markets, including the announcement of a numerical target (which may be a range) for inflation, and a clear indication of where accountability lies. A good model is provided by New Zealand. The primary function of that country’s central bank is to ensure price stability, which in 2000 meant restraining underlying inflation to under 3 percent per annum. This target was set out in a Policy Target Agreement between the Minister of Finance and the central bank governor for the five-year tenure period of the governor, and failure to meet it could put the central bank governor’s job at risk. Such an explicit and tight inflation target provides both transparency and accountability.

- 5 Technical expertise in modeling the behavior of the economy, estimating the impact of different variables on inflation, and forecasting the future course of inflation.

The coordination between the CBE and other elements of the government more directly responsible for the movements of real variables, such as the GDP, will also have to be strengthened, because the central bank's focus on inflation targeting virtually eliminates its ability to smooth fluctuations in real output and employment. A standard example is that of a supply shock that reduces output and raises prices. In such a situation, inflation targeting may lead the central bank to reduce the money supply at a time when the economy is in recession.

In order to pursue an active monetary policy that successfully targets inflation, the CBE will also have to review the effectiveness of its instruments. Hassan (2003) found that during 1992–2002, the nominal interest rate did not significantly affect real domestic credit going to the private sector. The bulk of bank credit was extended to large enterprises from big banks. Large businesses preferred the use of short-term, continually renewed, debt to raising additional equity, because debt financing did not risk their own capital or dilute ownership. Big banks preferred it because it was easier to obtain information about large businesses than about small. Both sides could continue their practices because the business sector was convinced that even under the most dire circumstances the government would not let the banking system fail. An effective monetary policy would therefore require a hardening of the budget constraint. It would also require the establishment of a more active bond market, to enable the term structure of interest rates to play a more active role and facilitate the transmission of monetary policy.

The capital market

The Alexandria and Cairo stock exchanges were established in 1883. Corporate financing and stock market activity fluctuated in response to changing international conditions, especially those affecting the cotton trade that dominated Egypt's economy. Market activity reached its height during the 1950s; in 1955, turnover amounted to LE 115 million, equivalent to 30 percent of the market value of listed securities, with about 1,000 daily transactions. The nationalization and expropriation measures described in earlier chapters drastically changed the structure of the economy, and abruptly abridged the role of the securities market. However, the stock exchanges were closed only briefly, and throughout the period of Arab Socialism remained open as private sector institutions.

Before the nationalizations of 1958–61, the Egyptian securities market provided between 25–50 percent of new capital raised by the private

sector. But the successive waves of Egyptianization, nationalization, sequestration, and expropriation (described in earlier chapters) radically changed the structure of the economy. The number of listed companies fell from 275 in 1958 to only 55 in 1975. Turnover declined from LE 66.7 million in 1958 to about LE 4 million on average between 1963 and 1974.

With the dominance of the public sector in the Egyptian economy, the state became the leading industrial investor. The state took control of most of the resources, financing its investment through the budget, loans from the four nationalized commercial banks, external assistance, and from nationalized financial institutions (such as the Social Insurance Organization and the state pension funds). There was also some public borrowing, only a small amount of which passed through the securities market in the form of government development and housing bonds. The nationalized banking sector, and to some extent the post offices, were used as the main agents for mobilizing savings. Various changes in tax legislation further encouraged savings through banks. The tax system continued to discriminate heavily against corporate securities and development of the securities market.

The nationalization policy did not extend to small businesses (those with less than 50 employees). However, this portion of the private sector concentrated on activities that called for only small amounts of capital and did not require the mobilization of resources on the securities market. Small-scale industries continued to survive during the 1960s and 1970s, but the aggregate share of the private sector in total industrial investment steadily dwindled; Ikram (1980: 246–53) estimated that it averaged only 4 percent in 1970–74. With the withering away of demand for capital by the private sector, the importance of the securities market as a source of capital also diminished, falling from 56 percent of net external private sector capital raised in 1961 to less than 2 percent from that year onwards. The World Bank reported that there was no record of new corporate securities issued during the 1964–74 period, and that stock market capitalization as a proportion of GDP fell from 12 percent in 1958 to only 1 percent in the 1970s and early 1980s.

The reactivation of the securities market following the *infatih* policy improved matters, but for several years did not result in a significantly more liquid market. Studies by the World Bank attributed this to three main reasons.

First, the number of large publicly issued companies grew only slowly, from 55 to 155. The economy remained dominated by the public sector, which relied on government-controlled sources of funding. Second, private investors preferred investments that could be owned and managed by an individual or his immediate circle of family and friends. Less than 0.1 percent of the companies registered during 1982–90 required a publicly recorded capital subscription by more than one person. The amount of equity capital required was also not large – the average capitalization of

the more than 1,150 joint-stock companies incorporated in 1982–90 was only about one million Egyptian pounds per company. Third, new tax laws encouraged the formation of “closely held companies” that went in for a stock exchange listing not in order to trade, but only to obtain tax benefits. About 80 percent of the 418 companies listed in 1980–90 had 15 or less shareholders, and by 1990, in terms of capitalization, closely held companies accounted for 64 percent by value of all listed securities. The World Bank estimated that during the 1980s, only about 20 percent of listed securities traded in any one year and that in many cases listed shares had not traded for several years, some as far back as 1959. This resulted in a very narrow base of tradable securities, averaging only 20–30 transactions a day.

The tax incentives for corporations to list on the stock exchange were considerable and the conditions for listing not very onerous.⁷ Companies with as few as three shareholders were able to apply for stock exchange listing, pay a small annual listing fee, and qualify for substantial tax exemptions. The tax incentives represented a revenue loss to the Treasury, but without a corresponding benefit to the economy from the development of the securities market.

Much the same picture continued until 2001. The total value of equities actually available for trading (the “free-float”) was considerably smaller than total capitalization. Some careful estimates of the total market value of the free-float at end-2001 put the figure at less than 3 percent of GDP. The hundred largest companies by market capitalization accounted for almost 75 percent of total equity market capitalization. But of these, over 60 companies (accounting for about 45 percent of capitalization) remained almost untraded; in fact, the ten most active companies represented 58 percent of the market’s total value of trading.

Moreover, for many of the listed securities, the trades were artificial. The reason for such artificial trading was that the regulations of the Capital Market Authority (CMA) required the delisting of any firm that had not been traded for more than six months. However, this regulation could be evaded by trades by firms’ insiders, a practice that is sometimes described as “cosmetic” trading. The extent of cosmetic trading remained substantial. An IMF study estimated that in 2001 about 40 percent of the firms were traded normally (i.e. their prices were determined by supply and demand), while the remaining firms were either not traded or only “cosmetically” traded.

A capital market law was enacted in 1992 (Law 95/1992) to modernize all existing capital market regulations. This law vested regulatory power in an independent Capital Market Authority that was charged with enforcing regulations, ensuring compliance, and overseeing market performance. The law provided full access to foreign investors, and included provisions against unfair market practices (such as insider trading, price-fixing, and hostile takeovers). It required publicly-traded companies to abide by international

accounting and auditing standards. In order to increase market transparency, companies were required to release semi-annual financial statements. A summary of stock exchange statistics is shown in Table 7.2.

Until 2000, listing and trading on the stock exchange remained limited to equities and bonds, both domestic and foreign, as well as shares of close-end mutual funds. Securities are listed on the Cairo and Alexandria Stock Exchanges simultaneously and are traded at the same price. Technical improvements have steadily been adopted; for example, the clearing and settlement process has moved from being a manual function to one performed electronically.

A picture of the performance of the equity market during the 1990s is provided by four indicators: market capitalization over GDP, value traded over GDP, the number of listed companies, and the number of traded companies. Between 1994 and 2000, the nominal capital of listed companies increased from 5.1 percent to 20.5 percent of GDP; market capitalization during the same period increased even more sharply, from 6.5 percent to 35.3 percent of GDP. Capitalization in 2000 was dominated by the financial sector, with a 25 percent share, followed by the cement industry with 12 percent and the food and beverage industry with 10 percent. The value of trading, which was less than 1 percent of GDP in 1994, increased to over 15 percent by 2000; the peak value of trading occurred in 1998, when it exceeded 29 percent of GDP. The turnover ratio (the value of traded securities relative to market capitalization) also increased sharply from a little over 3 percent in 1992 to nearly 30 percent in 2000. The number of listed companies between 1994 and 2000 increased by over 50 percent from 672 to 1,036, while that of traded companies jumped from 300 to 545 (an increase of over 80 percent). Foreign investors' participation in the stock market grew briskly. During 1997–2000, foreigners' transactions increased from a little over 30 percent to over 40 percent of the total trading volume of listed securities.

However, these comparisons mask the decline in all market indicators (such as market capitalization, trading volume, securities issues) from 1999, because of the slowdown of the economy. Moreover, in terms of the requirements of the economy, the market remained rather small and illiquid. Four reasons, in particular, accounted for the relative lack of activity in the market:

- 1 Most of the listed stocks were simply not intended for sale, but listed on the market merely to gain tax advantages. According to the World Bank (1993a), trading in the shares of closely-held companies constituted less than 10 percent of total trades in a year. A later study showed that in 2001, more than 700 of the over 1,100 companies listed on the Egyptian Stock Exchange were not actively traded. Huband (1999: 61) reported that the ten most actively traded stocks represented an average of nearly 60 percent of trade, while the top 30

Table 7.2 Summary stock exchange statistics, 1961–2001

	1961	1975	1980	1985	1990	1995	2001
Listed companies (number)	261	55	61	318	573	746	1,110
Market capitalization (LE million)	175	49	130	1,874	5,274	127,600	84,800
Market turnover (LE million)	39	8	11	63	342	3,500	16,600
Turnover ratio (percent)	22.46	16.94	8.31	3.36	6.48	2.75	19.70
Market capitalization/GDP (percent)	11.99	1.00	0.84	5.76	6.22	60.26	23.79

Source: World Bank; CASE.

accounted for 85 percent of the absolute liquidity of the market. The market therefore remained shallow and unable to provide easy entry and exit for investors and issuers. It has even been argued that the listing of such stocks constitutes an obstacle to the long-term growth of the market, because it consumes scarce administrative resources without adding to liquidity.

- 2 The absence of a well-developed secondary market meant that investors could not easily effect tactical transactions to adjust their portfolio yields and risks.
- 3 The absence of market-makers willing to continuously quote buy and sell offers limited the ability of both retail and institutional investors to buy and sell securities in a timely manner.
- 4 The nature and scope of services performed by intermediaries was limited. The capital base of most intermediaries was relatively small, and they were normally unwilling to take positions in which their limited capital would be exposed to risk. The lack of an inter-dealer system among brokers also contributed to the lack of secondary market liquidity.

The other major element in the capital market, the bond market, also expanded sharply during the second half of the 1990s, with higher placements of both government and corporate bonds. Placements of corporate bonds on the domestic market increased from LE 30 million in 1994 to about LE 4 billion in 2000. Treasury bonds (with maturities of five, seven, and ten years) were first issued in 1995, in order to lengthen the profile of domestic debt which hitherto had been largely financed by Treasury bills of maturities from three months to one year. This strategy was successful – by the end of the fiscal year 2000, the outstanding balances of Treasury bonds had reached LE 13 billion, the outstanding balances on T-bills having been brought down by almost 30 percent between 1994 and 2000.

Even though the markets expanded over time, the equity and bond markets developed unevenly. Growth resulted mainly from the sale of equities of large companies and government bonds; consequently, both markets remained fragmented. In the Egyptian equity market, both market capitalization and trading activity are concentrated in the big companies. This might be due, in part, to the restrictions on corporate bonds issues. According to the regulations of the Capital Market Authority, the issuance of corporate bonds required a credit rating of the debt-issuing company and guarantees by financial institution of the company's financial viability. Despite the progress made, the development of Egypt's equity market lags behind that of several other emerging economies. Market capitalization as a percentage of GDP and the number of listed companies is higher in most of the other comparable emerging markets in Latin America, Asia, and Europe.

The development of the bond market was considerably helped by the activity of the public sector. This support was due not only to the volume of bonds placed in the market. An important advantage derived from the presence of Treasury issues in the market because it formed a no-risk reference price for a range of maturities, and thereby established a yield curve against which other securities could be priced.

Non-bank financial intermediaries

The chief non-bank financial intermediaries in Egypt comprise the social insurance and pension funds and the insurance sector. There are other agents, such as leasing companies, but during the period under study these remained unimportant. The total assets of the social insurance system, private pension funds, and insurance companies rose steadily from 1960 and by 2000 amounted to over 42 percent of GDP. Annual inflows into the system are large; however, these large net inflows have been offset by negative real return of nearly 12 percent earned on the system's assets, particularly in the late 1980s and the early 1990s. This resulted in a reduction in the ratio of accumulated balances to GDP from 38 percent in 1988 to 32 percent in 1993. The real rate of return on social insurance balances improved thereafter with a reduction in the rate of inflation.

Contractual savings institutions can contribute enormously to the development of a country's capital market. The importance of the contribution depends on the allocation of their assets. Vittas (1998) points to important differences in the investment practices of these in different countries. In the United Kingdom, real assets and equities occupy the preponderant share in the portfolios of pension funds. In continental Europe, pension funds and life-insurance companies placed the largest part of their assets in government, corporate and mortgage bonds, and in long-term loans. However, most investments by Egyptian funds in government securities were not market-determined, but were mandatory. The funds of the social security system were mainly deposited with the National Investment Bank (NIB), which invested them in development projects. But the NIB credited the social security system funds with an overall rate of return that for much of the 1980s and the early years of the 1990s was negative in real terms. From 1992, the NIB started to pay a rate of 13 percent on social security funds. This was higher than the prevailing inflation rate, but the revised interest rate applied only to incremental amounts, i.e. new funds plus reinvested balances. Vittas (1998: 18) calculated the weighted interest rate on all funds at about 8 percent in 1996, still somewhat below the rate of inflation.

Since the public funds deposited the bulk of their resources with the NIB, only a small portion of these funds reached the private sector. Hence, the Egyptian banking system and the corporate sector did not benefit much from the development of the contractual savings

institutions. Moreover, the economy was not able to profit from a lengthening maturity of corporate debt, as occurs in other countries, again because Egyptian contractual savings institutions invest only a small share of their portfolio in long-term deposits in commercial banks. The pattern of investment followed by the contractual savings institutions also meant that they did not contribute much to the development of the capital market.

The social insurance funds

The Social Insurance System is by far the most important component of Egypt's non-bank financial intermediaries sector. Egypt possesses an extensive social insurance system for a developing country. The most important social insurance programs are those providing benefits to civil servants and to wage and salary workers in the formal sector. The Social Insurance System comprises two main bodies. The first is the General Authority for Social Insurance (GASI), which administers pensions for workers in public and private enterprises, employers and certain self-employed workers, Egyptians working abroad, agricultural laborers, and domestic staff. The second is the National Organization for Insurance and Pensions (NOIP), which administers pensions and indemnities for employees of the state.

During the four decades from 1960, the social insurance system generated large annual operating surpluses. These resulted mainly from the high insurance contributions levied on workers. Employees of the state and of public and private enterprises, together with their employers, pay taxes for social insurance amounting to 35–40 percent of covered wages. Workers themselves pay about one-third of social insurance contributions, with the employers making up the balance. Self-employed workers are required to make social insurance contributions equal to 15 percent of their self-reported income.

A major difficulty encountered by the social insurance programs was the investment of their surpluses. If the surplus of contributions over benefits and administrative payments had been invested in projects earning a market rate of return, the social insurance programs would have earned enormous additional income from interest on its capital reserve. However, with the creation of the National Investment Bank (NIB) in 1980, the social insurance programs were required to invest the reserve with this Bank, which offered a very low rate of interest. Indeed, for extended periods the interest was negative in real terms. Throughout the 1980s, for example, the GASI received an interest averaging only a little over 5 percent per annum during a period in which the inflation rate was nearly 18 percent a year.

Inflation thus substantially eroded the real yield on the investments and the reserve of the social insurance programs. The World Bank (1993a,

vol. 2: 105–6) calculated that if GASI reserves had earned even a zero real return on its trust fund rather than a negative real return, the asset holdings in the reserve would have been worth more than twice as much at the end of 1991 than its actual amount. Even if the GASI had received no transfer from the Treasury during the 1980s, the reserve would still have held nearly 50 percent more assets at the end of 1991. Clearly, therefore, during this period the social insurance funds provided a substantial net subsidy to the NIB and the state.

The World Bank (1993a, vol. 2: 106) pointed out two further issues raised by the low interest rate paid on the social insurance system funds. First, there was no guarantee that the heavily subsidized loans from the NIB were optimally allocated, because projects financed through such loans did not have to meet the economic test of showing that their expected rate of real return was at least equal to the social opportunity cost of capital. Second, the low rate obliged the social insurance authorities to impose high tax rates on covered workers. Since the Egyptian social insurance program is nominally a capitalized system, the contribution rates necessarily had to be high if the expected rate of return on assets was low. Moreover, this method of obtaining resources for the NIB raises questions of equity because the tax for social insurance workers was assessed only on labor earnings below LE 625 per month. Labor earnings in excess of that amount, as well as all earnings from capital, were exempt from social insurance taxes.

The NOIP program also received a very low rate of interest. During the 1980s the real interest on NOIP reserves remained negative. For several years the civil servants' insurance and pension fund had net operating deficits rather than a surplus. However, the fund remained in overall surplus because the operating deficit was more than offset by the considerable amount of income from interest (owing to the large size of the fund) and substantial transfers from the Treasury.

The National Investment Bank

The National Investment Bank (NIB) was set up in 1980 in order to use the resources of the social insurance system to finance development projects. Over most of the period 1980–2000, these funds amounted to about 70 percent of the NIB's assets. The NIB also receives postal savings deposits from the Post Office, and raises additional funds through investment certificates and various other sources. On paper, the NIB is the largest financial institution in Egypt, with a balance sheet that in most years was almost 50 percent larger than that of the largest commercial bank – at end-June 2000, the NIB's assets were equivalent to 55 percent of the combined assets of Egypt's commercial and investment banks.

However, the actual functions of the NIB had little to do with banking – a World Bank report (1993a, vol. 2: 116) described it as “effectively, an

accounting agency responsible for disbursing funds for the implementation of the Government's investment program." In addition to disbursing funds to various public sector entities for development projects, the NIB is responsible for monitoring the progress of such projects. However, on the basis of the NIB's very low overhead costs, the same World Bank report doubted that it could play more than a very limited role in assessing the creditworthiness and economic rationale of projects. The report also pointed to the limited financial intermediation role of the NIB, judging from its very low level of capital, reserves, and provisions, which amounted to less than 1.4 percent of total assets in 1990.

The NIB's impact on the functioning of the financial system came from the large amount of resources it mobilized from the social insurance system and the highly negative rates of return it paid on social insurance reserves. This was particularly the case during the 1980s. From 1992 the NIB began to pay the social security system a substantially higher nominal rate of 13 percent on incremental funds. This was a marked improvement, but according to Vittas (1998: 18) the overall rate was still slightly negative in real terms even as late as 1996. However, with continually decreasing inflation, the real interest rate turned positive.

Lending rates were also negative in real terms for many years. The interest rate on its long-term loans was set at 9 percent until 1989, when it was increased by a half percentage point; this compared with long-term rates to industry from commercial banks of 15–17 percent per annum during the same period.⁸ From 1998 the NIB lent funds to the government at a fixed rate of 12 percent with a maturity of 15 years. This rate was above what the government paid on market borrowings in 2000. A report by the IMF and the World Bank described this arrangement as "doubly unfortunate," because it added to the budgetary cost of the pension scheme in a non-transparent manner and also missed an opportunity for developing the capital market through the investment of the social security surpluses.

Insurance

The first insurance company to be established in Egypt was set up in 1900. By the time of the 1952 revolution, over 100 companies operated in the Egyptian market. In 1957 the insurance industry was Egyptianized, and in 1961 it was nationalized. It was not until the *infitah* policy that foreign insurance companies were permitted to enter the market, initially in joint ventures, but from 1998 they were permitted to own 100 percent of Egyptian insurance companies.

Nationalization of the industry in 1961 was followed by a wave of mergers which left the sector dominated by three state-owned companies. The entry of the joint venture companies after 1974 did not change this dominance – in 2000, the three public sector companies commanded a 75

percent share of the market, leaving the joint venture companies with a market share of 25 percent.

The insurance sector represents another potentially important nonbank financial intermediary because it has the capacity to accumulate reserves and other funds to meet its obligations from claims in the future. However, even by 2001 the insurance industry collected less than 1 percent of GDP in premiums, and the total investments of the industry amounted to only 3 percent of GDP. As such, the importance of the insurance sector in the financial system fell far short of its potential.

The sector can be divided into general (or nonlife insurance) and life insurance. Each of these makes a different contribution to the development of the financial sector.

General insurance provides coverage for relatively short periods, usually of not more than one year. Because of the short-term nature of their policies, general insurance companies tend to make little contribution to the country's long-term financial savings. The importance of these companies to the financial sector comes from the support that they provide to money markets. Life insurance, on the other hand, covers risks that generally extend over a long period. Such companies have to match these risks with long-term reserves, collected both from premia and from reinvestment of profits. Thus life-insurance companies are more likely to contribute to the development of markets in long-term bonds (government, corporate, and mortgage).

The Egyptian insurance market is very underdeveloped. Total assets for all insurance companies in 2001 amounted to less than 5 percent of GDP, while total direct insurance premiums were less than 1 percent of GDP. These were considerably short of the insurance sector's potential. Huband (1999: 83) reports estimates by the Insurance Federation of Egypt that the market in fire insurance was 5 percent of what it should be, that less than 1 percent of the population was insured against accident liability, and that only 7 percent of cars were insured.

The insurance industry is underdeveloped because of both supply and demand factors. The generally low levels of income and wealth inhibited the growth of demand. On the other hand, the regulatory framework was biased towards the public sector, and restrained supply by impeding the entry of private firms. The tax treatment of insurance also held back the development of the sector. Premiums paid to insurance companies were quite heavily taxed, in contrast to deposits in banks (which were not taxed) or with the purchase of an offshore life-insurance contract. Some observers pointed out that the use of foreign markets by some, generally persons of means, could create a problem of adverse selection for the domestic industry, which might be left covering the high-risk people.

The pattern of investment by insurance companies was not conducive to building up reserves through earning high returns on assets. Huband showed that in 1997 roughly 45 percent of the total amount invested was

in fixed deposits, about 20 percent in government bonds, 29 percent in securities, somewhat over 5 percent in real estate, and the remaining amount in miscellaneous small items. He also highlighted the different investment strategies adopted by the public and private sector companies. The public sector companies continued to invest in shares even during the stock market downturn in 1998 when the Egyptian Stock Exchange lost 34 percent of its value. It would appear that they saw themselves as performing a national investment function rather than acting simply as an insurance company; this is analogous to the behavior of public sector banks discussed earlier in this chapter. The private sector companies, on the other hand, stopped buying shares altogether, although prior to 1998 they had been investing in a wide range of companies on the stock exchange. Clearly, the private sector companies were driven by a profit motive whereas the public sector companies were not.

Enterprise finance

The available data on finance for Egyptian enterprises show that the larger Egyptian firms (those listed on the securities market) on average are not highly leveraged by international standards. It is not clear whether for large firms the low leveraging occurs because they do not wish to borrow larger amounts, or whether the financial system does not permit them access to larger amounts. However, there is considerable evidence that smaller firms have difficulty in accessing bank credit. According to estimates by the Ministry of Economy and Foreign Trade (2001), in 2000 only about 10 percent of micro and SMEs' financing needs were satisfied.⁹

A study by the IMF/World Bank estimated that the ratio of current liabilities to total liabilities for the larger Egyptian firms was much higher than that in other countries in the sample. The study found that in 1999 the median firm in Egypt had almost no long-term debt (i.e. maturity exceeding one year), which in turn prompted the suggestion that the firms were constrained in their access to long-term debt. The report pointed out that over-reliance on short-term liabilities could be potentially dangerous for the corporate sector, because it exposed enterprises to a sudden shortage of financing if creditors refused to roll over the debt.

Leverage in Egypt was lower than in most other countries in the sample. For Egyptian firms the ratio of total liabilities to total assets had a median of 0.51, while the median for the other countries studied was 0.57. Moreover, the interest coverage ratio (earnings before interest and taxes divided by the interest payments) was much higher than the median in the other countries. Taken together, these two findings suggested that Egyptian firms found it difficult to raise debt finance.

The study also compared the ratio of market value of assets to their book value (Tobin's Q-ratios) for firms in Egypt with those in other coun-

tries. It found that market valuations of firms in Egypt were a much lower multiple of book value than the median for the other countries examined.

A distinct pattern emerged between the outcomes by size of firm. Profitability and retained earnings declined significantly for smaller firms as compared with the larger. Leverage patterns also differed by size. Smaller firms reported significantly lower ratios of debt to equity and of total liabilities to total assets, implying that they may have experienced relatively more problems in accessing debt finance. Smaller- and medium-sized firms also relied significantly less on long-term finance. Paid-in capital as a share of total assets was much larger for smaller firms and was increasing over time. The data suggested that most of the financing for smaller firms came from their owners, which was another indication of the firms' limited access to external finance. From all these findings, it appeared that long-term debt was readily accessible by only a few large firms. Moreover, because the ratios discussed here had remained stable over time, these problems in differential access to financing seemed to be a structural matter.

The foregoing studies were based on the records of firms quoted on the securities market. The same details are not available for the micro and SMEs (M/SMEs). However, the data that are available suggest that the financing problems of micro and SMEs are even more acute than those of the smaller quoted firms. Micro and SMEs are virtually shut out from access to bank credit. Although M/SMEs accounted for more than 95 percent of all enterprises and over 75 percent of employment, they received only about 5 percent of bank credit in 2000. The maturity structure of bank lending to M/SMEs was also shorter than that of credit extended to larger firms. The main reasons given by financial sources for the reluctance to lend to SMEs was the lack of information about the borrowing firms, and the difficulties of taking possession of collateral in case of a default.

8 Labor force and employment*

In a modern economy, employment is the most important means of earning income; questions relating to the labor force and employment thus constitute perhaps the most important issues facing policymakers. Unfortunately, the study of unemployment in Egypt is freighted with problems arising from inconsistencies of definition, coverage, measurement, and interpretation, both within and between the different data series.¹

Data on labor in Egypt derive from two principal sources: the Population Census (PC) and the Labor Force Sample Survey (LFSS). Both references suffer from shortcomings in design and methodology that preclude strict comparability between the two sources, as well as within the same source over time. A third source that can be used for particular periods is the data produced by scholars – especially Samir Radwan, Nader Fergany, and Ragui Assaad – who have adjusted the first two sources in various ways in an attempt to obtain a greater degree of coherence.

The discordance between and within the data sources means that it is not possible to rely uniquely on any of them as a definitive basis for long-term analysis; one is compelled to move between different data sets. This explains Fergany's (1995) remark that monitoring changes in unemployment in Egypt bordered on detective work, and also why analyses of the Egyptian labor market are messier and more equivocal than one would like. Table 8.1 provides an example of the inconsistencies and of the difficulty created for meaningful trend analysis. The table highlights three points:

- 1 According to the PC, the unemployment rate fell from 11.1 percent in 1986 to 8.2 percent in 1996.
- 2 According to the unadjusted LFSS data, the labor force appears to be “shrinking” between 1988 and 1995 (despite a growing population), but the unemployment rate rose from 7.1 percent in 1988 to 10.2 percent in 1995.
- 3 According to the adjusted LFSS, the unemployment rate increased from 7.5 percent in 1988 to 13.5 percent in 1993.

Table 8.1 Labor force growth, employment, and unemployment, 1986-96

a The population census

	1986						1996						Growth rate 1986-96 (%)								
	Total Urban			Rural			Total Urban			Rural			Total Urban			Rural					
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F			
Population (mn)	48.3	21.2	10.9	10.3	27.0	13.8	13.2	59.3	25.3	12.9	12.3	34.0	19.4	16.6	2.1	1.8	1.7	1.8	2.3	2.3	2.3
Labor force (mn) ¹	12.9	6.3	5.2	1.1	6.6	6.3	0.4	17.2	7.9	6.4	1.6	9.3	8.2	1.0	2.9	2.3	1.9	3.9	3.4	2.8	10.5
Participation rate (%)	26.8	29.7	47.9	10.4	24.5	45.4	2.7	29.1	31.5	49.1	12.9	27.3	47.4	6.2	-	-	-	-	-	-	-
Employment (mn)	12.2	5.7	4.9	0.8	6.5	6.2	0.3	15.8	7.3	5.9	1.4	8.5	7.7	0.8	2.5	2.4	1.9	4.8	2.6	2.1	9.8
Unemployed (mn)	2.0 ²	1.0	0.6	0.5	1.0	0.6	0.4	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-2.7	-	-	-	-	-	-
Unemployment rate (%)	14.7 ³	15.8	10.9	34.8	13.7	9.3	50.4	8.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Unempl. rate (12-64) (%)	11.1 ⁴	12.6	10.6	22.6	9.6	8.3	32.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-

b The labour force sample survey (LFSS) - unadjusted

	Oct 1988						May 1995						Growth rate 1988-95 (%)								
	Total Urban			Rural			Total Urban			Rural			Total Urban			Rural					
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F			
Population (mn) ⁵	50.9	22.4	11.5	10.9	28.5	14.6	13.9	59.3	25.3	12.9	12.3	34.0	19.4	16.6	1.9	1.5	1.5	1.6	2.2	2.2	2.2
Labor force (mn)	18.6	7.2	5.2	2.0	11.4	6.7	4.8	17.5	7.6	5.9	1.7	9.8	7.6	2.3	-0.82	0.7	1.8	-2.7	-1.9	1.6	-9.2
Participation rate (%)	36.6	32.3	45.0	18.8	40.0	45.8	34.0	29.4	30.2	46.2	13.4	28.9	43.5	13.7	-	-	-	-	-	-	-
Employment (mn)	17.3	6.4	4.8	1.6	10.9	6.4	4.5	15.7	6.8	5.5	1.2	8.9	7.1	1.8	-1.2	0.7	1.9	-3.6	-2.5	1.2	-11.1
Unemployed (mn)	1.3	0.8	0.4	0.4	0.5	0.2	0.3	1.8	0.9	0.4	0.4	0.9	0.5	0.4	3.8	0.5	0.6	0.5	7.9	9.3	6.5
Unemployment rate (%)	7.1	11.6	8.1	20.5	4.2	3.4	5.3	10.2	11.4	7.3	26.4	9.2	6.4	18.6	-	-	-	-	-	-	-

continued

c The labour force sample survey (LFSS) – adjusted⁶

	Oct 1988						May 1993						Growth rate 1988–93 (%)								
	Total Urban			Rural			Total Urban			Rural			Total Urban			Rural					
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F			
Population (mn) ⁷	50.9	22.4	11.5	10.9	28.5	14.6	13.9	56.7	24.2	12.4	11.8	32.5	16.6	15.9	2.2	1.6	1.5	1.6	2.6	2.7	2.6
Labor force (mn)	17.7	7.1	5.2	1.9	10.6	6.7	3.9	21.2	8.5	6.4	2.1	12.7	8.2	4.5	3.7	3.6	4.1	2.3	3.7	4.2	2.8
Participation rate (%)	34.7	31.7	45.0	17.6	37.1	45.8	27.9	37.4	35.2	51.3	18.2	39.1	49.5	28.2	-	-	-	-	-	-	-
Employment (mn)	16.3	6.3	4.8	1.5	10.1	6.4	3.7	18.3	7.2	5.7	1.5	11.1	7.6	3.6	2.3	2.9	3.7	0.04	1.9	3.2	-0.6
Unemployed (mn)	1.3	0.8	0.4	0.4	0.5	0.2	0.3	2.9	1.3	0.6	0.6	1.6	0.7	0.9	15.6	8.4	7.9	8.7	24.1	21.4	26.3
Unemployment rate (%)	7.5	11.8	8.1	21.9	4.5	3.4	6.4	13.5	14.9	9.8	30.2	12.6	8.1	20.8	-	-	-	-	-	-	-

Source: PC from CAPMAS, Statistical Yearbook 1997 and 1999; LFSS (reported and adjusted) from Fergany 1995 and 1996a.

Notes

Figures may not add up due to rounding.

1 Labor force for 1986 defined for population 6+, 1996 for population 15+.

2 Internal consistency of the table based on the PC for 1986 implies a total number of unemployed of 0.7 million, equivalent to an unemployment rate of 5.4 percent only. This rate is substantially lower than the figures reported by other studies. We therefore rely on unemployment rates reported by Fergany (1991) and Assaad (1997).

3 Source: Fergany (1991), based on preliminary Census results.

4 Source: Assaad (1997), based on final Census results for population (12–62).

5 Total population figure for 1988 as reported in Assaad (1999); urban/rural and male/female distribution for 1988 based on proportions in PC 1986; population figures for 1995 are those of PC 1996.

6 Adjustments in Fergany (1995) based on parameters anchored in the October 1988 LFSS round, relating to female employment in unpaid household activities (excluding engagements of less than 15 hours per week) and to unemployment, by factoring in discouraged unemployment.

7 Total population in 1993 estimated assuming constant 1991–92 population growth rate; urban/rural and male/female distribution based on proportions in PC 1986 for 1988 and PC 1996 for 1993.

Reconciliation of different data sources suggests that the labor force grew faster than the population did between 1986 and 1996. Depending on the source, employment either shrank or grew at a much slower rate than that of the labor force, with a resulting increase in overall unemployment rates. Fergany (1999) estimated open unemployment at 12–15 percent in the mid-1990s, or at 2.0–2.5 million persons. Using an “extended” definition of the labor force, which included the large number of women engaged in subsistence activities, Assaad (2000) put open unemployment in 1998 at 7.9 percent, or 1.72 million persons. The decline in the unemployment rate for 1996 reported by the PC is unlikely in view of the relative stagnation of the economy during the first half of the 1990s.

Geographic and gender patterns are changing – unemployment is increasingly being ruralized and feminized. Open unemployment in Egypt is concentrated among educated youth in their early twenties, first-time job seekers, and graduates of intermediate (secondary and vocational) and university education – a pattern that has been emerging since 1976. And while young graduates constitute the bulk of open unemployment, unskilled and less educated individuals suffer from visible underemployment (willingness to work more hours than they already do) and invisible underemployment (apparently fully employed but at low levels of productivity and real wages). Visible underemployment is essentially a rural phenomenon of agricultural and casual workers, and its implications on poverty levels are a cause for concern. Studies on poverty – such as El-Leithy *et al.* (1999), UNDP (1996) – find a strong link between casual employment of unskilled laborers and poverty.

A number of economic and institutional factors combined to produce the observed patterns of unemployment and labor market rigidities in Egypt. This chapter starts by providing an analysis of the political economy underlying the evolution of the labor market between 1960 and 2000. The analysis points to two factors: (1) growth over the period was labor-sparse as a result of the bias towards capital-intensity of the import substitution strategies pursued during the late 1970s and early 1980s; and (2) because of its dominant size in the market, government employment policies, in terms of wage setting and stringent labor regulations, acted as a benchmark that overburdened the private sector and curtailed its ability to generate employment. The chapter then discusses the evolution of the labor force by looking at population and participation growth, followed by an analysis of unemployment trends and patterns of employment growth. The impact of the government’s employment guaranteed program is also discussed, and is shown to have segmented the labor market: the government, as a dominant player, influenced the reservation wage for both the public and private sectors. Some concluding remarks follow.

Economic growth and employment in Egypt

An historical framework for examining the unemployment problem in Egypt over the past four decades was proposed by Radwan (1997). He regards developments in terms of three sub-periods: (1) the 1960s, the “labor surplus economy”; (2) 1975–85, the decade of “jobless growth”; and (3) 1985–95, which might be extended to 2000, as a largely “slow growth, high unemployment” era. Employment performance is explained in terms of three determinants: the rate of growth of GDP, the management of labor demand, and the extent of labor market flexibility or regulation.

The 1960s

The period of the “labor surplus economy” coincided with the nationalization drive and sizeable state-led import-substituting investments, especially in manufacturing, which produced an upsurge in the demand for labor. The economy grew at an average of 5–6 percent per year, and was able to generate the employment opportunities required by the government’s employment guarantee program (EGP) for graduates, especially in urban areas. Radwan (1997) points out that through the EGP the state was able to pursue a “full employment” policy while maintaining a low-wage inflation system. Large labor shifts from agriculture into the booming construction sector in both urban and rural areas resulted in rural-to-urban migration and partially compensated for the slowdown of job creation in agriculture during 1960–76. There was not much demographic pressure on the employment generating capacities of the economy, as population and the labor force grew at roughly the same rate during that period. Assaad *et al.* (1999) judge unemployment to be negligible, standing at about 2 percent of the labor force, and concentrated mainly among illiterate workers. However, the government employment drive became unsustainable once the capacity of the state to finance investments was reduced as a result of the 1967 war and its political aftermath, which constrained the inflow of foreign exchange.

1975–85

The decade of “jobless growth” coincided with the launching of the *infitah* policy and massive inflows of external resources that boosted economic growth to an average of over 8 percent per year. Growth, however, occurred to a large extent in the non-tradable sectors, namely construction and financial services, which did not generate sufficient demand for labor (together they accounted for less than 30 percent of employment growth between 1976 and 1986). And while migration provided a partial relief to some 10–15 percent of the labor force, the market became tight, as shortages of particular skills co-existed with rising rates of open unem-

ployment. The pattern of sectoral growth and employment performance that emerged during and after the economic boom was largely shaped by government policies regarding two issues:

1 Management of the massive inflow of external revenues

A large portion of these revenues accrued to the government. This led to a surge in government spending that paid little attention to the employment component of the investments. Handoussa (1991a) estimates that external revenues as a share of total government revenue increased from less than 5 percent in 1975 to over 30 percent by 1982, and consisted primarily of Suez Canal revenues, oil exports, workers' remittances, and revenues from tourism. This was associated with a rise in government expenditures as a proportion of GDP from 49 percent to nearly 64 percent between 1975 and 1982, exceeding its revenues, which only rose from 29 percent to 42 percent over the same period. Gross domestic investment increased at an average of 12 percent per year.

Underlying this growth was an increasing bias towards capital and machinery. This was especially evident in the manufacturing sector – the sector responsible for the highest proportion of total employment growth (25 percent) during the preceding period. Resource inflows led to rising prices, to an appreciation of the real exchange rate by almost 50 percent, and to negative real interest rates. These two factors lowered the relative price of capital and industrial imports and thus encouraged capital intensity of industrial production, which restricted the creation of employment in the public enterprise sector. Productivity increased in the manufacturing sector, but this improvement resulted from greater mechanization in both the public and private sectors, raising the capital:labor ratio by an average of 10 percent per year during 1970–81. The rising trend of mechanization was also attributed to the rise in wages, because of the emigration that took place in the mid-1970s, and to the growing scarcity of skilled technicians and industrial specialists, coupled with wage rigidities: Handoussa (1991b). The public enterprise sector also generated lower employment, partly because it was permitted greater flexibility in hiring after 1978 by being freed from the scope of the EGP. Manufacturing provided only 8 percent of employment growth between 1976 and 1986.

2 Government employment policies

With increased resources at its disposal, the government employment program gained further impetus. Employment in the civil service (i.e. government excluding public sector enterprises) grew faster than in any other sector in the economy, accounting for over 20 percent of employment in 1986. Assaad (1995) argues that the emergence of the state as the primary employer in the economy had two mutually reinforcing effects.

First, it segmented the labor market along educational and gender lines; second, it strongly influenced the level of wages throughout the economy. By 1986 the government sector was responsible for the employment of almost 75 percent of all graduates and 60 percent of females. The size of the sector ensured that the level of government wages would significantly affect wages offered by the private sector, in that the (non-market-related) floor for the pay of graduates in government raised the relative cost of graduate labor to other sectors of the economy by setting a minimum expected level. This reduced the employability of graduates in the private sector.

The fall in oil prices in 1982 marked the end of the economic boom in Egypt. GDP growth and investment slowed, and the government's ability to finance its employment program became severely constrained. The waiting period for appointment under the EGP steadily lengthened, with graduates having to queue for several years before receiving an appointment. The queuing continued because of the high premium that graduates attached to the job security provided in the government, and because taking any employment in the private sector resulted in the removal of a graduate's name from the Ministry of Manpower's appointment lists. The longer wait and the reluctance to accept a private sector job increased the measured rate of unemployment among graduates.

Other government policies also slowed employment growth. Stringent labor codes and protection policies instituted in the government sector from the mid-1960s and extended to the private sector from 1981 raised the cost of hiring for private employers. The latter sought to circumvent the legal requirements by offering unprotected employment (without a contract) that deprived workers of any form of insurance or benefits. The relatively generous benefits to females mandated by the labor law further discouraged private employers from hiring women, especially young educated women, thus exacerbating unemployment among this group in the labor force.

The higher resource inflows supported growth in the non-tradable sectors of the economy: construction and services. The booming construction sector absorbed labor shed by agriculture, whose share in employment decreased throughout the 1980s. Once the construction boom subsided, migration to Arab countries took over, absorbing about 10–15 percent of the labor force. In the early 1980s, this led to labor shortages in agriculture and construction (and an attendant rise in wages).

1985–2000

The period of slow growth and higher unemployment resulted largely from the erosion of sources that drove the high growth performance of the previous decade and a net return migration following the Gulf War in 1991. Economic growth declined between 1987 and 1993, curtailing the

employment-generating capacity of the economy. While growth in the manufacturing sector resumed, industrial efficiency suffered because of the inward-oriented bias, the lack of exposure to competitive pressures in the domestic market, and the price and other distortions resulting from government intervention.

Open unemployment hit peaks of 10.2 percent in 1993 based on the LFSS, or 11.1 percent in 1986 based on the PC, and increasingly consisted of educated youth in their twenties entering the labor force for the first time. This was associated with a growing incidence of underemployment in the rural areas in general, and in agriculture and construction in particular, because of the net return migration and the end of the boom in the rural non-agricultural sector. While the informal sector appeared as an important source of employment in the 1990s (accounting for over 20 percent of employment), it was not sufficient to absorb successive cohorts joining the labor force.² Inflationary pressures that had arisen during the previous period eroded gains in real wages achieved during the economic boom, leading to further deterioration in living standards and an increase in the incidence of poverty until 1995.

Economic growth picked up after 1993, but in 1997 the economy was struck two major blows. The financial crisis that started in Thailand in July and then spread to much of East Asia seriously impacted on Egypt's trade and investment inflows. Then an attack on tourists in November in Luxor led to a precipitous drop in tourism and large-scale losses of employment in the sector. Towards the end of the century the economy recovered somewhat, but a liquidity shortage continued to hold back job creation to a level less than what was required to absorb the additions to the labor force.

The preceding analysis points to the importance of the *composition* of growth, and not only its rate. While skills mismatch in the demand and supply for labor may still be at work, it is not the main reason for the unemployment problem in Egypt.³ Nor is it a problem of inflexible wages. Real wages, in both the public and private sector, declined after the economic boom of the early 1980s. As several studies – Fergany (1999), Radwan (1997), Karshenas (1994) – point out, the primary cause for unemployment in Egypt is deficient demand for labor, resulting largely from the capital-intensive character of economic growth during 1975–85. This change is captured in estimates of the employment elasticity of output growth in Egypt's manufacturing, which declined from 0.43 in 1975 to 0.28 in 1992, and was generally lower than in other countries such as Malaysia, Indonesia, or Jordan, where the elasticity was 0.84, 0.66, and 1.04, respectively. These high employment elasticities reflect the successful export-oriented industrialization pursued by countries in East Asia, which embodied a high degree of labor intensity.

Radwan (1997) estimated the economy-wide employment elasticity of output growth at 0.61 between 1983 and 1995, with the highest elasticity

recorded for the manufacturing sector (0.74). However, the choice of time period significantly affects the measure; World Bank (2001: 12) estimated the (economy-wide) elasticity at 0.47 for 1960–90 and 0.64 for 1991–99, while MOP/World Bank (2002: 40) put it at 0.5 for 1995–99. According to some estimates, employment intensity dropped substantially in the early 1990s. Fergany's (1998b, 1999) calculations put the economy-wide constant prices employment elasticity at only 0.054 between 1990 and 1995, and 0.12 in manufacturing. This implied that over the same period, LE 1 million of output growth produced only eight job opportunities.

Trends in population, participation, and labor force growth

Three factors chiefly determine the evolution of the labor force: the population growth rate, the changing age structure of the population, and changes in age-specific participation. The latter result from changes in behavior patterns, such as higher school enrolment, retirement, changes in female participation in the labor force (because, for instance, of delayed marriage), and so on.

The PC recorded a total population of 59.3 million and a labor force of 17.2 million in 1996. Between 1986 and 1996, the labor force grew at 2.9 percent a year compared to 2.1 percent for population. Unadjusted estimates of the LFSS show a “shrinking” labor force between 1988 and 1995. The primary source of this unusual result is error in accounting for female participation after the special round of the LFSS in October 1988. Adjusted LFSS data imply an even higher growth rate of the labor force compared to the PC, because of higher participation rates. Assaad (1999) estimates the overall participation rate to have increased by almost 9 percent between 1986 and 1996, varying between 30 percent in 1996 based on the PC and defined for age groups 15 and over, and 47 percent in 1995 based on the LFSS and defined for age groups 15–64.

Despite incongruities between the PC and the LFSS (see Table 8.1), a number of patterns are discernible. The first is a declining trend in male participation aged 15–64 (based on the LFSS) up to 1995, because of higher enrolment in basic education and earlier retirement of older workers. The second is a likely increasing trend in female participation, based on the PC and the ELMS 1998. Higher female educational attainment, delayed marriage, and increased economic hardship are all likely to increase female participation in economic activity, and not reduce it, as recorded by the LFSS. The third pattern is a substantial increase in overall rural participation rates during 1988–98 (by nearly 12 percent), compared with urban rates (by only 6 percent), mainly because of the rise in rural female participation.

Reliable time series on labor force participation are difficult to obtain. Estimates of labor force size, and hence of participation rates, are very sen-

sitive to the definition used and to the extent that these definitions are adhered to during data collection. Participation rates recorded by the PC are generally lower than those of the LFSS.⁴ Fergany (1991) attributes this discrepancy to two reasons. First, the reference period to establish employment in the PC is one day, which would capture only individuals employed on a regular basis and those seeking work on the reference day. There is a tendency, therefore, to under-report both employment and unemployment. Second, the PC tends to undercount the activity of women and children in informal home-based (and unpaid) activities.

Given the imperfections in the data, adjustments are often made to render it consistent with patterns that labor specialists deem closer to economic reality; the main work in this area is by Fergany (1996a), and Assaad (1997).⁵ It is not easy to reconcile the different estimates and trends on labor phenomena reported in different studies. This chapter therefore reviews the statistics and trends as reported, and concludes with a judgment on a likely range or magnitude of the labor phenomena that are discussed.

To assess the differences between the two sources, one can compute crude and refined participation rates for specific years using the LFSS statistics reported in Assaad (1997) (see Table 8.2). The 1986 PC figure for the non-age-restricted labor force is clearly understated compared to the LFSS series after 1984. The 1988 LFSS estimates the labor force at 18.6 million, compared to 13.3 million only two years earlier – a difference that is too large to ascribe to demographic growth. This is almost entirely caused by fluctuations in the measurements of female participation.⁶ With the exception of 1981, participation rates throughout the LFSS series are consistently higher than those reported in the 1986 PC, except for 1995, when the figure is almost identical to PC 1996. Allowing for the different reference points used, estimated population and manpower growth rates are very close to those reported by the PC.

However, the LFSS presents a number of unusual results, especially when compared to the PC. The first is the shrinking of the labor force recorded by the LFSS after 1988, despite a growing working age population; and the second is the declining trend in female participation. After examining the results from the special round of LFSS in October 1988, Fergany (1995, 1996a) and Assaad (1999) attribute this anomaly almost entirely to errors in measuring female participation. The observed decline in the overall labor force in general, and female participation in particular, is almost entirely accounted for by biases in measuring rural female participation. In 1995, if the LFSS is to be believed, the urban female labor force had declined to 1.6 million from a little over 2.0 million in 1988, whereas the rural female labor force had been reduced to almost half its level in 1988 (2.3 million in 1995 versus 4.8 million in 1988).

To underscore the magnitude of error in reporting female participation, Table 8.3 compares estimates provided by different data sources. The

Table 8.2 Population, labor force, and economic activity, 1977-98 (millions and percent)

<i>Number of persons (millions)</i>										
	1977	1981	1984	1986	1988	1990	1991	1992	1995	1998
Population ¹	36.7	41.4	45.0	48.1	50.9	53.6	54.7	55.7	59.2	-
Manpower basis ²	29.5	33.4	36.6	37.2	39.8	42.0	43.3	44.9	48.8	-
Manpower basis (12-64)	23.8	27.2	29.5	30.3	31.7	33.7	35.1	36.5	39.9	-
Labor force ³	10.4	11.5	14.4	13.3	18.6	16.4	16.5	16.3	17.5	-
Labor force (12-64)	9.5	10.5	12.6	19.9 ⁴	17.6	15.7	15.9	15.8	17.0	21.7 ⁵
Crude activity rate (%) ⁶	28.3	27.8	32.0	27.7	36.5	30.6	30.2	29.3	29.6	-
Refined activity rate (%) ⁶	35.3	34.4	39.3	35.8	46.7	39.1	38.1	36.3	35.9	-
Employment (12-64) ³	9.2	9.9	11.8	11.4	16.3	14.4	14.5	14.4	15.2	-
Unemployment rate	3.1	5.4	6.0	11.1	7.3	8.6	8.8	9.0	10.4	-
<i>Average growth rate (percent)</i>										
	1977-81	1981-84	1986-90	1991-95	1977-88	1988-95	1977-88	1988-95	1977-95	1977-95
Population ¹	3.0	2.7	2.8	2.0	2.97	2.16	2.97	2.16	2.66	
Manpower basis ²	3.1	3.1	3.0	3.0	2.72	2.91	2.72	2.91	2.74	
Manpower basis (12-64)	3.3	2.7	2.7	3.2	2.61	3.29	2.61	3.29	2.87	
Labor force ³	2.5	7.4	5.3	1.7	5.29	-0.87	5.29	-0.87	2.89	
Labor force (12-64)	2.6	6.0	5.1	1.8	5.61	-0.50	5.61	-0.50	3.23	
Employment (12-64) ³	2.0	5.7	5.8	1.4	5.20	-1.00	5.20	-1.00	2.79	
Unemployment rate	13.9	3.3	-3.5	4.6	13.33	4.65	13.33	4.65	9.95	

Table 8.3 Participation rates by data source, ages 15–64 (percent)

		<i>Assaad et al.</i> (1999)		<i>Fergany</i> (1996)	<i>Assaad (1999)</i>	
		<i>LFSS 1988</i>	<i>LFSS 1995</i> ¹	<i>LFSS 1995</i>	<i>PC 1996</i> ²	<i>EIHS 1997</i> ³
Male	Urban	75.0	45.7	69.9	77.1	72.8
	Rural	79.2	44.4	76.3	83.4	75.4
Female	Urban	29.3	13.0	19.5	20.4	26.2
	Rural	53.9	13.8	23.0	10.9	17.3

Source: Assaad *et al.* (1999), Fergany (1996a), and Assaad (1999).

Notes

- 1 Estimates from Fergany (1996); participation rate defined for labor force over population 6+.
- 2 Participation rate defined as labor force (15–64) as a proportion of population (15–64), and therefore different from corresponding figures in Table 2.2.
- 3 Participation based on a definition of economic activity only for the purpose of market exchange.

first column reports participation rates that related male and female labor forces to the respective populations of all ages. Subsequent columns restrict these indicators to the population aged 15–64. Naturally, age-restricted participation measures are higher because of the smaller denominator, which captures participation for the working age population only. Female participation measures varied considerably across the three sources.

Analysis of participation trends by gender and geographic classifications was also affected by the error in measuring the size of the labor force. Using age-specific participation rates based on the LFSS, Assaad (1999) shows a drop in overall participation rates over 1990–95 when defined for the age group 15–64, with female rates declining much more than male participation rates. Rural participation rates also decline faster

Source: Population from CAPMAS; LFSS data from Assaad (1997).

Notes

Crude activity rate is labor force as a proportion of population of all age groups, while refined activity rate is labor force as a proportion of the manpower basis; growth rates in italics (for 1977–88, 1988–95, and 1977–95) are author's own calculations.

- 1 Does not include Egyptians abroad.
- 2 Manpower is population aged 6–64, including employed persons 65+ but excluding disabled persons.
- 3 Individuals 6 and over actually employed and individuals 12–64 seeking work, excluding foreigners; reference period is one day for LFSS in May 1977, 1981, and 1984, and one week for LFSS 1988, 1990, 1991, and 1995.
- 4 This figure is probably a printing error, and hence the PC 1986 has been excluded as a reference point in estimating broader sub-period average growth rates.
- 5 Figure for 1988 estimated from Assaad (1999) as the sum of 1.72 million unemployment and 20 million employment based on the extended definition of the labor force.
- 6 Defined for the broader labor force as defined by 3.

than urban rates, largely because of the drop in rural female participation. Fergany (1995) attributes the drop in male participation rates observed in 1988 compared to 1984 to the surge of emigration to oil-producing countries in the late 1980s. Emigration is unlikely to be responsible for the similar trend observed in the early 1990s; a more likely reason for the declining trend in overall participation is a rise in discouraged unemployment, which affected rural males more than urban, and older males more than younger (Fergany, 1995).⁷ Assaad (1999) attributes the decline in male participation rates to a combination of higher school enrolment among younger males and earlier retirement of older segments of the male population from the labor force.

Age-specific patterns of participation also appear to be sensitive to the time interval used. Overall participation rates, based on the extended labor force definition used in 1988, are relatively stable at 59 percent. Underlying this relative stability is a clear decline in male participation rates and a corresponding increase in female rates. The geographic patterns are also slightly reversed, with urban participation rising and rural participation declining, and with a more rapid growth of female participation in urban areas.

Female participation rates are very sensitive to the definition used. When the market definition of the labor force is used (i.e. which essentially excludes persons engaged in subsistence activities) female participation rates fall by 50 percent compared to the extended definition (which includes persons engaged in subsistence activities), almost entirely accounted for by the drop in rural participation rates. This is not surprising since most women in rural areas engage in unpaid subsistence activities, and therefore drop out when the market definition is applied. This difference is in sharp contrast to the stability of male participation rates across the two definitions.

The figures provided so far present us with a number of contradictory and somewhat perverse patterns of labor force participation. The following conclusions may be ventured.

First, having a labor force that is growing at, or slightly above, the population growth rate implies that LFSS estimates of a "shrinking" labor force are likely to be the result of poor measurement of economic activity. Considerable fluctuation in female participation figures after 1988 indicates errors in accounting for female activities in general, and in rural areas in particular, to be the principal source of this inconsistency. Under-enumeration of female activity results in under-estimation of the size of the female labor force, thus affecting all statistics and indicators pertinent to female activity.

Second, as Assaad (1999) points out, the set of economic, educational, and behavioral factors operating in Egypt seems to imply a rising, not a declining, trend of female participation. Rising female school attainment, delayed marriage ages, as well as economic hardship, combine to increase the participation of women in economic activity.

Third, the observed decline in male participation also probably results from a combination of behavioral and statistical factors. Whereas higher school enrolments are likely to underlie the drop in male participation at the earlier tail of the age distribution, rising discouraged unemployment (and thus retirement from the labor force), especially among older males in both urban and rural areas, is likely to underlie the overall decline in male participation.

Finally, the studies tended to consider the PC as the most consistent source in portraying very broad and aggregate employment trends, at least up to 1986. For instance, the PC shows rising participation for both urban and rural areas, and for both males and females – a logical outcome given the observed population and labor force growth rates. One is therefore inclined to use the figures reported by the PC as “conservative” or “lower bound” estimates of broad labor phenomena in the economy. Participation rates, as of 1995, therefore were in the range of 30 percent, defined for the population aged 6+, and 47 percent defined for the population 15–64.

Adjustments to the LFSS also result in more tractable participation trends. Fergany (1995) adjusts for the bias in the LFSS by correcting the series based on parameters anchored in the special round of the LFSS 1988.⁸ These adjustments resulted in a smaller female labor force in 1988, but a steadily growing labor force, both male and female, up to May 1993, with an overall labor force of 21.2 million, as opposed to 17.5 million according to LFSS 1995.

Trends and structure of unemployment

Trends in unemployment

Official estimates of unemployment placed it at 8.2 percent in 1996, down from 11.1 percent in 1986. However, both this level and the direction run counter to the LFSS and the adjusted estimates of Fergany (1999) and Assaad (1999). The picture that emerges from these studies is one of *rising* open unemployment between 1988 and 1998.

According to the PC, the open unemployment rate defined for individuals 6+ increased from 7.7 percent in 1976 to 14.7 percent in 1986, corresponding to 2 million unemployed individuals in 1986 (Table 8.4). The 1996 PC reported a (much contended) rate of unemployment of less than 9 percent, defined for the reduced age bracket 15+, which corresponds to 1.54 million individuals. Adjusting for differences in census versus LFSS reference periods and for the underestimation of unemployment in the LFSS (by requiring active search and therefore excluding discouraged unemployment) led Fergany (1999) to an unemployment rate of 14–15 percent for 1996. At 15 percent of the labor force, the number of unemployed would rise to 2.5 million instead of the reported 1.5 million.

Table 8.4 Unemployment level and rate, population censuses, 1960–96 (thousands and percent)

		<i>Fergany (1991)</i>			<i>Assaad (1997)</i>	<i>Fergany (1999)</i>
		<i>1960</i>	<i>1976</i>	<i>1986¹</i>	<i>1986²</i>	<i>1996</i>
<i>Number of unemployed (thousands)</i>						
Urban	Male	93	297	563	–	–
	Female	26	157	464	–	–
	Total	119	454	1,027	–	–
Rural	Male	46	261	596	–	–
	Female	10	136	388	–	–
	Total	56	397	984	–	–
Total	Male	139	558	1,159	–	–
	Female	36	293	852	–	–
	Total	175	851	2,011	–	1.54
<i>Unemployment rate (%)</i>						
Urban	Male	3.8	7.2	10.9	10.6	–
	Female	9.1	25.0	34.8	22.6	–
	Total	4.3	9.5	15.8	12.6	–
Rural	Male	1.0	4.5	9.3	8.3	–
	Female	3.0	38.0	50.4	32.9	–
	Total	1.1	6.4	13.7	9.6	–
Total	Male	1.9	5.6	10.0	9.3	–
	Female	5.8	29.7	40.6	25.2	–
	Total	2.2	7.7	14.7	11.1	8.2

Source: Fergany (1991, 1999), Assaad (1997).

Notes

Unemployment defined for individuals 6+ in PC 1960, 1976, 1986, and for individuals 15+ in PC 1996.

1 Preliminary results of PC 1986.

2 Unemployment defined for individuals (12–64).

The unemployment rate reported by the 1996 PC represents a break from the historical trend in the census series, and is difficult to explain in view of other indicators of economic performance during this period.

Excluding the 1996 figures, the census series reveals a rising trend in the unemployment rate, with rural unemployment growing at a much faster rate than urban unemployment. Male unemployment rates doubled between 1976 and 1986, with rural males bearing the brunt of this increase. Female unemployment rates also increased significantly. Rural females experienced the highest incidence of unemployment in 1986, when half the female labor force was unemployed. The gap between male and female unemployment was higher in rural than in urban areas, and was increasing with time.

A similar trend of rising unemployment is reported by the LFSS. Although the LFSS series reports lower estimates of unemployment than the PC, these discrepancies are considerably reduced when corrections and adjustments are made.⁹ Figures 8.1a–b show quarterly LFSS series for unemployment, reported and corrected, provided by Fergany (1995, 1996a). In general, these figures underscore the volatility of the unemployment problem in Egypt and point to a reversal in gender and geographic patterns of unemployment during the mid-1990s.

In the early 1990s, unemployment was essentially an urban phenomenon; by 1995, unemployment was being increasingly ruralized and

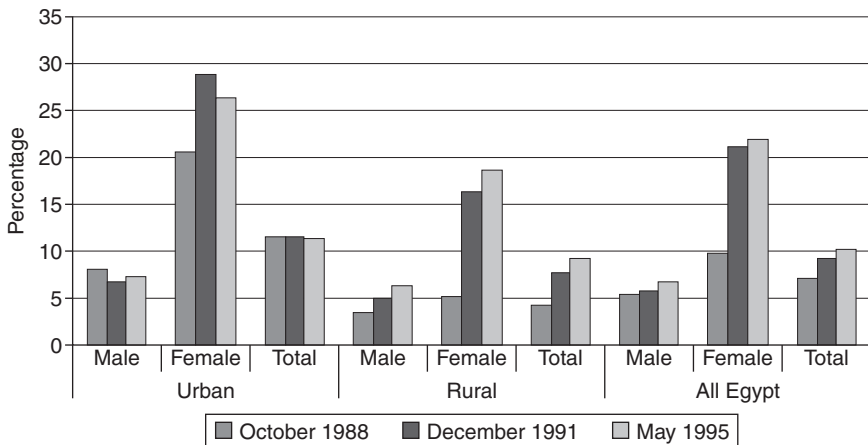


Figure 8.1a LFSS reported unemployment rates, 1988–95 (percent) (source: based on Fergany (1995)).

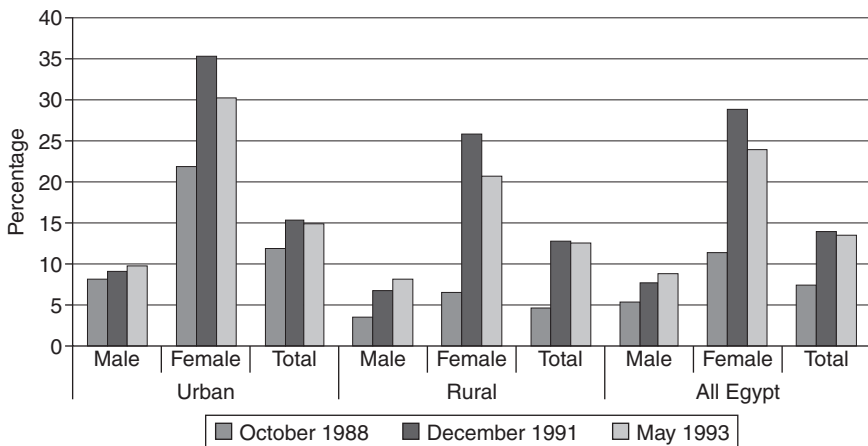


Figure 8.1b LFSS adjusted unemployment rates, 1988–93 (percent) (source: based on Fergany (1995)).

feminized. In 1988, the number of urban unemployed was twice that of their rural counterparts; in 1995, the number of unemployed in rural areas exceeded that in urban areas. Although still lower than the urban rate, rural unemployment rates doubled between 1988 and 1995 (see Table 8.1). Moreover, and contrary to the census, LFSS estimates show the unemployment rate (both reported and corrected) for urban females to be consistently higher than for rural females, although the latter grew at a much faster pace. Not only did urban females experience higher unemployment rates throughout the period, the gap with their male counterparts was also larger than in rural areas and was growing with time.

Unlike the PC, unemployment rates based on the LFSS are less sensitive to the age bracket used, implying that the bulk of the unemployed are in fact in the working age population 12–64 (indeed in the 25–30 years age group). According to the LFSS, the reported unemployment rate in 1995 was in the vicinity of 10 percent of the labor force, with urban unemployment rates consistently higher than rural rates during 1988–95. With only slight periodic fluctuations, the urban unemployment rate hovered around 11 percent throughout the period 1988–95, while the rural unemployment rate showed a marked increase, more than doubling to 9 percent in 1995. And while male unemployment rates in urban areas slightly declined between 1988 and 1995, rural male unemployment rates doubled over the same period. Females in both urban and rural areas have seen their unemployment rates increase between 1988 and 1995, with a faster growth in rural female unemployment rates.

To sum up, the LFSS data indicate unemployment to have increased between 1988 and 1995 to about 10 percent of the labor force; some adjustments put this figure at 13 percent.¹⁰ Unemployment in rural areas, for both males and females, rose faster than in urban areas, albeit at lower levels. The results of the ELMS 1998, discussed in Assaad (1999), also contradict the decline in unemployment reported by the 1996 PC.¹¹ The overall unemployment rate, based on the extended labor force and search definitions, increased from 5.4 percent in 1988 to 7.9 percent in 1998. These rates corresponded to 1.72 million unemployed individuals in 1998, up from 0.89 million in 1988, equivalent to an average rate of increase of 6.6 percent per year, which is 2.5 times that of the labor force or working age population. When the market definition of the labor force is used, Assaad (1999) showed that the average rate of increase in unemployment rose to 11.7 percent per year, with almost all the difference accounted for by the change in the female unemployment rate, which increased from 9.4 percent according to the extended definition to 27.6 percent based on the market definition. Notwithstanding the contradicting trends in gender unemployment rates displayed by the ELMS data, the general trend was one of rising open unemployment between 1988 and 1998.

Structure of unemployment

The composition of open unemployment in Egypt has remained virtually unchanged over the past two decades, indicating the causes to be mainly structural. Fergany (1996b, 1999) and Assaad (1999) have shown that unemployment is still highest among the age group 20–25, and among graduates of intermediate education (secondary and vocational technical training). Open unemployment is highest in Lower Egypt, while visible underemployment is a major problem in Upper Egypt. A profile of unemployment in terms of socio-demographic characteristics is sketched below.

Unemployment by gender and urban/rural residence

The LFSS data underscore the acuteness of the unemployment problem in rural areas. Unemployment in rural areas was composed almost entirely of new entrants to the labor market, or first-time job seekers, who experienced the longest durations of unemployment (up to 47 months). Females in general and rural females in particular, were disproportionately affected by these conditions. While the proportion of first-time job seekers among unemployed females remained at 98 percent, the gap in the duration of unemployment compared to their male counterparts increased. Despite a slight decline in urban male unemployment rates over the two-year period, the pressure of an increasing proportion of first-time job seekers pushed up the unemployment duration for urban males between 1993 and 1995, who nevertheless faced the shortest duration spells (38 months) while rural women suffered the longest unemployment durations (51 months). This was a direct outcome of the slower growth in government employment, which represented the only socially acceptable form of employment for educated rural females. The total duration of unemployment was almost entirely determined by first-time job seekers. For both males and females in urban and rural areas, unemployed individuals with previous work experience suffered employment spells that were less than half as long as those of new entrants.

Unemployment by region

The Lower Delta was the area most affected by unemployment. The unemployment rate was highest in the Western governorates of the Delta: at 19 percent it was almost double the aggregate level of unemployment and triple the rate in Greater Cairo. Almost all of the unemployed were first-time job seekers who experienced extended spells of unemployment of more than four years. However, an unusual result was the relatively low unemployment rate in the northern governorates of Upper Egypt, similar to that in Greater Cairo, but of much longer duration. This pattern seems to have continued through 1998. Assaad (1999) showed that most of the

increase in unemployment in rural areas over the period 1988–98 occurred in Lower Egypt, where both male and female unemployment rose more than in rural Upper Egypt. The PC 1996 also recorded the highest rates of unemployment for governorates in Lower Egypt.

Unemployment by age groups

Almost all data sources report the highest unemployment rates to be for youth in their early twenties, especially females. Unemployment hit hardest at youth in their early twenties, reaching almost 40 percent among the age group 20–24, although individuals in the age group 25–39 experienced the longest spells of unemployment, ranging between five and six years (see Table 8.5). The majority of individuals below 30 years of age were first-time job seekers, probably holding out for regular waged employment in the government sector. A pronounced rate of unemployment among youth is a pattern that can be traced back to 1976 (by looking at the PC 1986) and appears to persist throughout 1986–95 (see Figure 8.2). The proportion of unemployed individuals in the age groups 20–29 fluctuated around 76 percent of the total unemployed for most years during 1986–95.

This pattern was reflected in the 1996 PC. According to Fergany (1999), almost all the unemployed in 1996 were first-time job seekers, but a shift occurred in the age structure over the intercensal period, with unemployment rates for individuals below the age of 30 declining and those in the early 30s increasing. This probably indicated a lengthening of the unemployment period, which lasted more than five years for this group according to LFSS 1995. The high incidence of first-time job seekers among such older age groups indicated the stock of the

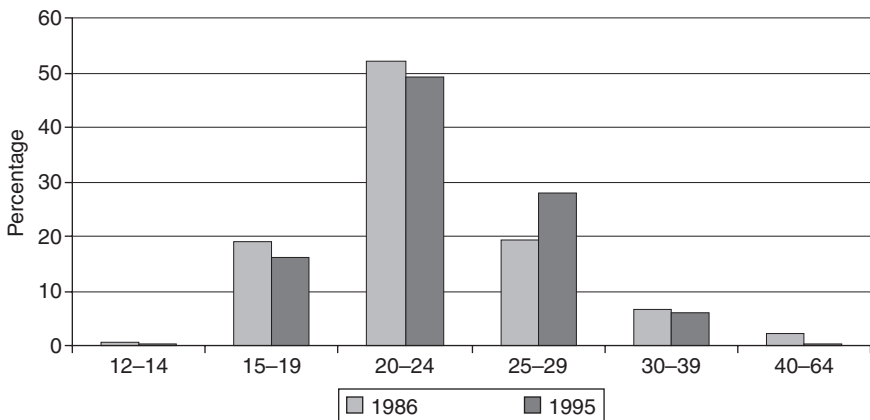


Figure 8.2 Unemployment rates by age, 1986 and 1995 (percent) (source: Gautier (1997)).

Table 8.5 Unemployment by age categories, LFSS 1995 (thousands and percent)

	6-	12-	15-	20-	25-	30-	40-	50-	60-	65+
Employed ('000s)	70	267	1,040	1,360	1,940	4,280	3,589	2,193	538	410
Waged employment (%)	34.3	37.1	43.1	54.3	63.4	64.4	58.0	52.6	20.6	10.0
Unemployment rate (%) <i>of which:</i>	1.5	2.4	21.5	39.0	20.4	2.4	0.2	0.1	0.1	0.1
First-time work seeker (%)	100.0	71.4	96.1	97.9	94.8	84.1	0.0	0.0	0.0	0.0
Average duration of unempl. (mths)*	-	20.2	18.4	37.7	65.3	68.5	16.3	49.5	90.0	-

Source: Fergany (1996).

Note

*Defined for the age group 12-64.

unemployed to be increasingly formed of individuals in older unemployment cohorts still searching for their first job.

Unemployment by educational attainment

To an important degree, unemployment towards the end of the twentieth century was a phenomenon of graduates of intermediate and above intermediate education (Table 8.6). The position of these groups appeared to have worsened since 1986. (see Figure 8.3). In 1995, holders of intermediate diplomas suffered unemployment rates three times the aggregate rate, with spells of unemployment of up to four years. Almost all of them were

Table 8.6 Unemployment by educational attainment (ages 12–64), 1986–95 (percent)

	1986	1987	1988	1990	1991	1992	1995
Illiterate	10.5	3.1	21.9	12.9	3.7	1.2	1.6
Reads and writes	4.9	3.2	8.5	4.1	1.7	1.0	1.4
Below intermediate	3.9	2.8	12.5	8.4	3.5	1.2	1.4
Intermediate	57.3	57.3	40.0	53.3	66.8	70.4	74.6
Above intermediate	5.3	7.7	4.7	6.8	8.2	9.1	8.4
University	18.0	25.9	12.4	14.6	16.0	17.0	12.6
All ('000s)	1,426	1,354	1,303	1,345	1,397	1,416	1,774

Source: Assaad (1997).

Notes

1988 data refer to unemployed 10+ rather than 12–64. The total number of unemployed below age 12 and above 64 is 37,000.

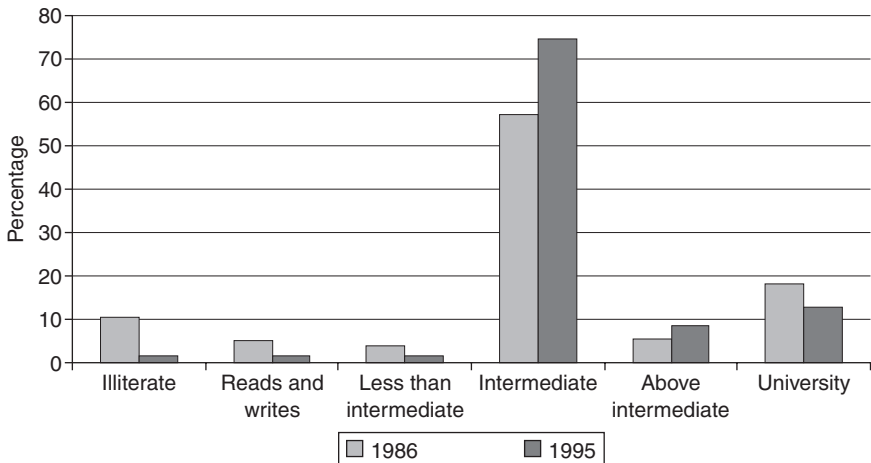


Figure 8.3 Unemployment rate by educational attainment, 1986 and 1995 (percent) (source: Table 8.6).

first-time job seekers. The proportion of holders of intermediate degrees among the unemployed increased from 53 percent in 1990 to nearly 75 percent in 1995. This was in sharp contrast to the almost negligible unemployment rates for individuals with little or no education and suggests a negative correlation between education and unemployment, at least within a certain range, referred to in studies such as Fergany (1992). This contrasts with the almost negligible incidence of illiterates and low-level education holders among the unemployed.

Based on the ELMS 1998, Assaad (1999) reported a substantial increase in unemployment rates for educated rural males, especially at the intermediate and above intermediate levels, while urban males at all educational levels saw virtually no change in unemployment rates between 1988 and 1998. A similar pattern was discernible for rural women as their male counterparts, albeit at higher levels of unemployment, and with peak increases in unemployment occurring at the post-secondary and university levels, instead of the intermediate level.

Underemployment and discouraged unemployment

Data on open unemployment in Egypt appear to capture employment inadequacy mainly among young educated individuals. Individuals with little education, skills, or qualifications often suffer from another type of employment inadequacy, namely underemployment, visible or invisible. Underemployment is a more difficult concept to measure directly, and proxy indicators are therefore used.

Based on the 1988 LFSS, Fergany (1996a) found a net visible underemployment of 1.6 percent of the norm to exist in 1988, but with strong gender and geographic differentials.¹² Whereas males were visibly overemployed by about 12 percent, females were visibly underemployed by more than 24 percent. Moreover, workers in rural areas were as much visibly underemployed as urban workers were overemployed, with rural females being 30 percent visibly underemployed compared to urban males who were 17 percent overemployed. Male overemployment increased steadily with age after 15 years, and although overemployment was manifest at all educational levels, it was highest for unqualified males. Female underemployment, on the other hand, declined significantly with educational attainment, the turning point being intermediate education.

Using the ELMS 1998, Assaad (1999) measured underemployment and discouraged unemployment using a composite index, the underemployment ratio¹³ (see Table 8.7). At the overall level, about 7.5 percent of the working age population was underemployed in both 1988 and 1998. However, there was a shift in underemployment from involuntary part-time employment in 1988 to open unemployment in 1998. Discouraged unemployment increased between 1988 and 1998, but only for males in both urban and rural areas, although the rates for females were higher on

Table 8.7 Underemployment ratio by gender, urban/rural residence, 1988 and 1998 (percent of working age population 15–64)

		<i>Urban</i>		<i>Rural</i>		<i>Total</i>	
		<i>1988</i>	<i>1998</i>	<i>1988</i>	<i>1998</i>	<i>1988</i>	<i>1998</i>
Male	U	4.4	4.9	1.9	5.3	3.1	5.1
	DU	0.4	0.8	0.3	0.9	0.3	0.8
	IPT	4.3	1.9	8.0	5.0	6.3	3.6
	<i>Total</i>	9.0	7.6	10.2	11.2	9.6	9.6
Female	U	4.9	5.3	1.9	3.6	3.3	4.3
	DU	0.8	0.8	0.5	0.6	0.7	0.7
	IPT	0.7	0.2	2.8	0.6	1.8	0.4
	<i>Total</i>	6.3	6.3	5.1	4.7	5.7	5.4
Total	U	4.6	5.1	1.9	4.5	3.2	4.7
	DU	0.6	0.8	0.4	0.7	0.5	0.8
	IPT	2.5	1.1	5.4	2.8	4.0	2.0
	<i>Total</i>	7.7	6.9	7.6	7.9	7.6	7.5

Source: Assaad (1999) based on LFSS 1988 and ELMS 1998.

Notes

U = open unemployment

DU = discouraged unemployment

IPT = involuntary part-time work, available

average. Assaad also found involuntary part-time work (IPT) to be more associated with men than with women, because more men tended to be casual workers. This category of workers is typically uneducated and most likely to suffer from underemployment. The significant drop in the IPT rate for males in urban and rural areas between 1988 and 1998 was taken as an indication of improved employment conditions for male casual workers. Coupled with the observed declining trend in open unemployment rates registered for individuals with little education (Table 8.6), this seems a reasonable interpretation.

However, other factors may be at work. The concurrent rise in open unemployment during the same period may be an indication of the inability of the labor market to provide productive employment opportunities, even through part-time work arrangements. Individuals unable to find productive part-time employment opportunities either move to the ranks of the openly unemployed, or become “discouraged unemployed.” The rise in discouraged unemployment during the same period, especially for males, and the relatively high and sustained rates for females, suggests that this may indeed be the case. Moreover, the rise in discouraged unemployment among males, compared to its stability for females, support Fergany’s (1995) view about rising discouraged unemployment to underlie the declining trend in male participation observed over the past few years. The rise in open and discouraged unemployment and the decline

in IPT combined to produce a slightly lower overall underemployment ratio in urban areas in 1998 and a higher ratio in rural areas, compared with 1988.

The LFSS 1988 also provided information on factors affecting employment decisions, specifically those related to desire to change the main job. Less than 10 percent of respondents reported a desire to change their main job, with the percentage being higher among males in urban areas (12 percent) and lowest among rural females (only 2 percent). A “more secure future” topped the list of reasons for desire to change, followed by a “less tiring” job, which were both more frequent in rural than in urban areas. In the third and fourth places came reasons of “raising income” and attaining a better “correspondence” between qualification and work.

This evidence also points to the importance, if not predominance, of job security in making employment decisions among workers in Egypt. The long queues of young graduates for government jobs are therefore not surprising. What is more troubling, however, is the expectation of low work effort, or low productivity, associated with a presumably secure government job (the “less tiring” job reason). Such non-pecuniary aspects of government jobs create a wedge between private and public wages in the economy by raising the effective level of real wages above those of the private sector.

Unemployment and demographic pressure

Pressure on employment is likely to continue from demographic factors, more so for rural areas than for urban, where fertility declines set in earlier. Demographic data from CAPMAS (1999) show the cohort of 10–19 year olds to be at historical highs, experiencing the fastest growth rate (3.3 percent per annum) between 1986 and 1996. Once this group completes its transition to the 20+ age group, the age of labor market entry, it will put additional pressure on the employment-generating capacity of the economy. Thereafter, labor pressures are expected to subside, as the share of the younger cohort of individuals less than ten years of age is declining.

Assaad (1999) reports a similar pattern of age cohorts in rural and urban areas, suggesting that over the next decade or so demographic factors would continue to generate pressures on employment in rural areas. However, as a result of the increasing educational attainment of new entrants, it is possible that current demographic pressures might translate into open unemployment, since educated workers are more likely to hold out for regular salaried employment, and remain unemployed, compared with their uneducated counterparts, for whom labor surplus is manifested in underemployment rather than open unemployment.

In sum, open unemployment continued to be concentrated among educated youth under the age of 30, most of whom were new entrants to

the labor market, with holders of intermediate diplomas experiencing the highest unemployment rates. Urban unemployment was fairly stable, but rural unemployment increased substantially, especially in Lower Egypt and for educated females. The longest spells of unemployment were for educated youth aged 25–30 in rural areas. For governorates in Upper Egypt, underemployment was a major problem.

A number of interrelated factors have translated past government policies into the perverse unemployment patterns that characterized Egypt's labor market at the end of the twentieth century. Referring to LFSS 1961, Assaad *et al.* (1999) pointed out that at least at the beginning of the 1960s, unemployment was inversely related to education. Unemployment rates were highest for illiterates, followed by those with intermediate (secondary) education (6 percent) and least among university graduates (3 percent). By 1975, with the inception of the open-door policy, the current pattern of unemployment had emerged. Government employment policies, especially the employment guarantee programs for graduates of intermediate and university education, seems to have influenced the educational threshold at which the open unemployment bottleneck appears, namely, intermediate education. The indirect suspension of this program since the early 1990s through the lengthening of the waiting period for appointment has led to young graduates queuing for periods of up to six years, with a resulting increase in their measured unemployment rates. While a portion of unemployed males in urban areas was absorbed into the private sector, educated females had a harder time. A set of social, institutional, and behavioral factors have combined to make the private sector virtually inaccessible to women, especially in rural areas. The slow-down in the growth of government employment therefore seems to have disproportionately affected young educated females in rural areas, whose unemployment rates soared in the mid-1990s.

Trends and patterns in employment growth, 1960–2000

This section examines trends and patterns in the evolution of employment over the past four decades. Owing to inconsistencies between the employment figures from the PC and unemployment figures and labor force sizes from other sources, the present analysis concentrates on broad trends (rather than on sub-sectoral details) in the evolution of employment between 1960 and 2000.

Employment growth by sector of economic activity and sector of ownership are considered first, with specific attention to the composition of sectoral employment growth, especially that of the informal sector. The impact of the government's policies of guaranteed employment on observed employment outcomes is then discussed.

Trends in employment*Employment growth by sector of economic activity*

Based on the PC, employment in 1996 stood at 15.8 million, up from 7.7 million in 1960, 10.3 million in 1976, and 12.2 million in 1986 (see Table 8.2). Employment grew at a rate of 1.77 percent over 1976–86 and accelerated to 2.54 percent over 1986–96 (with most growth occurring in 1986–90), but was still below the growth rate of the labor force for both intercensal periods (on average 2.9 percent per year). The sectors driving the growth employment in 1986–96 were manufacturing, followed by financial services and construction.¹⁴

During the period 1960–86, growth in employment was accounted for primarily by urban employment, which increased at almost twice the national average. This pattern was reversed in 1986–96 and rural employment grew slightly faster than the aggregate rate. In both 1986 and 1996, the major part of employment (54 percent) remained in rural areas. Employment data from the LFSS are generally consistent with the PC after 1986. Data from Fergany (1996a) and Assaad (1997) show overall employment in 1995 at 15.2 million for individuals aged 12–64 and 15.7 million for non-age-restricted individuals (6+). With the exception of 1986–90, the growth rate of employment consistently fell short of the growth rate of the labor force. Employment grew by only 1.4 percent during 1991–95, because of poor economic performance of the early 1990s, which consequently saw an escalation of the unemployment rate.

Female employment grew rapidly in both urban and rural areas, but of course from a much smaller base. Female employment represented only 15 percent of total urban employment in 1986 and 18 percent in 1996; for rural females these shares were even smaller: only 4 percent and 9 percent, respectively.

Figure 8.4 shows the evolution of shares of main economic activities over the period 1960–96. In 1996, agriculture accounted for 31 percent of employment – dropping from 60 percent in 1960 – and was still the most important activity, followed by services (24 percent), manufacturing (14 percent), commerce and tourism services (10 percent), and construction (8 percent).

AGRICULTURE

Despite its decline in the share of employment, agriculture still provided jobs to over half the male population and almost 30 percent of the female population in rural areas in 2000. The growth rate of agricultural employment was negative for rural males during 1976–86 because of migration to urban areas in the construction sector or to Arab oil-producing countries, with a slight rebound during the following ten-year period. Radwan

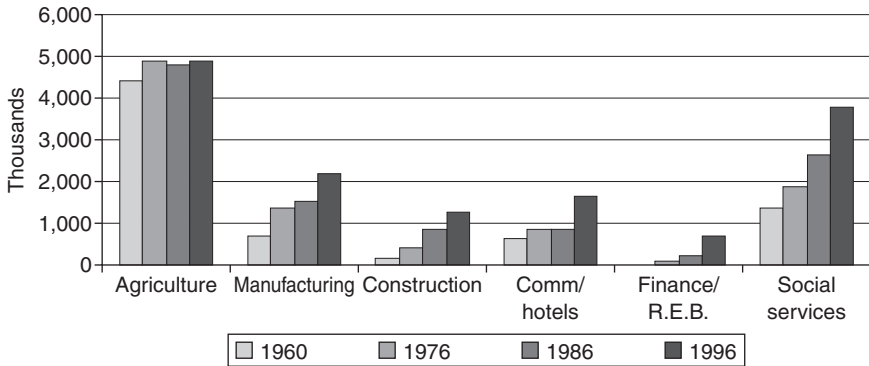


Figure 8.4 Employment growth by sector, 1960–96 (thousands) (source: based on Population Census 1960, 1976, 1986 and 1996 in CAPMAS, *Statistical Yearbook 1997 and 1999*).

(1997) attributes this increase in agricultural employment to the shift to high-value, labor-intensive crops (such as vegetables and fruits) that occurred in the early 1990s, and the re-emergence of family farms, resulting from a favorable shift in agricultural terms of trade. The data show huge fluctuations in growth rates of female agricultural employment in rural areas (from a negative 3.8 percent in 1976–86 to a positive 7.8 percent in 1986–96), reflecting measurement issues referred to earlier.

MANUFACTURING

This was an important generator of employment, accounting for more than 25 percent of jobs created during 1960–76 and almost 20 percent during 1986–96. This sector grew at a rate of over 4 percent per year during 1960–76, reflecting the huge injections of public investment during the Nasserist era and the early years of the “open-door” policy. Growth in manufacturing slowed down during 1976–86 to a little over 1 percent per year. Handoussa (1991a) ascribes two reasons for this slow-down.

The first was the government’s relaxation of hiring policies in the public enterprise sector, which eventually enabled it to start shedding surplus labor.¹⁵ The second was the increasing mechanization in industry driven by the sharp rise in wages relative to other factors of production. The wage increases resulted from the growing scarcity of skilled industrial labor caused by the emigration of such workers to the Arab countries, together with rigid wage policies in the public sector. These two factors encouraged the adoption, especially by new establishments, of machinery that reduced dependence on labor. Growth in manufacturing picked up to an average of 3.6 percent a year during 1986–96.

CONSTRUCTION

This was another important sector, growing at an average rate of over 7 percent per year during 1976–86 and accounting for nearly a quarter of total employment created during this period. Growth in this sector was driven by the construction boom of the early 1980s, which also absorbed labor shed by agriculture. As the construction boom subsided, the sector grew at a more modest pace of 4 percent per year during 1986–96. Nevertheless, the share of construction in total employment grew steadily from 2 percent in 1960 to 8 percent in 1996.

FINANCE AND BUSINESS SERVICES

The finance and business services sector's growth rate of 10 percent a year during 1976–96 made it the second largest contributor (after manufacturing) to total employment created during 1986–96, even though it still represented only 5 percent of total employment in the latter year. Women accounted for 31 percent of total employment in this sector in 1996, as opposed to only 9 percent in manufacturing.

COMMERCIAL SECTOR

An assessment of the performance of the commercial sector (commerce, restaurants, and hotels) based on the PC is more ambiguous, because additional categories of classification were introduced in 1996. Despite the large increase in this sector's share in total employment during 1986–96, Radwan (1997) reported a negligible contribution of the tourism sector to employment generated between 1990 and 1996. He attributed this result to a measurement bias towards formal types of employment, which ignored the huge numbers informally employed in the tourism sector.

The distribution of employment by economic activity in 1995 based on the LFSS largely mirrored that of the PC (Figure 8.5). Agriculture accounted for a third of total employment, followed by services (26 percent) and manufacturing (14 percent). The figure also shows the predominance of waged employment in certain sectors, such as electricity, mining, and services, which are most likely to be government-owned or publicly run. The proportion of waged employment was lowest in sectors such as trade (only 31 percent), which are most likely to comprise private self-employed and small-scale activities in the informal sector.

Employment growth by sector of ownership

The government remained the main generator of non-agricultural employment in the economy. According to the PC, government share in total employment increased from 17.7 percent in 1976 to 22.0 percent in



Figure 8.5 Employment by economic activity, LFSS 1995 (12–64) (thousands) (source: based on Fergany (1996a)).

1986. Government employment grew at an average yearly rate of 3.7 percent – the highest over the period, and more than twice the rate of growth of total employment. This growth was associated with increasing feminization of government and public sector employment. Between 1976 and 1986, female employment grew at 9 percent per year in the government sector and 5 percent in the public sector. The government alone absorbed about half the increase in female employment between 1976 and 1986. Data from Assaad (1999) show that between 1988 and 1998, educators (teachers) were the fastest growing group among government workers, growing at 7 percent per year and contributing to a third of the total growth in government employment. This could reflect continued pressure to hire graduates despite the stated suspension of the employment guarantee program. The share of the public enterprise sector grew modestly from 9.5 percent to 10.3 percent, accounting for almost 15 percent of growth in total employment and 17.0 percent of that in male employment.

The private sector experienced mixed fortunes. Although accounting for the highest share in employment for both years, agriculture was a net loser of jobs, especially for males. Between 1976 and 1986 it lost a total of 348,000 jobs, with a corresponding decline in share from 48 percent to about 39 percent.

The private non-agriculture sector grew almost as rapidly as the government sector, its share increasing from 25 percent in 1976 to nearly 30 percent in 1986. Absorbing labor shed from the agricultural sector (21 percent), the private non-agriculture sector accounted for almost 60 percent of employment growth during 1976–86, most of it in the informal sector. Employment in this sector exhibits strong gender patterns. Unlike

the government sector, male employment dominated the private non-agricultural sector, which accounted for 30 percent of total male employment in 1986 and almost 75 percent of the growth in male employment between 1976 and 1986. Male employment grew at three times the rate of female employment (4.7 percent and 1.6 percent, respectively) and was more evenly distributed across the different activities. Female employment, on the other hand, was concentrated in manufacturing, trade and tourism, and finance and insurance activities.

The gender bias carried over to the type of job protection associated with employment in this sector.¹⁶ The majority of jobs created between 1988 and 1998 were not legally protected (66 percent), and if the irregular jobs are added, this proportion rises to 80 percent. Regular protected employment grew much faster for males than for females (5.6 percent and 1.1 percent, respectively). In fact, unprotected regular employment dominated the pattern of female employment growth (93 percent) during the ten-year period (Assaad 1999). Growth in the private sector is therefore more likely to be associated with a rise in unprotected employment.

Table 8.8 documents the growing role of government employment (including public sector enterprises) in the economy. Government administration, public sector enterprises, and the informal sector were the main sources of labor absorption in the economy during the 1980s and up to the early 1990s. Migration was also an important vent for labor surplus at the time, accounting for (according to the CAPMAS 1985 emigration survey) about 1.2 million workers, or almost 9 percent of the labor force. Domestically, government employment grew at an average of 8 percent during 1977–84, and together with the public enterprise sector, accounted for 54 percent of total non-agricultural employment and a third of total employment in the economy in 1984. The government sector grew at a considerably lower rate during 1984–92, reflecting the general slowdown in the economy. But at 4 percent per year, employment in this sector grew at double the overall growth in employment (2 percent), with government employment maintaining its shares in overall employment in 1992. The public enterprise sector grew rapidly between 1977 and 1981, but employment in the sector slowed down considerably thereafter, as the public enterprises were removed from the centralized manpower allocation system in 1978 and given the right to set their own employment levels. This was reinforced by the downsizing of the sector in the economic adjustment program of the early 1990s.

More importantly, the table indicates the inadequacy of the private formal sector as a generator of employment, with the burden placed, by default, on the informal sector. Although the private formal sector, composed of establishments employing ten or more people, expanded at impressive rates during 1977–92, it accounted for only 3.4 percent of total employment and 5.6 percent of non-agricultural employment in 1992. On the other hand, the informal sector, which includes establishments with

Table 8.8 Sectoral structure of employment, 1 1977–92, ages 12–64 (millions and percent)

Sector	Millions						Structure (%)						Av. annual growth rate (%)		
	1977	1981	1984	1992	1977	1981	1984	1992	1977–81	1981–84	1984–92				
Agriculture	reported	4.2	4.0	4.8	5.5	—	—	—	—	—	—	—	—	—	
	adjusted ²	5.3	5.4	5.4	5.8	51.5	47.5	43.5	39.6	0.2	0.1	0.9	—	0.9	
Manufacturing, mining, and utilities		1.4	1.7	1.8	2.2	13.8	14.7	14.2	15.0	3.9	1.9	2.8	—	2.8	
	Of which public enterprise	0.7	0.7	0.7	0.8	(6.4)	(6.2)	(5.8)	(5.7)	1.6	0.6	1.8	—	1.8	
Of which private 10+	0.1	0.2	0.2	0.3	(1.4)	(1.4)	(1.5)	(2.0)	2.2	4.7	6.0	—	6.0		
Residual (informal sector)	0.6	0.8	0.9	1.1	(6.0)	(7.1)	(7.0)	(7.4)	6.5	2.5	2.8	—	2.8		
Construction	0.3	0.5	0.6	0.9	3.2	4.6	4.9	6.0	10.8	5.6	4.6	—	4.6		
Services	3.2	3.6	4.3	5.8	31.4	31.6	34.5	39.3	2.4	6.0	3.7	—	3.7		
Non-agricultural employment		5.0	5.9	7.0	8.9	48.5	52.5	60.4	4.3	5.6	2.9	—	2.9		
	Of which government	1.5	2.0	2.5	3.5	(14.2)	(17.5)	(20.4)	(23.7)	7.4	8.2	4.0	—	4.0	
Of which public enterprise	1.0	1.2	1.3	1.4	(10.1)	(10.7)	(9.6)	(9.6)	3.6	2.9	0.8	—	0.8		
Of which private 10+	0.2	0.2	0.3	0.5	(2.1)	(2.2)	(3.2)	(3.2)	3.1	7.8	5.1	—	5.1		
Residual (informal sector)	2.3	2.5	2.9	3.5	(22.0)	(22.1)	(23.9)	(23.9)	2.5	4.4	2.5	—	2.5		
Total domestic employment	reported	9.2	9.9	11.8	14.4	2.5	—	—	—	—	—	—	—	—	
	adjusted	10.3	11.3	12.4	14.7	100.0	100.0	100.0	100.0	2.3	3.1	2.1	—	2.1	
Unemployment		0.3	0.6	0.8	1.4	2.8	4.8	5.7	8.8	16.5	9.3	7.8	—	7.8	
	Total domestic labor force	reported	9.5	10.5	12.6	15.8	—	—	—	—	—	—	—	—	
	adjusted	10.6	11.9	13.2	16.1	—	—	—	—	2.8	3.4	—	—	2.5	

Source: Assaad (1997) using the following *statistical sources*. Main source: CAPMAS, LFSS (1977, 1981, 1984, 1992); exception includes:

- Government employment for 1977 is estimated based on share in 1976 census.
 - Public enterprise employment for 1977, 1981, 1984 is from Zaytoun (1991) and is based on figures from the Public Enterprise Information Center (PEIC). Estimate for 1992 is from LFSS.
 - Manufacturing employment in Public Enterprises is from Handoussa (1991a) and is based on data from PEIC. Estimate for 1992 is based on share of manufacturing calculated from PEIC data.
 - Private 10+ employment is from CAPMAS, Employment, Wages and Hours of Work Bulletin (various years). Figures for 1981 were interpolated.
- N.B. Several sources were used to compile this table. Due to possible inconsistencies between sources, estimates are only indicative of underlying trends.

Notes

- 1 As a proportion of adjusted total employment, except for unemployment which is given as a proportion of adjusted labor force.
- 2 Agricultural employment was adjusted, setting the ratio of female employment to the female manpower basis (12–64) at the 1991 level.

less than ten workers and employment outside establishments, has been an important sector for labor absorption, especially since the mid-1980s, accounting for almost a quarter of total employment and over 40 percent of non-agricultural employment in 1992. Indeed, the informal sector has accounted for nearly as many jobs as the government sector (excluding the public enterprises) both in 1984 and 1992 (almost 24 percent).¹⁷ The slowdown in the growth of this sector in the early 1990s may be an indication of saturation, and expectations of the informal sector as a main absorber of labor in the future may be misplaced.

Table 8.9 updates the distribution of employment growth up to 1998. Assaad (1999) reports that the government sector was still the fastest growing and largest contributor to employment creation. Between 1988 and 1998, while the public enterprise sector divested itself of labor, government employment continued to grow at 4.8 percent per year – double the rate of growth of overall employment. Female government employment grew at higher rates than male employment. Growth in agricultural employment was slower than in any other sector during 1988–98, while growth in private non-agricultural employment was maintained at roughly 3 percent per annum, and was confined almost exclusively to males. Male wage employment in this sector grew at a faster rate than employment in the rapidly growing government sector, while the decline in female employment occurred in the non-wage part of the sector.

The foregoing pattern of sectoral and gender employment indicates that the private non-agricultural sector has offered employment overwhelmingly to the male portion of the labor force. Educated females rely increasingly on government employment. Assaad *et al.* (1999) discuss a number of factors that curtail women's employment in the private non-agricultural sector. First, Egypt has had limited success with the promotion of labor-intensive export industries, which have absorbed young female labor in other countries. Second, labor laws in Egypt impose a number of female-specific mandates on employers, including generous maternity leaves and child care provisions, which increase the costs of hiring women. Third, private employers commonly perceive women to be less attached to jobs, pointing to high rates of absenteeism and a lack of willingness to work long hours. Fourth, a variety of social norms prevent women from engaging in casual wage labor or self-employment. These factors raise the barriers to entry of females into the private sector, and make government the employer of last resort for young educated women. With the effective suspension of the program of guaranteed employment since the mid-1980s, educated females find it increasingly difficult to find suitable wage employment. Those who cannot find suitable employment in the government sector join the ranks of the open unemployed.

Table 8.9 Sectoral distribution of employment growth by gender, 1988–98 (percent)

Sector	Male		Female		Total	
	Share of growth	Annual rate of growth	Share of growth	Annual rate of growth	Share of growth	Annual rate of growth
<i>Public sector</i>						
Government	55.6	4.5	28.1	5.4	41.8	4.8
Public enterprises	-11.2	-2.3	-2.9	-4.1	-7.0	-2.6
Sub-total public sector	44.4	2.6	25.2	4.3	34.7	3.0
<i>Private agriculture</i>						
Wage work	2.7	0.6	-3.5	-6.3	-0.04	-0.2
Non-wage work	-28.6	-3.1	82.4	4.4	27.4	1.9
Sub-total private agriculture	-25.9	-1.9	78.9	4.1	26.9	1.6
<i>Private non-agriculture</i>						
Wage work	61.0	4.7	2.6	1.6	31.6	4.3
Non-wage work	20.5	2.6	-6.8	-2.7	6.7	1.3
Sub-total private non-agr.	81.5	3.9	-4.1	-1.0	38.3	3.0
Total	100.0	1.9	100.0	3.4	100.0	2.5

Source: Asaad (1999); statistical sources: LFSS (1988) and ELMS (1998).

The government employment guarantee program

The government has been an important generator of employment in the Egyptian economy since the early 1960s, and its policy of providing employment for university graduates has had a far-reaching impact on the workings of the labor market. Several writers – e.g. Handoussa (1991a), Radwan (1997), Assaad (1995, 1997, 1999), Fergany (1991), Karshenas (1994) – have identified government employment policies as the root causes for various phenomena observed in the labor market today, such as the mismatch between educational outcomes and skills, inefficiencies in production in both public and private sectors, and patterns and levels of unemployment. The following account of the government's employment guarantee program and its development within the broader economic framework over the past three decades or so owes much to Assaad's (1995) important study, which models the effects of public sector hiring practices on employment and wage setting in the labor market.

The employment guarantee program (EGP) began in 1961 as part of the extensive nationalization and employment drives of the Nasser regime, essentially guaranteeing employment to university graduates. This guarantee was later extended in 1964 to include graduates of vocational secondary school and technical institutes. These policies were matched by efforts to expand access to higher education, in an attempt to replace expatriate labor that left the country after the Suez Crisis in 1956. Coupled with the abolition of fees for higher education in 1963, the EGP led to a surge in the demand for education in general, and higher education in particular. Assaad (1995) reports that enrolment in higher education increased from 50,000 in 1953 to over 97,000 in 1962. Moreover, since establishing a university place in science or engineering cost about five to six times that of a place in general arts subjects, the bulk of admissions occurred in the latter fields. Graduates applied to the Ministry of Manpower and Training, which then allocated them to different government authorities, including public sector enterprises. In 1978, the public enterprise sector was divorced from this policy and was allowed more flexibility in hiring practices. Thereafter, the brunt of the graduate employment scheme fell entirely on the government (civil service).

The government employment drive was sustained by huge inflows of revenues in the 1970s and early 1980s from the Suez Canal, oil exports, workers' remittances, and tourism, which together accounted for about 45 percent of GDP in the early 1980s. Government employment in 1976–86 grew faster than any other sector and at more than twice the overall growth rate of employment. The result was overstaffing of the government bureaucracy, and a skewing of the mixture towards graduates of intermediate education, with unfortunate consequences for productivity. In fact, Assaad (1996b) estimated marginal productivity in the government as negative, or at best zero. While there appeared to be a "shortage" of

university graduates for government appointments between 1976 and 1983, appointments of applicants with intermediate education consistently exceeded the numbers requested by the different government departments; Fergany (1991) calculates that the number of appointments in 1982 was 2.6 times the number requested.

The economic burden of such a policy was unsustainable, and while the government did not publicly announce a suspension of the EGP, it did so in practice by prolonging the waiting period for appointment. Assaad (1995) reports that in 1995, the last cohorts of graduates appointed in the government were those of 1983 university graduates and 1982 of vocational secondary and technical institute graduates, with a waiting period of at least five years for the first group and six years for the second.

Assaad (1995) contends that such a policy resulted in two undesirable outcomes. The first was the long queuing by graduates for government employment. In order to be eligible for government employment under the EGP, a graduate was required to be unemployed.¹⁸ Those in the queue for government jobs, therefore, had necessarily to list themselves as unemployed, thus elevating the observed unemployment rates among graduates. The second was adverse selection into government employment because of the first-come-first-served hiring practice. With longer waiting periods, the better qualified graduates were more likely to find employment in the private sector and drop out of the queue, leaving for the government only those who were not able to secure a job elsewhere. The result was a systematic overstaffing of government bureaucracy at low levels of skills and productivity. There are indications, however, that some graduates retained their position in the queue while working in the private sector, in order to qualify for the more secure employment in the government sector.

The EGP also contributed to a higher feminization of the government workforce. This may reflect discrimination against educated women in the private non-agricultural sector, but it may also reflect a greater preference among females for the stable and protected jobs in the government. This is evidenced by the impressive growth rate of female government employment during 1976–86 and the significant share of government in overall female employment. Educated females are also more likely to remain in the job queue, which is reflected in the higher open unemployment rates recorded for females. Among educated females, those with vocational secondary education (especially those with diplomas in commerce) were the least able to find employment.

Government employment policies distorted wage-setting mechanisms in the labor market. Assaad (1995) argues that the magnitude of government sector employment, coupled with the non-market determination of public sector wages, affected wages in the private sector in two ways. First, wages and benefits set for government employees acted as a floor for wages expected by graduates in other sectors in the economy, which artifi-

cially raised the relative cost of their labor and reduced their employability in the private sector. Second, by setting a wage floor for graduates in the public sector, the demand for intermediate and university education was artificially inflated, encouraging a shift of resources to these educational levels at the expense of basic education.

Zaytoun (1991) showed that, with the exception of manufacturing and services, government wages were lower than wages in the private sector. However, after correcting for observed and unobserved differences in wages and properly accounting for non-pecuniary benefits, Assaad (1995) estimated that government wages could be comparable with, and might even exceed, private sector wages.¹⁹ Non-wage benefits included lower work effort, access to subsidized commodities and housing, access to rents, and opportunities for moonlighting – practices tacitly tolerated as a means of supplementing falling real government wages.²⁰ Coupled with the premium on job security, as well as pension and disability benefits, the attraction of a government job to a graduate becomes evident. While wages in the private sector were higher for males at all education levels, empirical and econometric studies suggest that the premium received by private sector workers was insufficient to offset the margin in non-wage benefits.

The story was slightly different for females, who faced larger gender wage gaps in the private sector. Given more egalitarian wage-setting practices in the government sector, females with secondary and vocational education developed a preference for government employment, and hence their overrepresentation in this sector, while females with university education and higher faced fewer discriminatory barriers in the private sector. The private–public wage gap was largest for graduates of secondary and vocational education, which induced more of them to queue and hence explains the higher unemployment rates observed for this category. The sizeable proportion of non-pecuniary benefits of government wages, through its effects on wages in the economy at large, further acted to reduce estimated overall rates of return to education in Egypt, reported in studies such as Radwan (1997). The returns to primary and lower education were estimated at 5 percent, those to university education at 2 percent, while those for technical and vocational (intermediate) education were negative. Intermediate education therefore appears to be the threshold at which the government employment guarantee program has its greatest distortionary effects.

The unemployment problem in Egypt: policy failures or institutional constraints?

Unemployment in Egypt in 2000 was characterized by four features. First, it was essentially a problem of the youth, with unemployment for the 15–29 age group standing at 84 percent, the majority of them being first-time job seekers. Second, unemployment was concentrated among

graduates of intermediate education, who accounted for nearly 55 percent of total unemployment. Third, unemployment remained more of a rural than an urban problem, with 52 percent of total unemployment being attributed to the rural areas. Fourth, a severe gender bias existed, with the unemployment rate among women being double the national average and almost 3.5 times that of males.

Identifying the primary causes of unemployment in Egypt is necessary for the formulation of an appropriate policy to resolve it. While government employment policies have contributed to the observed pattern of unemployment, the growing consensus is that the chief problem is insufficient demand for labor (Radwan 1997, 2002). As suggested by Galal (2002) and Radwan (2002), addressing the unemployment problem in Egypt requires reform of the broader economy by focusing on three main areas. First, the demand for labor must be expanded by promoting labor-intensive growth. This requires maintaining a realistic exchange rate, improving the incentive structure to encourage investment and business growth, removing the anti-export bias that results from high tariff rates, and simplifying labor regulations (the last two factors both tend to favor capital-intensive techniques and therefore reduce the demand for labor). Second, the skills mismatch must be abridged and the supply of labor better aligned with market demand through education reform and effective training. Third, the segmentation of and the rigidities in the labor market must be reduced. These may have artificially raised the reservation wage and made nominal wages sticky downwards, although some evidence by Radwan (1997) suggests that real wages are relatively flexible. A critical issue for job creation in the immediate future is that of labor regulations, which raise the cost of employment but fail to provide protected employment to a large and growing segment of the economy, namely the private non-agricultural and informal sectors.

9 Poverty and income distribution*

Modern investigations of poverty and income distribution in Egypt go back to 1977 and have proliferated in recent years. The principal analyses include Radwan and Lee (1977), Ikram (1980), Ibrahim (1982), Abdel-Khalek and Tignor (1982), World Bank (1991), Korayem (1996), UNDP (1996), El-Leithy and Osman (1996), Cardiff (1997), Radwan (1997), El-Leithy *et al.* (1999), Datt *et al.* (1997, 1999), Haddad and Ahmed (1999), MOP/World Bank (2002), Haddad and Ahmed (2003), and MOP/World Bank (2004).

Each of these studies offers useful insights. However, they frequently differ in approach and methodology, and thus their findings are not always comparable. Nevertheless, some broad conclusions can be derived.

- Poverty increased between 1982 and 1996 and then decreased somewhat by 2000.
- Poverty was relatively “shallow,” meaning that a large number of households were clustered around the commonly used poverty lines. Hence, small differences in the level of the line could significantly change the numerical estimate of the poor.
- The incidence of poverty was greater in rural than in urban areas, and the incidence in Upper Egypt was substantially greater than in Lower Egypt.
- Poverty was associated with self-employment and employment in casual and unclassified activities. Wages were the most important source of income for the poor in both urban and rural areas, followed by agricultural income in rural areas.
- Poverty in rural areas was closely linked to lack of access and/or ownership of productive assets, especially agricultural land, and to agricultural infrastructure services, such as irrigation. Income from transfers, including outside-village remittances, was an important source, especially in rural areas between the mid-1970s and the late 1980s.
- The most important determinant of poverty was education, which was also the most important influence in the intergenerational

transmission of poverty. Demographic factors, especially family size, dependency ratios, and gender of household heads, also contributed significantly to poverty.

- Poverty in terms of capability deprivation worsened *pari passu* with income deprivation. However, subjective interpretations of poverty showed that the poor identified their status more with income shortfalls than with capability shortfalls.
- Poverty characteristics remained relatively unchanged during 1982–96. This led some observers to suggest that poverty in Egypt was chronic rather than transitory.

Trends in poverty, 1982–2000

While the estimates, especially for the earlier years, are not all derived from exactly comparable methodologies, the trend indicates that poverty increased between 1982 and 1996, and then decreased between 1997 and 2000. An idea of the progression is provided by El-Leithy *et al.* (1999), which indicates that the incidence of poverty, using the upper definition of poverty lines, increased from 24 percent in 1982 to 39 percent in 1991 to 43 percent in 1996. Thereafter, according to MOP/World Bank (2002), it dropped to about 17 percent.¹ Since the estimates for 2000 reflect a sudden reversal of a longstanding trend, the two periods, 1982–96 and 1997–2000, are examined separately.

Poverty trends, 1982–96

Although earlier years will be discussed, the main focus of this chapter will be on the period 1991–2000. Most of the studies during this period relied on the Household Income and Expenditure Surveys (HIES) of 1991, 1996, and 2000; and their methodologies, although differing in details, showed more similarities of approach with each other than with the earlier group of studies. The insights of the 1997 survey carried out under the auspices of the Ministry of Agriculture and IFPRI, and the 1999 panel study conducted by the latter organization, will also be used. Table 9.1 summarizes the broad findings of the different studies.

Income/expenditure-based poverty measurements

Poverty estimates have proved sensitive to the poverty line used. However, the evidence is that poverty in Egypt increased between 1982 and 1996 (Table 9.2 and Figures 9.1 and 9.2). El-Leithy *et al.* (1999) estimate poverty incidence to have increased from 23.7 percent to 42.5 percent of individuals between the two dates. Poverty appears to have grown faster over the first half of the 1990s than it did between 1982 and 1991. Rural poverty was higher than urban poverty, although urban poverty was

Table 9.1 Estimates of poverty in Egypt, 1959–96 (percent)¹

	Unit	1959	1975	1977	1982	1991	1996	1997
<i>Urban areas</i>								
World Bank (1990) ²	indiv	–	–	–	21.0	–	–	–
World Bank (1995)	indiv	30.0	34.5	–	22.5	–	–	–
Korayem (1994) ³	hhld	–	–	–	30.4	35.9	–	–
El-Leithy (1994) ²	hhld	–	44.0	–	30.0	35.9	–	–
Cardiff (1997)	hhld	–	–	–	–	12.6	30.8	–
EHDR (1996)	indiv	–	–	–	33.5	39.0	45.0	–
El-Leithy <i>et al.</i> (1999)	indiv	–	–	–	26.0	36.8	42.9	–
Datt <i>et al.</i> (1999)	indiv	–	–	–	–	–	–	23.1
<i>Rural areas</i>								
Radwan and Lee (1977)	indiv	–	–	56	–	–	–	–
World Bank (1990) ²	indiv	–	–	–	25.0	–	–	–
World Bank (1995)	indiv	35.0	44.0	–	24.2	–	–	–
Korayem (1994)	hhld	–	50.9	–	29.7	56.4	–	–
El-Leithy (1994) ²	hhld	–	41.9	–	27.8	34.1	–	–
Cardiff (1997)	hhld	–	–	–	–	32.2	55.2	–
EHDR (1996)	indiv	–	–	–	26.9	39.2	50.2	–
El-Leithy <i>et al.</i> (1999)	indiv	–	–	–	23.0	41.3	41.9	–
Datt <i>et al.</i> (1999)	indiv	–	–	–	–	–	–	29.1
<i>All Egypt</i>								
Cardiff (1997)	hhld	–	–	–	–	20.7	44.3	–
EHDR (1996)	indiv	–	–	–	–	–	48.0	–
El-Leithy <i>et al.</i> (1999)	indiv	–	–	–	23.7	39.1	42.5	–
Datt <i>et al.</i> (1999)	indiv	–	–	–	–	–	–	26.5

Source: See references within table.

Notes

- 1 Poverty estimates based on upper expenditure-based poverty lines, unless otherwise stated.
- 2 Poverty estimates as presented in El-Leithy *et al.* (1999).
- 3 Poverty measurements for 1981/82 are based on income poverty lines.

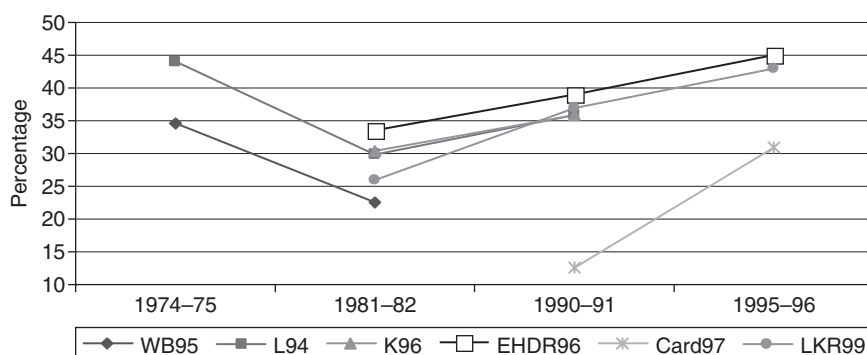
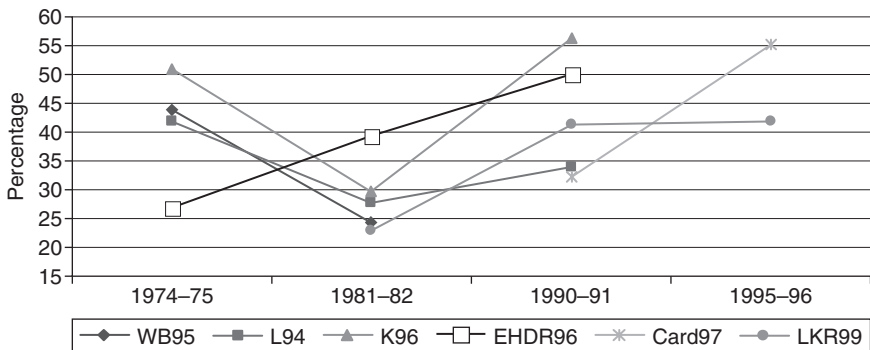


Figure 9.1 Incidence of urban poverty, 1975–96 (percent) (source: based on El-Leithy *et al.* (1999) and UNDP (1996)).

Table 9.2 Poverty measurements, 1982–96 (percent)

	1981/82		1990/91		1995/96	
	Urban	Rural	Urban	Rural	Urban	Rural
<i>Lower poverty line</i>						
Headcount (P_0)	18.2	16.1	20.3	28.6	22.5	23.3
Poverty gap (P_1)	3.5	3.1	4.3	4.5	4.9	4.3
Poverty severity (P_2)	0.9	0.8	1.1	1.4	1.6	1.2
Poverty line at current prices (LE)	138.6	109.7	556.0	423.0	968.4	696.2
Poverty line at 1990/91 prices (LE)	555.0	422.0	556.0	423.0	549.4	430.9
Real per capita expenditure (LE)	1,107.0	733.0	1,088.0	724.0	1,002.0	639.0
<i>Upper poverty line</i>						
Headcount (P_0)	33.5	26.9	39.0	39.2	45.0	50.2
Poverty gap (P_1)	6.5	4.2	10.8	12.0	12.8	12.5
Poverty severity (P_2)	3.5	1.6	4.0	4.5	4.9	4.2
Poverty line at current prices (LE)	182.0	122.0	739.0	502.0	1,326.0	924.0
Poverty line at 1990/91 prices (LE)	729.0	472.0	739.0	502.0	743.0	568.0

Source: UNDP (1996).

Figure 9.2 Incidence of rural poverty, 1975–96 (percent) (source: based on El-Leithy *et al.* (1999) and UNDP (1996)).

deeper. Estimates of rural poverty in 1996 ranged between 42 percent by El-Leithy *et al.* (1999) and 55 percent by Cardiff (1997), while urban poverty ranged between 31 percent (Cardiff) and 45 percent (UNDP 1996). The figures must be taken as indicative of the trend; the precise increase across the two points, especially by urban/rural distribution, is not easy to determine because of the different starting levels of poverty estimated by the different studies.

In studies that provided poverty estimates according to upper and lower poverty lines, such as UNDP (1996) and El-Leithy *et al.* (1999), the urban/rural gap in poverty measurements was generally bigger when the upper poverty line was used (see Table 9.2). The expenditure distribution

in 1996 was relatively flatter, or more equitably dispersed, compared with 1991. Indeed, despite an unambiguous increase in overall poverty between 1991 and 1996, Cardiff (1997), El-Leithy and Osman (1996), and El-Leithy *et al.* (1999) reported an improvement in distribution over the same period, as measured by the Gini index. Lorenz curves and the associated Gini indexes between 1982 and 1996 are shown in Figure 9.3(a–c).

Cardiff reported an overall improvement in the *income* distribution between 1991 and 1996, with greater improvement in urban areas than in rural, which, however, was attributed more to a decline in the share of the top quintile than to an increase in the share of the lowest distribution. El-Leithy *et al.* (1999) found that, based on *expenditure* distribution, the urban distribution remained relatively stable during 1982–96, with a Gini coefficient at about 0.34. Rural inequality seems to have considerably worsened between 1982 and 1991 (Gini of 0.26 and 0.37, respectively), but improved between 1991 and 1996. These figures and other studies suggest that rural poverty (using the lower poverty line) tends to decrease or worsen more in line with improvements or deterioration in distribution than with decreases or increases in per capita consumption levels. In contrast, in urban areas, where inequality is generally higher but has remained fairly unchanged, increases in poverty levels are more likely to result from declines in per capita consumption levels.

The lack of consensus on the magnitudes and location of an improvement in distribution requires some discussion. In addition to the higher rural representation in the 1996 HIES sample, the distributional patterns displayed by the HIES for both data points have been criticized. Korayem (1992), Bartsch (1997), and Fergany (1998a) have pointed to discrepancies between income and expenditure data provided by the HIES and the national income accounts. When aggregated to the national level, income and expenditure figures provided by the HIES are generally lower than those provided through national income accounts.

Fergany (1999) attributes this primarily to the truncation of the distribution at its upper end – richer households frequently are excluded from the survey, either because they refuse to participate or because of under-reporting. The exclusion of the rich from the survey therefore results in greater homogeneity in income and expenditure levels among the non-rich, or a more equitable distribution that is skewed towards lower expenditure levels. This is precisely what is captured by the data in Cardiff (1997), UNDP (1996), and El-Leithy *et al.* (1999).

The picture is significantly altered if the rich are included in the information base. Using the 1991 HIES, Bartsch (1997) attempted to reconcile the survey estimates with national accounts figures by augmenting the expenditure of the highest expenditure brackets, so that total household expenditure as implied by the HIES was consistent with household consumption in the national accounts. This procedure ensured that expenditures at the lower brackets were unchanged.² The resulting

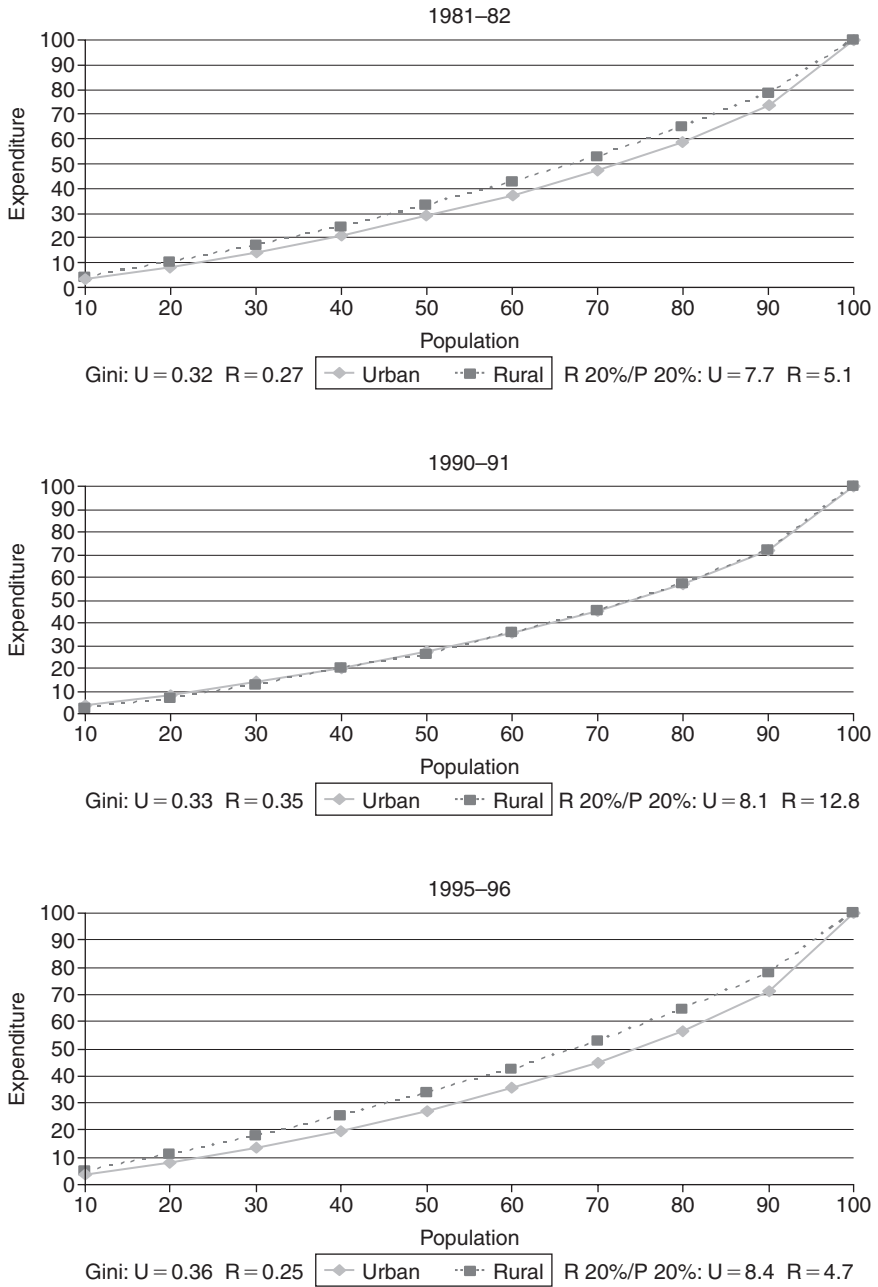


Figure 9.3 Lorenz curves by urban/rural classification, 1982-96 (source: based on El-Leithy *et al.* (1999) and UNDP (1996)).

Note
 R 20 %/P 20 % = ratio of richest 20 % to poorest 20 %.

Lorenz curve was much flatter than that produced by the unadjusted HIES data, implying a worse (more unequal) distribution, especially at the tails. Analyses involving distributionally sensitive measures in rural areas should therefore be interpreted with caution.

The relatively flatter distribution of the HIES 1996, or the apparent clustering of households around the poverty line, has resulted in a number of rank reversals in poverty trends over time. Dominance analysis can help to determine the robustness of poverty measurements to the poverty line used.³

Both the UNDP (1996) and El-Leithy *et al.* (1999) confirmed the existence of trend reversal in rural areas between 1991 and 1996. Specifically, El-Leithy *et al.* (1999) show that the curve for the headcount index in urban areas for 1996 is everywhere above that of 1991 and 1982, which implies that poverty in urban areas rose steadily between 1982 and 1996. In rural areas, however, the curves for the headcount index in 1991 and 1996 crossed at the poverty line value of LE 507.⁴ Thus, for any poverty line below this figure rural poverty in 1996 was lower, and for any poverty line above it rural poverty in 1996 was higher, than in 1991. Conversely, the 1991 line is everywhere above the 1982 line, implying that poverty in 1991 was unambiguously higher than in 1982.

Other indicators of poverty also register an increase in poverty in the first half of the 1990s. For instance, using the World Bank measure of \$1 per day (at 1985 purchasing power parity) per capita, the proportion of poor people in 1994 was estimated at 6.1 percent of the population, up from 5.6 percent in 1990. The World Bank measure is close to the ultra poverty lines developed in UNDP (1996), El-Leithy *et al.* (1999) and Datt *et al.* (1999).

Capability deprivation in the 1990s

Owing particularly to the work of Amartya Sen (1984, 1985, 1992, 1997, 1999) it is now recognized that income deprivation is but one aspect of poverty. A more comprehensive measure would take account of other factors – such as access to education, health care, nutrition, and, indeed, the freedom to make choices – that abridge the capabilities of individuals. As Sen puts it:

A society's standard of living should be judged not by the average level of income, but by people's capabilities to lead the lives they value. Nor should commodities be valued in their own right – they should instead be seen as ways of enhancing such capabilities as health, knowledge, self-respect, and the ability to participate in community life.⁵

If income poverty deteriorated between 1982 and 1996, poverty in terms of capability deprivation fared even worse. The UNDP (1996) estimated a

Capability Poverty Measure for Egypt in 1995 based on: (1) the proportion of children under five who were underweight; (2) the proportion of births unattended by a doctor and/or trained nurse/midwife; and (3) the proportion of female household population age six and over with no education. On the basis of these indices, as can be seen from the last two columns of Table 9.3, Egypt performed worse in terms of human poverty than income poverty.

The figures in Table 9.3 underscore the gravity of the situation in rural areas. The prevalence of chronic undernutrition, reflected by stunting and/or wasting and low height for age, was particularly high among rural children. Access to basic health care services was also severely lacking, with the proportion of unattended births in rural areas more than double that in urban areas. Moreover, the high incidence of female illiteracy reflected deprivation from the means that enable command over resources, which was particularly acute in rural areas. All three measures pointed to a serious shortfall in human capability in rural areas when compared with the income shortfall. On the other hand, relatively greater access to education and basic health services in urban areas contributed to a relatively high capability measure (low capability shortfall). The urban poor suffered more from income shortfalls than from capability deficits.

The Human Development Index (HDI) and Human Poverty Index (HPI), published in the UNDP's *Human Development Report* for 1997 and 2000, further underscore the shortfall in human capital-related indicators. In 1994, the HPI ranked Egypt 44th among 78 countries; on the Human Development Index (HDI), Egypt ranked 109th among 175 countries. While income-based measures of poverty (US\$1 per day in 1985 PPP\$) placed 8 percent of the population under the poverty line, almost 35 percent of the population suffered from human poverty. In 1998, Egypt

Table 9.3 Capability poverty and income poverty, 1995 (percent)

	<i>Underweight children</i>	<i>Unattended births</i>	<i>Females with no education</i>	<i>Proportion people capability poor</i>	<i>Proportion people income poor</i>
Urban	9.9	32.1	20.8	33.9	22.5
Rural	14.1	67.2	47.8	20.9	23.3
Egypt	12.5	53.7	35.4	43.0	22.9
Metropolitan gov.tes	9.1	30.8	20.4	20.1	16.0
Lower Egypt	9.6	48.6	33.0	30.4	17.1
Urban	8.8	24.9	18.8	17.5	21.7
Rural	9.9	56.1	38.9	35.0	15.4
Upper Egypt	16.1	67.8	48.3	44.1	34.1
Urban	11.0	40.4	24.1	25.2	35.0
Rural	17.8	77.1	59.1	51.3	33.7

Source: UNDP (1996).

had managed to slightly reduce its HPI value, but had slipped further behind (to 119th) in its HDI rank.

Trends in regional poverty

Regional poverty rankings in Egypt remained fairly stable between 1991 and 1996. All poverty measurements, based on upper poverty line definitions, unambiguously pointed to the seriousness of the poverty situation, in terms of prevalence, depth, and severity, in Upper Egypt (Table 9.4 and Figure 9.4). Whether poverty was higher in Urban Upper or Rural Upper was sensitive to the poverty line used. The Upper Rural region fared the worst in both 1991 and 1996, with more than two-thirds of the population under the poverty line in 1996. The ranking across the two points was fairly stable for most of the regions, with the exception of Border governorates and Other Urban governorates, with rural regions seeing consistently higher poverty rates than their urban counterparts. The poverty gap index increased with the headcount in both years, but the distributionally sensitive measure, P2, remained fairly stable for most regions, with the exception of the Upper Egypt region.

El-Leithy *et al.* (1999) found that except for the Metropolitan governorates, which witnessed a decrease in poverty in 1996 compared with 1982 and 1991, all other regions saw a steady increase in their poverty between 1982 and 1996. The highest increase in poverty over the period was in the Upper Rural region, where poverty increased from 17.5 percent in 1982 to more than 43 percent in 1996. According to Cardiff (1997), there was little movement in governorate rankings between 1991–96, with the poorest governorates at both points being Assiut, Qena, Sohag, and Menia.

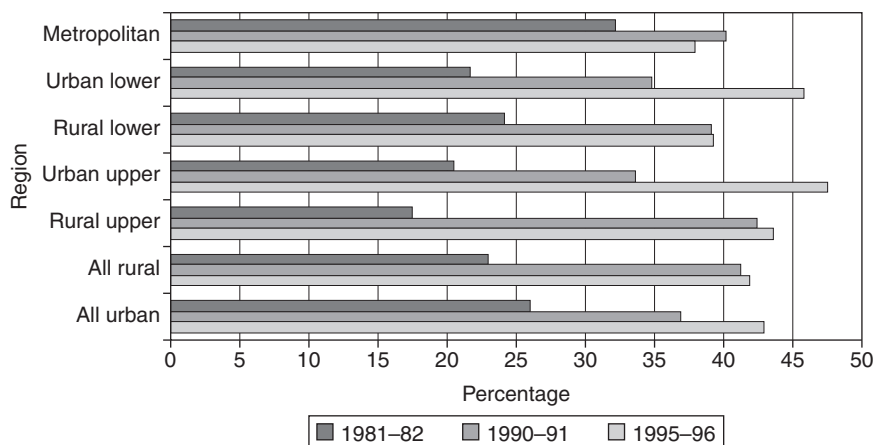


Figure 9.4 Regional poverty, 1982–96 (percent) (source: based on El-Leithy *et al.* (1999)).

Table 9.4 Regional incidence of poverty (P_0), 1982–96 (percent)

Region	1981–82	1990–91	1995–96		1997		
	<i>El-Leithy et al.</i> ² (1999)	<i>Korayem</i> (1994)	<i>Cardiff</i> (1997)	<i>El-Leithy et al.</i> ² (1999)	<i>Cardiff</i> (1997)	<i>El-Leithy et al.</i> ² (1999)	<i>Datt et al.</i> ² (1999)
Metropolitan	32.2	46.6	–	40.2	–	37.9	26.1
<i>of which:</i>							
Cairo	–	–	8.3	–	20.0	–	–
Alexandria	–	–	18.6	–	40.5	–	–
Other urban	–	–	9.4	–	4.2	–	–
Lower urban	21.6	51.4	11.6	34.8	32.7	45.8	24.2
Lower rural	20.5	47.5	22.5	33.6	46.4	39.3	26.9
Upper urban	24.2	61.1	15.8	39.1	40.3	47.6	17.1
Upper rural	17.5	82.4	44.9	42.4	67.5	43.6	31.7
Border urban	–	28.3	19.4 ¹	–	30.4 ¹	–	–
Border rural	–	81.1	–	–	–	–	–
All urban	25.9	–	12.6	–	30.8	42.9	23.1
All rural	22.9	–	32.2	–	55.2	41.9	29.1
All Egypt	23.6	–	20.7	–	44.3	42.5	26.5

Source: See references within table.

Notes

1 Estimates are for both urban and rural border.

2 Based on upper definition of the poverty line.

Characteristics of the poor: poverty profiles

Poverty is often associated with a number of socio-demographic and economic characteristics that are used to construct a *poverty profile*. Comparisons of poverty profiles over time can provide some insights into the social and economic dynamics of poverty.

Amidst evidence of rising poverty in Egypt, the poverty profile remained virtually unchanged between 1982 and 1996, indicating a persistence of the socio-economic correlates of poverty in influencing poverty levels and dynamics. The poor remained closely associated with larger households, a larger proportion of the young population to support per adult working member, illiteracy and low education levels, employment in casual and informal activities in agriculture and construction sectors, and with female headship of the household. The poor typically faced higher prices and had fewer sources of income than the non-poor.

The design and format of the 1991 and 1996 HIES allowed the construction of fairly informative poverty profiles at both the national and regional levels. Information to gauge some characteristics of the poor prior to 1990 was limited either in scope (such as the 1982 Household Budget Survey) or coverage (such as the ILO 1977 rural survey). Yet some of the poverty correlates suggested by these early surveys continued to be identified by more recent investigations, including the IFPRI/EIHS 1997.

Poverty profiles: 1977–82

Radwan and Lee (1977) provided the earliest reference to a rural poverty profile. In 1977, the chronically poor in rural Egypt (the bottom 10 percent of the income distribution) depended heavily on transfer payments and remittances, had a high proportion of disabled people, higher dependency ratios, and a higher proportion of single-member households headed by old persons. In addition, the poor were mostly landless and with limited access to productive assets.

In 1982, urban poverty was associated with industrial and services occupations, while rural poverty was closely linked to agricultural employment and self-employment. Poverty in both urban and rural areas was also higher among households whose head was out of the labor force or in unclassified occupations.

Poverty profiles: 1991–97

Household composition

Poverty was positively related to household size and dependency ratios. Poor people lived in large households of 6.2 members in 1996, compared to 4.4 for the non-poor. Ultra-poor individuals in 1997 lived in families of 8 members, compared to 5.4 members for the non-poor. Household size for

the poor was higher in rural than in urban areas (6.8 and 5.4 members, respectively). Poor households also had a higher proportion of dependants. In 1996, the dependency ratio was 72 percent for poor households and 51 percent for non-poor households, i.e. on average, every 100 working members in poor households supported 72 individuals, while every 100 working members in non-poor households supported only 51 individuals. Higher dependency was a cause of poverty because it implied a higher consumer:earner ratio. The situation was particularly acute in Rural Upper Egypt, where the dependency ratio for the poor exceeded 100 percent.

The dependency in poor households was chiefly accounted for by children less than 12 years of age; thus Datt *et al.* (1999) reported that in 1997, children accounted for almost 90 percent of dependency in both urban and rural poor households. Poverty in both 1991 and 1996 varied positively with the number of children in the household, despite the rank reversal in 1996 observed for very large households (6+ children).⁶

Moreover, poverty was higher for households whose heads were at the tails of the age distribution and for female-headed households. Poor households in both 1991 and 1996 had very old and very young household heads (Cardiff 1997). Poverty was also higher for female-headed households, especially in urban areas. Poverty incidence, depth, and severity were greater for female-headed compared with male-headed households in both urban and rural areas, despite the near equality of average real per capita consumption across the two groups. However, Datt *et al.* (1999) found that the gender difference was statistically significant only in urban areas, implying a higher degree of income inequality among urban female-headed households.

Educational characteristics

Education was the most influential determinant of poverty. Poverty was inversely related to educational attainment. Households whose heads were illiterate or with little education fared worst in both data points and saw their poverty rates double between 1991 and 1996. Even a minimum of education impacted on the household's vulnerability to poverty. In both 1991 and 1996, the poverty rates for the category "reads and writes" were high but still below the national average. However, poverty also started to appear among university graduates, probably because of the persistent and high unemployment rates affecting this group since the early 1990s (see Chapter 8). The appearance of income poverty among this group underlined the extent of distortions in the Egyptian economy in general and the labor market in particular, wherein wealth in human capital and capability received poor economic rewards.

Education was a more important determinant in escaping poverty in urban areas than in rural. In all urban regions in 1996, the incidence of illiteracy and lower educational attainments among poor household heads

was double the levels for the non-poor, with a relatively smaller gap in the rural regions between poverty groups. The situation was worst in the Upper Rural region, where over 88 percent of poor household heads had less than primary education, if any.

Datt *et al.* (1999) discuss gender and geographic disparities in educational attainments of poverty groups. Poor individuals on average achieved 4.4 years of schooling compared to seven years for the non-poor. Moreover, within poverty groups, the urban poor attained 5.6 years of schooling compared to only 3.5 years for the rural poor, and poor males attained 5.7 years of education compared to only 3.1 for females.

Educational attainment of the household head had important inter-generational consequences on the dynamics of poverty. El-Leithy *et al.* (1999) found a strong relationship between the educational attainment of the household head and that of the household members. In 1996, for instance, 74 percent of illiterate individuals in Egypt belonged to households whose head was also illiterate, with the incidence larger in urban than in rural areas. Datt *et al.* (1999) reported that in 1997, about 64 percent of poor individuals, and 76 percent of ultra poor individuals, above 15 years had not completed primary schooling, compared to a national average of 48 percent. Failure to complete primary education was worse for poor women and the rural poor. This failure is partly corroborated by evidence from El-Leithy *et al.* (1999), where the percentage of non-enrolment among poor children in Metropolitan areas was more than four times the level for the non-poor, and where non-enrolment among poor children in rural areas was more than twice the proportion in urban areas. Not surprisingly, the poorest region, Rural Upper Egypt, had the highest incidence of non-enrolment (35 percent compared with a national average of 21 percent).

Several factors underlie the decision whether or not to enroll children in schools and, conditional upon enrolment, whether or not to continue. Datt *et al.* (1999) showed that the principal reasons among poor individuals for dropping out of school, as well as never attending school, were financial considerations and lack of desire to continue.⁷ Financial considerations reflected the increasing opportunity cost of education experienced by poor people in the face of rising costs of education and diminished opportunities for gainful employment once education was completed. El-Leithy *et al.* (1999) found that the rising costs of education disproportionately affected the poor in both urban and rural areas. Between 1991 and 1996, the real expenditure per capita on education for the poor increased by 102 percent in urban areas and by 210 percent in rural areas. This compared with an increase for the non-poor of only 34 percent in urban and 43 percent in rural areas.

The lack of desire to continue could also reflect the effect of poor academic progress for poor children on their decision to continue enrolling. High repeater rates, particularly at the end of each cycle, tend to increase

the opportunity for school drop-out and child labor. In the face of rising costs, poor families found it increasingly difficult to put up with prolonged education cycles due to high repetition. Child drop-out because of poverty was therefore closely associated with child labor. In fact, in 1996, the proportion of working children (aged 6–15 years) among the poor was three times higher than the non-poor in urban regions, and 1.5 times higher in rural regions.

Employment characteristics

Poverty was associated with self-employment and employment in casual and unclassified activities. Poverty was further associated with agricultural activities in rural areas and trade, construction, and transportation activities in urban areas. Cardiff (1997) showed that the employment characteristics of the poor remained fairly stable between 1991 and 1996. Poverty rates were least among wage earners in both 1991 and 1996 and higher than the national average for the self-employed working alone. As in 1991, poverty in 1996 was highest for households whose head was in the “unclassified” category, which comprised the 1991 groups of “unemployed adult” and “out of the labor force.”

Poverty rates were also highest for individuals in construction, agriculture, and trade and services. The poor were primarily engaged in agricultural and construction activities in both urban and rural areas, and in manufacturing, trade, and transportation in urban areas.

Along gender lines, Datt *et al.* (1999) found salaried employment to be the most important source of income for poor females in urban areas but not in rural areas. They also found much higher poverty among self-employed males in urban areas compared with rural areas. Self-employment was often associated with the informal sector, which was more prevalent in urban areas.

Income-earning characteristics

Poverty was inversely related to the number of income earners in the household. Poverty was highest among single earner families in both 1991 and 1996. The data for 1996 showed an interesting rank reversal that may suggest some diseconomy from increasing earners. Cardiff (1997) suggests that the data perhaps capture a breakdown in the relationship between potential income contributors and household economic well-being, as individuals rely less on the extended family as a mechanism to cope with poverty.

Wages were the most important source of income for the poor in both urban and rural areas, followed by agricultural income in rural areas. In 1996, income from transfers and receipts made up more than a third of total income of the poor in urban areas and almost a quarter in rural

areas. According to the UNDP (1996), outside-village remittances were an important source of income for both landless and landed households in rural areas between mid-1970s and late 1980s. There was a considerable decline in the flow of these remittances starting in the early 1990s because of the Gulf war on the one hand, and increased unemployment in urban areas on the other. Unfortunately, the income section of the HIES in both years does not allow for a proper analysis of the sources of income of the poor. Transfer receipts and remittances, particularly important for the poor, are lumped with income sources in the “others” category. According to El-Leithy *et al.* (1999), average yearly per capita income from wages and transfers in 1996 for the urban poor was LE 1,105 and LE 900, respectively. In rural areas, average yearly per capita income for the poor from wages, agricultural income, and transfers was, respectively, LE 788, LE 558, and LE 509.

Consumption patterns

Household budgets were largely consistent with “Engel’s Law,” in that food took up a larger share of the budgets of poor households. In 1991 the urban poor spent 58 percent of their budget on food, compared with 46 percent by the non-poor; in 1996 the respective figures were 53 percent and 43 percent. In rural areas, the poor in 1991 devoted 63 percent of their total expenditures to food, compared with 57 percent by the non-poor; in 1996, the respective shares were 60 and 53 percent. Moreover, while average total expenditure per capita in real terms for both the poor and non-poor declined in urban areas between 1991 and 1996, it increased for the poor and declined for the non-poor in rural areas. These patterns reflect the improved distributional characteristics of the rural sample in 1996 referred to earlier.

Expenditure patterns reflected the rising costs of living in urban areas, especially that of education. Whereas real total per capita expenditures for the poor declined by 6 percent between 1991 and 1996, real average expenditure on education increased by more than 100 percent for the poor and only 34 percent for the non-poor. A similar pattern was observed in rural areas, with real average expenditures on education for the poor increasing by 210 percent compared to 43 percent for the non-poor. Rising education expenditures in urban areas were matched with reductions in expenditures on items such as housing, transportation, health, and food.

Poor individuals in both urban and rural areas allocated larger expenditure shares on cheaper food items, such as grains and starch (cereals), vegetables, and dry pulses, and smaller shares to more expensive food items such as fish, fruits, dairy products, or meat and poultry. Food subsidies played an important role in securing minimum caloric intakes for the poor in both urban and rural areas. The food subsidy in Egypt in 2000

included four foods: baladi bread, baladi wheat flour, sugar, and oil. Baladi bread and wheat flour were universal, while oil and sugar were available in restricted quotas to households with ration cards. Baladi bread was the most important source of calories, providing almost 33 percent of total calories for the lowest expenditure quintile, and almost half of total calories from cereals in urban areas. In rural areas, subsidized baladi bread and baladi wheat flour provided about 40–50 percent of total calories. In both urban and rural areas, subsidized baladi bread and wheat flour are the cheapest sources of calories among the cereals group. Baladi bread and wheat flour were also inferior commodities in urban areas, and to a lesser extent in rural areas. All four subsidized foods provided 44 percent of total calorie availability for the lowest 20 percent of the expenditure distribution.

Per capita income transfers because of subsidies on baladi bread and wheat flour amounted to LE 1.7 per week in urban areas and LE 1.4 in rural areas, with transfers declining in absolute terms with increasing incomes. Subsidies on these items therefore seem to have substantially mitigated the adverse effects of deterioration in consumption on the poor in Egypt compared to other developing countries. Simulations involving alternative scenarios for removing the food subsidies imply significant losses to the poor, with implied savings in government expenditure insufficient to offset the associated adverse effects on the poor. For instance, doubling the price of baladi bread would lead to a decline in the total costs of subsidizing all four goods by 47 percent, but it would also entail a decline of more than 60 percent in the value of income transfers provided by all four food subsidies in urban areas (with a smaller effect in rural areas owing to their higher consumption of subsidized baladi wheat flour instead of baladi bread). The institution of an alternative targeted system would entail higher costs of administration and geographic targeting, which may not justify the removal of the current subsidy system (Bouis and Ahmed 1999).

Ownership of productive assets and agricultural land

Poverty, in all its counts, was associated with landlessness and varied inversely with the size of landholding. Datt *et al.* (1999) showed that poverty in rural Egypt was highest among non-cultivators (35 percent compared with a total rural poverty incidence of 29 percent). Poverty incidence and severity also fell substantially with larger farm size. Poverty fell from a high of 35 percent for small farm cultivators to 7 percent for large farm cultivators. Access to agricultural land therefore remained an important determinant of the well-being of rural households.

The pronounced incidence of poverty among the landless was related to several socioeconomic characteristics of rural areas. The problems arising from the limited amount of agricultural land in Egypt were

aggravated by an unequal distribution of landholdings and excessive land fragmentation at the low end of the size distribution. Per capita cultivated area was only 3.1 kirats in 1981 and further declined to 2.7 kirats in 1994.⁸ Moreover, UNDP (1996) reported that in 1990 almost 70 percent (2.7 million) of land owners possessed land that was less than one feddan in size, and together they owned only 18 percent of total cultivated land. In addition, diverse forms of arrangements, including formal and informal rental contracts, as well as monetary and crop-sharing arrangements, governed access to this land. Limited agricultural land and farm sizes far below those required by modern agriculture were therefore major contributors to rural poverty in Egypt. At the other end of the scale, 0.25 percent of land owners (numbering about 9,000) possessed 15 percent of the total cultivated area.

Access to community facilities

Datt *et al.* (1999) found no statistically significant differences between the poor and non-poor in access to community services, but did find that the ultra poor were severely limited in their access to facilities such as school, hospitals, and markets.

How the poor perceived poverty

Through a Semi-Participatory Poverty Assessment approach, the UNDP (1996) was able to gauge people's perceptions (both poor and non-poor) of poverty, and focus on how poor households lived and coped with poverty. There was considerable convergence of views of both poor and non-poor people on the meaning of poverty. Both groups associated poverty primarily with inadequate income, which led to depressed levels of living on the one hand, and to frequent borrowing and begging on the other. Moreover, many poor households also identified insufficiency of income with the instability in its sources. This last element of poverty was motivated by the temporary types of employment typically associated with the poor, such as casual labor and employment in informal activities.

In general, poor people identified themselves as poor when confronted by a material criterion of well-being. For instance, when the poor were directly asked if they labeled themselves as "poor," about 24 percent of all respondents classified themselves as poor (16 percent in urban areas and 31 percent in rural areas). When indirectly approached to define their poverty status in terms of their wealth ranking, more respondents identified themselves as poor. The overall response was 36 percent, with urban responses of 23 percent and rural responses of 48 percent. The predominance of rural poverty, both as a perception and a deprivation, is obvious.

In terms of how the poor perceived changes in poverty, only 23 percent of the poor reported an improvement in their living conditions between

1991 and 1996 – the percentage was higher in rural areas (24 percent) than in urban (20 percent). Of these 23 percent, the majority attributed the improvement to factors such as improved general economic conditions and better employment opportunities. On the other hand, the majority of the non-poor attributed improved living standards to household-specific factors such as reduced dependency, due to entrance by some family members to the labor market, marriage, or migration.

However, 76 percent of the poor still reported a worsening in their living standards over the same period, with urban households reportedly being more adversely affected by the structural adjustment program than rural households. Both the poor and non-poor attributed the deterioration in living standards to causes such as inflation, unemployment, and economic stagnation. Nearly 25 percent of both poor and non-poor attributed this deterioration to family-specific causes such as retirement, old age, sickness, or an increase in household size.

To sum up, the results indicate a distinct sectoral difference in poverty levels and attributes along an urban/rural classification, rather than across a regional classification. The results also indicate that poverty in Upper Egypt was substantially worse than in Lower Egypt. Significant differences existed in the schooling and education attainment levels between the poor and non-poor. In fact, education emerged as the most important determinant discriminating against the poor and influencing the inter-generational transmission of poverty. Demographic factors were also important in averting poverty, especially dependency ratios. Poverty in rural areas was closely linked with lack of access to, and/or ownership of, productive assets, especially agricultural land, and to adequate agricultural infrastructure services, such as irrigation. Despite observable shortfalls in human capability measures among the poor, subjective interpretations of poverty showed the poor to identify their status with income shortfalls rather than capability shortfalls. Poverty characteristics have remained fairly unchanged over the past 25 years or so. The aggregate evidence therefore suggests poverty in Egypt to be chronic in nature.

The determinants and sources of poverty

While poverty profiles are useful for policy purposes such as targeting interventions, it is desirable to know the impact of proposed policy interventions on poverty rates and dynamics. Some studies have gone beyond the traditional poverty profile to provide “conditional” poverty analysis of policy interventions. These studies typically assess the effect of policy on a particular poverty correlate, given the other potential poverty correlates as identified by the poverty profile.

The preceding analysis suggested that the chief correlates of poverty in Egypt had remained unchanged for at least two decades. This led some commentators – e.g. Haddad and Ahmed (1999, 2003) – to suggest that

poverty in Egypt was “chronic” rather than “transient.” This has two important implications. The first concerns our understanding of the causes of poverty. The virtually unchanged nature of the poverty profile over two decades suggested that there were important social, economic, and demographic factors operating to reinforce, and sometimes aggravate, poverty trends and to favor the intergenerational transmission of poverty. In a study that included a panel survey in 1999 of households that had previously been surveyed in 1997, Haddad and Ahmed (1999) found that households had had very limited mobility between consumption groups, and that almost half of the poor households in the panel remained below the poverty line across the two survey points. They identified education and unemployment as critical factors perpetuating the effects of poverty in Egypt.

The second implication concerns the type of policy intervention used to target poverty groups. As argued by Haddad and Ahmed (1999), if poverty in Egypt is predominantly chronic in nature, then public policy needs to address the fundamental determinants of economic growth, especially the provision of adequate and remunerative employment opportunities. Chronic poverty also reinforces the case for targeted antipoverty interventions, such as food subsidies. If poverty in Egypt were transient, the target would be shifting, and the appropriate policy would be to aim at better smoothing of consumption for the poor, for example, through micro-credit programs or insurance instruments that the poor could access.

The determinants of poverty in Egypt

Examination of the determinants of poverty typically involves simulations describing the effects of a change in the level of one poverty-specific variable, conditional on other poverty correlates, on observed poverty rates. Two studies, El-Leithy *et al.* (1999) and Datt *et al.* (1999), included such simulations for Egypt. Their findings underline that the poor are not a homogeneous group; rather, poverty groups are differentiated along education, employment, and dependency characteristics.

Guided by the poverty profiles, these studies attempted to gauge the probability of being poor in terms of a number of socioeconomic and household characteristics. In modeling the probability of being poor, El-Leithy *et al.* (1999) used two approaches. The first includes a set of socio-demographic characteristics and the second includes a set of housing characteristics.⁹ The performance of the models in correctly identifying the poor was modest, but nevertheless provided some interesting findings.

First, geographic location appears to have an impact on welfare, especially in urban areas. Other things equal, being situated in Upper Egypt reduces per capita consumption levels by almost 20 percent.

Second, household size has a substantial negative effect on living

standards in both urban and rural areas. In El-Leithy *et al.* (1999), an additional unit in the dependency ratio was estimated to increase the probability of being poor by 44 percent in urban areas and 52 percent in rural areas. The effect was equally large in Datt *et al.*'s (1999) results. Increasing household size by one member reduces per capita consumption by nearly 30 percent in urban areas and 12 percent in rural areas. The turning points at which household-scale economies become significant are 15 members in urban areas and 10 members in rural areas which, however, constituted less than 2 percent of the respective geographic samples.

Third, household composition is also important. In rural areas only, for a given household size, increasing the number of children less than 15 years of age reduces per capita consumption by nearly 4 percent. In both urban and rural areas, welfare increases with the age of household head, up to 74 years in urban areas and 62 years in rural areas, after which welfare level declines but only in rural areas. Female-headed households are also more prone to poverty. Female headship has the effect of reducing per capita consumption by almost 8 percent in rural areas.

Fourth, education is a powerful determinant of living standards in both urban and rural areas. Even a minimum amount of education has a positive effect on poverty rates especially in urban areas. El-Leithy *et al.* (1999) showed that, maintaining all other variables at their national mean, in urban areas the proportion of the poor would rise to 59 percent if the whole population were illiterate, but decrease to 17 percent if the whole population attained at least secondary education. The effects are similar in rural areas but the impact is much smaller. Simulations by Datt *et al.* (1999) further show that increasing the number of years of schooling for the household by one year raises per capita consumption by nearly 6 percent in urban areas and 3 percent in rural areas. The effects are even greater when either parent in the household is assumed to have completed primary education (10 percent and 13 percent in urban and rural areas, respectively). The substantial reductions in the distribution-sensitive measures in urban areas in Datt *et al.*'s (1999) simulations further indicate the important distributional effects of educational attainment. For instance, other things equal, increasing household average schooling in urban areas by two years reduces the predicted values for poverty incidence by 23 percent, poverty depth by 28 percent, and poverty severity by 31 percent. The respective measures for rural areas are, 14, 18, and 21 percent.

Fifth, employment status and occupation also matter. If all the population were unemployed, other variables unchanged, the proportion of the poor would rise to almost 70 percent in urban areas and 54 percent in rural areas. In fact, unemployment has the largest (marginal) impact on poverty incidence in urban areas. Also increasing the probability of being poor is employment in construction and manufacturing in urban areas and employment in agriculture in rural areas. Similarly, female unemploy-

ment substantially reduces welfare levels, especially in urban areas, while male unemployment is significant only in rural areas. Simulations by Datt *et al.* (1999) show that decreasing by one the number of unemployed females in the household reduces the predicted incidence of poverty by nearly 4 percent in urban and 2 percent in rural areas, compared to 3.5 percent and 1.7 percent, respectively, for unemployed males. At the mean value of land owned and for households with no schooling, female unemployment reduces per capita consumption by 20 percent in urban areas and by 14 percent in rural areas.

Sixth, ownership of productive assets and access to agricultural land are positively correlated with consumption. Ownership of cultivated land improves living standards in rural areas by a sizeable degree. Consumption also increases with the value of livestock owned by the household in both rural and urban areas. Increasing access to physical capital, however, provided somewhat ambiguous results. Datt *et al.* (1999) found that increasing the area of land owned and cultivated by 20 percent in rural areas would reduce the incidence of poverty by only 1.5 percent. However, the effect on poverty rates is greater if one considers only those individuals whose land area was less than the mean value in the model.

Seventh, access to community services, such as distance to railroad or supply of irrigation, is statistically insignificant on its own, but is significant when interacted with other determinants. In rural areas, there are positive effects of shorter distance to railroad and better supply of irrigation when interacted with average years of schooling. In simulations that shortened the distance to the nearest railroad (to less than 4 km), the impact on poverty reduction was small (only 3 percent). However, the effect of improving irrigation was substantial; it would reduce the predicted incidence of poverty by 12 percent in Rural Lower Egypt and by 8 percent in Rural Upper Egypt.

The evidence from surveys pointed to the significance of education and employment in differentiating between poverty groups, with more pronounced effects in urban than in rural areas. In the latter, additional factors are important in increasing poverty, such as household size and dependency, access to arable land, and access to specific community services. The effect of these factors on poverty measures is further supported by results of the simulations. In general, the results for the education simulations generate the largest impacts on all poverty measurements, with a particularly pronounced impact on the distributionally-sensitive measurements (such as depth and severity). Moreover, the effects of education on poverty are stronger than even those resulting from the sector of employment. Thus, when employment in the construction sector (one of the sectors most associated with urban poverty) is interacted with illiteracy, while maintaining all other variables at their national means, poverty incidence increases to nearly 62 percent in urban areas. Alternately, when employment in the construction sector is interacted with secondary

education (i.e. if all those employed in construction had at least secondary education), poverty incidence falls to less than 20 percent.

“Chronic” versus “transitory” poverty in Egypt

Haddad and Ahmed (1999, 2003) carried the analysis a step further. Using a panel of households in 1999 that had been surveyed in 1997, they examined the change in observed living standards in terms of the above socioeconomic variables and assess their relative contribution to chronic, transitory, and total poverty.¹⁰ Their assessment of changes in living standards was based on changes in average per capita consumption between 1997 and 1999. They found (2003: 71) that over this period, about two-thirds of overall poverty was chronic (average consumption over time was below the poverty line), and almost half the poor were always poor.

Their panel results showed a significant deterioration in living standards between 1997 and 1999. Average per capita consumption declined by almost 8 percent in 1999 with a downward shift in the entire distribution in 1999 compared to 1997. In preserving consumption levels, the Lower Rural region did best while the Upper Rural region fared worse. Moreover, the results indicate poverty in Egypt to be mostly chronic in nature and associated with rather limited mobility across consumption groups (Table 9.5). For instance, while 6 percent of surveyed households were able to climb out of poverty in 1999, a further 14 percent fell into poverty.

Table 9.5 Households by chronic, transitory, and total poverty status, 1999 (number and percent)

<i>Poverty status</i>	<i>Urban</i>		<i>Rural</i>		<i>Total</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Chronic – persistent	23	14.2	43	23.1	66	18.9
Chronic – not persistent	9	5.6	17	9.1	26	7.5
Transitory	20	12.3	25	13.4	45	12.9
Never	110	67.9	101	54.3	211	60.6
Total	162	100.0	186	100.0	348	100.0

Source: Haddad and Ahmed (1999).

Notes

- 1 Chronic poor, persistent: households that have per capita consumption is below the poverty line in both years.
- 2 Chronic poor, not persistent: households with average per capita consumption over the two years is *below* the poverty line, but in one of the years per capita consumption was above the poverty line.
- 3 Transitory poor: households with average per capita consumption over the two years is *above* the poverty line, but in one of the years per capita consumption was above the poverty line.
- 4 Never poor: households with per capita consumption that is above the poverty line in both years.

Almost 20 percent of the sampled households were persistently poor (i.e. their consumption levels were consistently below the poverty line in both years), the proportion being higher in rural (23 percent) than in urban areas (14 percent). Using per capita poverty measures, almost two-thirds of total poverty in Egypt was to be regarded as chronic, and this rises to 73 percent in the Upper Urban region followed by 69 percent in the Upper Rural region.

In explaining the changes in consumption between 1997 and 1999, Haddad and Ahmed (1999) found education, represented by the average years of schooling, to be important in increasing per capita consumption in rural areas, but not in urban areas; in the latter, female unemployment was an important determinant reducing consumption. None of the other poverty correlates was statistically significant. The authors concluded that upward mobility resulting from education was limited in urban areas. This view is reinforced by the elevated unemployment rates among graduates in urban areas.

Nevertheless, education emerged as an important factor in averting the risk of both chronic and transitory poverty in urban areas, and only chronic poverty in rural areas. Additional factors increasing the risk of chronic poverty included large households and age of household head in urban areas, and the number of children below age 15, female headship and ownership of agricultural land in rural areas.

In general, the results suggest that of all the socioeconomic characteristics, education was the most discriminating between poverty groups. While it may not contribute to increases in per capita consumption in the short run, possibly because of labor market rigidities that prevented the reflection of higher education in greater labor returns, education had a powerful distributional impact in the long run. This made it important for averting the risk of chronic, and sometimes transitory, poverty. Other factors, such as female unemployment, female household headship, dependency, and access to agricultural land were also important in attaining a certain consumption level, but their distributional effects were much smaller.

Growth and redistribution effects of poverty changes

In a somewhat similar exercise, El-Leithy *et al.* (1999) decomposed poverty changes between 1991 and 1996 into growth and redistribution effects. They analyzed changes in poverty rates in terms of changes in the redistribution of living standards, as distinct from growth in living standards. The analysis showed that increases in poverty levels at the national level and in urban areas were mainly attributed to reductions in per capita expenditures, whereas improved redistribution mitigated the adverse effects of falling per capita expenditures in rural areas. Improvements in distribution, however, were not always strong enough to offset the negative impact

of reduced per capita expenditures, so that even in cases where the coefficient on the redistribution component exceeded that on growth (such as in Lower Rural and Upper Rural regions), the incidence of poverty still increased, although by much smaller magnitudes than in urban regions. Given the expenditure distribution in 1996, El-Leithy *et al.* (1999) suggested that the elasticity of poverty rates to growth was quite significant.

Poverty in 2000

The most recent study of poverty was based on the Household Income and Expenditure Survey of 2000. The HIES 2000 raised four important points: (1) it reported that, for the first time since 1982, overall poverty dropped in Egypt; (2) poverty fell even though inequality increased; (3) even though overall poverty decreased, poverty in both urban and (especially) in rural Upper Egypt increased; and (4) unemployment was not an exceptional cause of poverty.

On the basis of the lower poverty line, the study – MOP/World Bank (2002) – concluded that poverty had fallen to 16.7 percent of the population compared with 19.4 percent in 1996. This means that 10.7 million persons in 2000 were unable to obtain their basic nutritional requirements and non-food items, compared with 11.5 million in 1996 – a reduction of 800,000 individuals. The use of the upper poverty line showed a similar change; the incidence of poverty in 2000 dropped to 42.6 percent, compared with 51.4 percent in 1996. This represents the first change in the trend of poverty incidence since the early 1980s.

A caution should be entered at this point. The results of the HIES 2000 have given rise to two main comments. The first queries the emphasis placed by the HIES 2000 on the lower poverty line, and is skeptical about its importance for policy in the Egyptian context. In an increasingly middle-income country, such as Egypt, one would not expect to find large numbers of the utterly destitute; hence, the focus of the HIES 2000 on the lower poverty line obscures the more relevant problem, which is the large number of persons still below the higher poverty line.

The second raises concerns about apparent inconsistencies in the results of the HIES 2000. Thus, Adams and Page (2003) point out that between 1981 and 2000, real mean per capita expenditures as measured by the household surveys fell by 14 percent and 31 percent in urban and rural areas respectively. Such substantial declines can be expected to lead to increases in poverty. However, the HIES data suggest that while the incidence of poverty rose in rural Egypt, it fell in urban Egypt and for the country as a whole. Moreover, while real mean household expenditures declined by 14 and 31 percent for urban and rural households, real GDP per capita for the country as a whole was reported to increase by 54 percent. Adams and Page term these results “puzzling,” and requiring further examination. Another such result was that decreasing poverty in

urban Egypt was associated with a significant worsening of the income distribution (the Gini increased by 8.3 percent). The findings of the HIES 2000 that follow should be read in the light of the foregoing comments.

The chief characteristics of poverty in Egypt as the country entered the twenty-first century can be briefly summarized. Of the poor, 8.2 million were located in rural areas and 2.5 million in urban areas. The incidence of poverty was strongly dependent on the growth of the economy, and particularly on the sectoral composition of growth. In 1996–2000, economic growth in Egypt was driven largely by domestic demand and impacted chiefly on construction, import-substituting manufacturing, financial services, and tourism. Agriculture grew modestly (less than 3.5 percent a year) and contributed only about half a percentage point to GDP growth.

By the late 1990s the regional distribution of poverty had become a major issue. Between 1996 and 2000, poverty declined rapidly in the four metropolitan governorates (Cairo, Alexandria, Port Said, and Suez), moderately in Lower Egypt, but actually rose in Upper Egypt¹¹ (see Figure 9.5). This was in line with the regional growth in productivity and incomes. The data do not permit a precise analysis of differential productivity growth between Upper Egypt and the rest of the country. However, the information available – for example, in INP (1996, 2002) – suggests that Upper Egypt was less well endowed in activities in which productivity increased, such as manufacturing, and that it also lagged behind Metropolitan and Lower Egypt in productivity growth in activities, such as agriculture, that were common to both regions. GNP per capita in the Metropolitan areas grew by 8.9 percent a year, in Lower Egypt by 5 percent, and in Upper Egypt by only 0.5 percent annually. While rural areas in general exhibited a greater degree of poverty than urban areas, the situation was

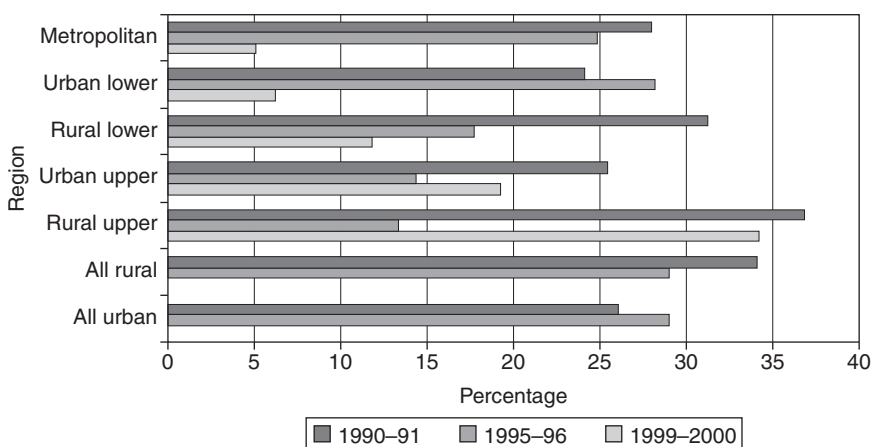


Figure 9.5 Regional poverty, 1991–2000 (source: based on El-Leithy *et al.* (1999) for 1990–91 and 1995–96; MOP/WB (2002) for 1999/2000).

systematically worse between Upper Egypt and the rest of the country. MOP/World Bank (2002: v) found that two-thirds of the 10.7 million persons classified as “poor” in 2000 were located in Upper Egypt – 5.8 million in rural Upper Egypt, and another 1.4 million in the urban parts of Upper Egypt. The number of poor people and the share of people who were poor both increased in Upper Egypt between 1996 and 2000.

Poverty in Egypt continued to be relatively shallow; thus even small movements in incomes could shift a significant number of persons above or below the line. This also means that, with proper targeting, relatively small transfers of income could raise substantial numbers of the poor above the poverty line. In fact, MOP/World Bank (2002: 13) estimated that if perfect targeting of poverty-alleviating transfers were possible, it would have required only about LE 350 million per year, i.e. about 0.1 percent of GDP in 2000, to lift everyone out of poverty.

MOP/World Bank (2002: 17–19) found that between 1996 and 2000, three different regional patterns of equity emerged. At the national level, growth was not pro-poor, and the Gini coefficient increased from 0.345 to 0.378. A similar pattern was observed in the Metropolitan region, with the Gini rising from 0.374 to 0.396. Lower Egypt, however, combined high increases in per capita expenditure with a better income distribution; in fact, the Gini for rural Lower Egypt dropped to 0.248. The third pattern, for Upper Egypt, combined decreases in per capita expenditures with a worsening of the income distribution, so that both factors contributed to increasing poverty. The Gini coefficient for urban Upper Egypt at 0.406 showed the highest inegalitarianism in the country (but that for rural Upper Egypt remained around 0.27). Inequality in Egypt in 2000, therefore, resulted mainly from inequality within regions rather than between regions. Computations using the Theil index showed that 82.1 percent of the inequality in 2000 resulted from intra-region variation, while 17.5 percent would be explained by inter-region variation. The corresponding figures for 1996 were 87.2 and 13.2 percent.

Consistent with the findings of earlier studies, the most important correlate of poverty was with education; out of every ten Egyptians, three were illiterate, while out of every ten poor persons, five were illiterate. Similarly, out of every ten Egyptians, four lived in a household of which the head was illiterate; out of every ten poor persons, six lived in a household with an illiterate head. The presence of education enabled individuals to access employment opportunities, and even a moderate improvement in educational attainment could substantially reduce the ranks of the poor. Moreover, the lack of education set up a vicious circle – individuals without education tended to be poor, and the poor were less able to afford education. Education thus becomes doubly critical, affecting not only the present generation, but also in transmitting poverty across generations.

Other correlates of poverty also remained consistent with previous findings. Demographic factors, such as the size of the household, were import-

ant; for example, while out of every ten people in Egypt three had more than three children, out of every ten poor people five had more than three children. The rural–urban divide was significant – six out of ten Egyptians lived in rural areas, but eight out of ten poor people lived in such areas. The slower growth of productivity and value-added in agriculture took its toll on those who were employed in that sector – four out of every ten people in Egypt worked in agriculture, but for poor persons the figure was six out of every ten.

Annex: conceptual issues in measuring poverty

Poverty estimates are sensitive to several methodological choices, such as the welfare indicator, the units of measurement (e.g. household versus individual, or income versus expenditure), or the adjustment of poverty lines over time. This annex addresses some of the main conceptual issues that arise in the measurement of poverty.¹²

1 Welfare indicators

Poverty comparisons are typically defined in terms of a pre-specified standard of well-being (Ravallion 1992, 1994). The most commonly used approach is to define as “poor” those individuals or groups whose income is inadequate to provide them with the level of nutrition, clothing, and shelter deemed as the minimum by the norms of that society. A broader interpretation of this concept would approach Sen’s (1981) notion of “capability deprivation,” wherein the definition of poverty is extended to embrace non-material aspects, such as inadequate access to education and health services – factors that improve the capabilities of individuals and expand their command over resources.

A single universally-accepted indicator of non-material well-being or deprivation does not exist. Measures of *human (capability) poverty* have undergone several revisions. In 1995, the UNDP HDR introduced the concept of capability poverty, defining this in terms of deprivation in three basic capabilities – the capability to be healthy and well nourished; the capability for healthy reproduction; and the capability to be educated.¹³ These were incorporated into a single index – the Capability Poverty Measure (CPM). The UNDP HDR 1997 refined this into the Human Poverty Index (HPI), which combined deprivation in three elements: survival (deprivation in longevity), knowledge, and adequate standards of living in terms of overall economic provisioning.¹⁴

2 Units of measurement

Poverty comparisons are based on poverty lines where the unit of measurement is either the household or the individual. Individual-based

poverty lines are preferred to household-based ones. Household-denoted yardsticks of expenditure or income might be misleading, since for a given level of per capita consumption, larger households would be placed above the poverty line while smaller households would be placed below it (Lanjouw and Ravallion, 1996). This approach, however, does not capture the effect of scale economies or the demographic composition of households, and could therefore overstate poverty. Hence, adult equivalence scales are often applied to adjust the individual welfare measure to reflect differences in age and gender patterns of households¹⁵ (Ravallion 1992).

The most important source of information for poverty assessments is household budget surveys, which provide detailed information on household incomes and expenditures. Cardiff (1997) and El-Leithy *et al.* (1999) provide a number of conceptual and empirical considerations that seem to favor expenditure- over income-based poverty lines. First, expenditure better reflects “realized opportunities,” especially in environments where the poor are credit-constrained and savings are negative. Second, income streams for the poor are typically fluctuating and derive from a multiplicity of sources, which makes it hard to obtain accurate information on income. Third, while income streams may be variable, the poor tend to smooth consumption over time, which makes expenditure a better indicator of longer run living standards than is current income. Although expenditure-based poverty lines fail to account for consumption of public goods, they constitute a useful monetary aggregate that reflects individual preferences, given a set of prices and incomes.

3 *Poverty lines*

Poverty lines can be absolute, relative, or subjective. *Absolute poverty lines* are anchored in a cost-of-basic-needs concept. The usual approach is to define an absolute food poverty line in terms of the estimated cost of a food bundle that provides a stipulated energy intake, deemed essential or minimum, by the standards of a given society and is based on consumption patterns of the lower expenditure groups in that society. The food poverty line is then augmented by an allowance for non-food consumption.¹⁶ Two questions can be asked. First, how much do households who are capable of meeting nutritional requirements and choose not to (i.e. those whose total expenditures are just equal to the cost of the food basket) spend on nonfood items? Second, how much non-food spending is done by households whose food expenditures are just equal to the cost of the food basket? The former procedure yields a *lower* (sometimes termed an *ultra poverty line*) because it defines the poverty line in terms of those households who had to displace minimum food consumption in order to purchase essential non-food items; the latter an *upper poverty line*.

The non-food spending associated with spending displacement is obtained by regressing food share on the log of the ratio of total spending

to the food poverty line, and household composition variables. A model (Engels curves) commonly fitted is: $FS_i = \alpha + \beta \log(TS_i/FP) + \varepsilon_i$ where FS_i is the food share of the i -th household, TS_i is total spending, and FP the food poverty line. A variable representing household size is often added. The intercept represents the average food share of households who can afford the food poverty line. Since the total poverty line is the sum of the food poverty line and non-food spending at the food poverty line, it can be obtained by multiplying the food poverty line by a factor equal to $2 - \alpha$.¹⁷ The non-food component associated with actual non-food spending of households who reach the food poverty line is obtained by using the following formula, along with intercept and slope coefficients estimated earlier: $FS = (\alpha_i + \beta_i)/(1 + \beta_i)$. The total poverty line is then obtained by dividing the food poverty line by the final estimate from this equation.

Relative poverty lines recognize the interdependence between the poverty line and the rest of the income distribution. As Fields (2001: 91–3) points out, this concept covers two separate ideas. In the first type of relative poverty measures, a relative poverty line is the income level that cuts off the lowest x percent of the population in the national income distribution; the World Bank, for example, uses the lowest 40 percent. Anand (1997: 244–5) raises two objections to this method of defining the poor: (1) it prejudices the extent of poverty (it is x percent by definition); (2) poverty in this sense can never be eradicated, because there will always be a lowest x percent in the income distribution. In the second sense of relative poverty, the higher the poverty line used the richer is the country in which poverty is being measured. Examples of such relative poverty lines are half the mean income (as used by the European Union) or two-thirds of the median income (as used occasionally by the World Bank). With relative poverty lines specified in this manner, it is no longer true that the poverty cannot be eliminated.

Subjective poverty lines define poverty in terms of individual perceptions of what constitutes a socially acceptable minimum standard of living in that society. Poverty measures according to this approach tend to be an increasing function of income, because individuals with higher incomes set higher thresholds for minimum standards of living.

4 Poverty measurements

In addition to the Headcount Index, the Foster–Greer–Thorbecke (1984) class of decomposable poverty measurements is increasingly used. This includes three indices: the headcount index, the poverty gap index, and the poverty severity index.

The decomposable poverty measure may be defined as:

$$P_\alpha = \frac{1}{n} \sum_{i=1}^q [(z - y_i)/z]^\alpha$$

where P is the poverty measure, α is the weight attached to the normalized gap function $[(z - y_i)/z]$ of each individual, y_i is the income of the i -th individual, z is the poverty line, and q is the total population below the poverty line. Fields (2001: 84–5) points out that this measure essentially weights each individual's normalized gap function by itself, so that the income of an individual whose income is 10 percent below the poverty line is weighted by 10 percent, one whose income is 50 percent below the poverty line by 50 percent, and so on.¹⁸ For individuals whose income is at or above the poverty line the gap is zero, and hence the weight is zero.

The most commonly used weights are 0, 1, and 2. When $\alpha = 0$, the measure reduces to the “headcount ratio” or the *headcount index* (P_0), which gives the percentage of households or individuals who fall below the poverty line. However, this measure is insensitive to the depth of poverty, or the distribution of the poor below the poverty line. The latter can be captured by setting $\alpha = 1$, thus obtaining the *poverty gap index* (P_1), which measures the gap between the observed expenditure levels of poor individuals and the poverty line. Under the assumption of perfect targeting, the poverty gap index denotes the amount of resources needed to raise the consumption of the poor to the poverty line. To obtain estimates of consumption shortfalls, the poverty gap index is first multiplied by the inverse of the headcount index. For instance, the UNDP's (1996) estimate of a poverty gap of 12.8 percent in urban areas in 1996 and a headcount index of 45.0 percent implies that the average consumption of the poor was 28.4 percent below the poverty line.

This measure, however, still misses the distributional effects of transfers between individuals below the poverty line. For instance, a transfer from a poorer to a relatively less poor individual (but still below the poverty line) would leave both the headcount and poverty gap indices unchanged, even though the former individual is now worse off. Hence, the “squared poverty gap,” or the *poverty severity index* (P_2) is computed by setting $\alpha = 2$; this measures the inequality of distribution below the poverty line. This measure gives more weight to individuals who are further away from the poverty line; thus, the higher the index, the greater the extent of poverty.

10 Toward sustainable growth

Strategic and institutional issues

What are the key issues that Egypt must address in order to sustain a growing level of prosperity in the next two decades and beyond? The matters to be tackled comprise the economic as well as the broader institutional and behavioral. This chapter provides a framework for thinking about these questions.

First, consider the broad societal challenge that Egypt faces. For most societies, a basic aim is to offer a better life to its citizens. A starting point (but only a starting point) towards that aim would be the provision of adequate income, which means creating a sufficient number of productive jobs. The contours of this task are set by the size and growth of the country's population. For several years Egypt's population increased at more than 2.5 percent a year, and this rapid growth has left a legacy in the shape of a large and young population. Such a population structure will continue to generate a rapid increase in the labor force – although the population growth had dropped to about 2 percent a year by 2000, the labor force was still growing at 2.7 percent a year. Given a labor force of about 19 million in 2000 (of which 1.3 million were said to be unemployed), this implies a labor force in 2010 of about 25 million.

“Full employment,” however, does not necessarily mean that everyone is employed at any given moment. Lord Beveridge, whose *Full Employment in a Free Society* (1944) established the guidelines for the full employment strategy of the British Labour Party, defined “full employment” as compatible with 3 percent unemployment, allowing 1 percent each for frictional unemployment, seasonal unemployment, and overseas factors. Nor does the United States equate full employment with 100 percent employment of the labor force. In its *Economic Report* for 1962, President Kennedy's Council of Economic Advisors accepted 4 percent unemployment as constituting full employment. In 1977, the administration of President Ford changed the full-employment benchmark to incorporate 4.9 percent unemployment in the calculation of the full-employment GDP. In 1979, the Carter administration adjusted it further to 5.1 percent. Other countries also appear to use a similar approach; in a recent report on full employment for the Prime Minister of France, Pisani-Ferry (2000: 52–3)

argues that an unemployment rate of 5 percent would not significantly differ from that to which more elaborate definitions of “full employment” would lead, and uses this as the basis of his analysis and recommendations.

If “full employment” in Egypt is taken to accept that 5 percent of the labor force will remain unemployed because of frictional and structural reasons, then employment in 2010 must be about 24 million. This will require the creation on average of about 620,000 new jobs a year in order to employ all the new entrants into the labor force and to steadily reduce the numbers of the presently unemployed so that full employment is attained in ten years.¹

In a market economy the demand for labor is generated by economic growth. The World Bank (2001: 12) reported that in 1991–2000 the economy created 436,000 jobs annually. In order to create the number of jobs required for full employment, the economy has to generate a higher demand for labor by growing noticeably faster than it did in 1991–2000.

How much faster must it grow? Mohammed (2001: 11) estimated the elasticity of employment creation with respect to real GDP growth at 0.53 for the period 1990–97, while MOP/World Bank (2002: 40) put it at 0.5 for 1995–99. An annual increase of 620,000 jobs is roughly a 3.2 percent a year increase in employment. On the basis of the more recent estimate of employment elasticity, the economy would need to grow at around 6.4 percent a year in real terms in order to reach full employment (as defined above) by 2010. And if one adjusted the labor force figures in order to reflect more fully the participation of discouraged workers and women and for reducing *underemployment*, a required growth of real GDP in the neighborhood of 7 percent a year would not be unreasonable.

As against this requirement, what is the long-term potential growth rate for the Egyptian economy? We can approach the question in a number of ways.

First, the potential growth rate for any country is given by the growth of the fully employed labor force plus the growth of labor productivity. In 2000 the Egyptian labor force was growing at an annual rate of 2.7 percent, while Radwan (2002) and Nassar and El-Leithy (2003) estimated the growth of labor productivity in 1988–98 at 1.6 percent a year. This gives a potential growth rate for the Egyptian economy of 4.3 percent per annum (if the entire increase in the labor force is assumed to be employed).

Second, another view of the long-term possibility is suggested by what the economy has actually been able to do over an extended period. Over the three and a half decades, 1965–2000, the growth of real GDP is estimated at 5.2 percent a year. However, this figure is inflated, because the national accounts overstate the weight of industry, the faster growing sector, and understate that of agriculture, the slower growing. Correcting for this bias would give a growth rate of 4.5–4.7 percent a year.

A third view of potential GDP, following Backhouse (1991: 100–1), can be obtained by inserting into a Cobb–Douglas production function the parameters for capital and labor productivity from Mohammed (2001), increasing the capital stock by assuming steadily rising investment until the investment/GDP ratio reaches 28 percent, and replacing the labor actually employed by the “fully employed labor force” (95 percent of the labor force in our case). This procedure provides a figure of 4.4 percent a year as an approximation of the “full-employment output.”²

A fourth calculation is provided by Alba *et al.* (2004) who used a Hodrick–Prescott filter (a smoothing technique that removes low-frequency variation in a time series in order to obtain a trend component) of real GDP level data to estimate potential GDP and variations from the potential during the period 1960–2003. Their estimates showed the growth rate of potential GDP reaching a high of 7 percent in the mid-1970s and dropping steadily thereafter to a little over 4 percent in the 1990s.

These different approaches thus converge towards rather similar results: in round numbers and given the existing institutional structure, the potential growth rate of the Egyptian economy is about 4–5 percent per annum. *At the risk of some oversimplification, then, one might say that a basic condition for Egypt to meet the societal challenge is to raise the growth rate of the economy from its present potential of 4–5 percent a year to 6.5–7 percent annually for at least two decades.*³

How did actual GDP growth in the recent past compare with the potential? The actual growth rate of the GDP in 1992–2002, about 4.6 percent a year, did not fall far short of the potential. However, it began from a lower level of GDP, and the continuous compounding of even a relatively small difference in growth rates can have quite a substantial cumulative effect over a ten-year period. By the end of the period, the persistent “output gap” resulted in a cumulative loss of about LE 140,000 million in 1992 prices, meaning that Egypt lost more than 75 percent of one (average) year’s output in 1992–2002.

Two conclusions follow. The potential GDP growth rate is less than that required for Egypt to attain its employment goals, and the actual GDP growth fell short of even this insufficient potential. Figure 10.1 also shows that, except for 1994–95 and 1998, the unemployment rate and the GDP moved in the same direction. Therefore, the basic task for Egypt is to raise the potential growth rate and to perform to the higher potential in a sustained manner. The critical issues that Egypt will have to address in accomplishing this task are examined in this chapter.

The prime mover of GDP growth is investment. This, of course, does not mean that investment is the only factor that drives growth; improved labor training, better management, and more efficient organization contribute in significant measure. However, no country has managed to sustain growth over a multi-decade period without a substantial increase in



Figure 10.1 Unemployment and shortfall between potential and actual GDP, 1992–2002 (percent) (source: MOP; World Bank LDB).

the investment:GDP ratio. Moreover, investment also acts as the main vehicle of technological change, because technology most often comes embedded in new capital equipment. Thus, both because it adds to productive capacity and because it serves as a major conduit for transferring advances in productivity, investment must be seen as the single most important factor for Egypt's growth. To sustain a growth rate of 7 percent a year, the economy is likely to require an investment rate of perhaps 25–28 percent of GDP (assuming an investment:output ratio approaching 4:1, which is in fact lower than in the “East Asian miracle” countries), compared with an average of 19 percent in 1995–2000. The first critical development concern for Egypt, therefore, is the set of issues relating to the *investment rate*: how to raise the rate, and why in the decade of the 1990s it did not respond to the incentives provided.

Investments must be financed. Egypt has a variety of financing options: domestic savings, external assistance, foreign direct investment, and borrowing from abroad. While the optimal mix will depend on a number of factors, the bulk of sustainable financing will have to depend upon domestic sources. The second critical development issue, therefore, is how to raise the domestic *savings rate* from its present 16 percent of GDP to around 22–25 percent. This is a significant, but feasible, aim. It may help to put matters in perspective by reflecting that for more than three decades the fast-growing economies of East Asia have routinely posted savings rates in excess of 35 percent of GDP.

An important consideration for policy is that the areas of growth and of efficient job creation will be more restricted than in the past. The agricultural sector cannot absorb a substantial number of additional workers, the public sector should not take on extra labor. Moreover, the demand for

labor in the main destinations for Egyptians working overseas is largely satisfied; hence emigration does not offer a solution to Egypt's employment problem. This means that the space for action by the policymakers is limited – the additional employment must nearly all be created in the private non-agricultural sector of the domestic economy. This constraint is liable to raise some problems. First, employment growth in this sector has been predominantly for males: between 1976 and 2000, male employment growth was almost three times that of female. Second, the vast majority of jobs in this area of the economy are not legally protected. These considerations will have to be borne in mind when developing employment policies.

Between 1992 and 2002 this subsector grew at an approximate real rate of 8.5 percent annually, while employment in this sector is likely to have been growing at about 3–4 percent. Policies to strengthen the *business environment* thus form the third broad set of issues. This must cover a strengthening of the institutions supporting the private sector's functioning, in particular the bureaucracy, the commercial judicial system, the tax administration, the financial sector, and the educational and labor training systems. It will also require special attention to the problems of small and medium enterprises.

Sustained real growth of 7 percent a year will require the creation of a larger demand than can be generated through domestic efforts; thus, Egypt will have to make greater efforts to access the international market. This will call for major changes in some key institutions, such as the incentives for import-substitution versus those for exports. It will also require the economy to become more competitive, particularly in view of the increasing trends towards globalization. Moreover, an important concern for Egypt is food security. Given the size and growth of the country's population on the one hand, and the increasing constraints on water and land on the other, it does not appear likely that "food security" can mean "food self-sufficiency." As usual, Richards (1993: 244) offers an incisive insight, namely, that food security for Egypt must increasingly mean foreign exchange security, and that Egypt must perforce become a more efficient participant in the international economy simply in order to assure its food supply.

The fourth major development issue is thus a reorientation of the development strategy in the direction of rapidly boosting *exports* (which will also increase domestic savings).

The growth of GDP will be meaningless as a guide to the well-being of the population unless the issue of *poverty* is squarely faced. A sustainable long-term development strategy must also focus attention on disparities in regional and gender rates of poverty.

Growth cannot be sustainable if it degrades the quality of life, a key ingredient of which is the condition of the *environment*. This is all the more important in Egypt, where 98 percent of the population is packed into 4 percent of the land area.

Finally, any discussion of sustainable growth in Egypt must confront the question of *water*. The increasing demands on the Nile's water from all the riparian countries, and the strategies that can help satisfy these requirements, must be addressed.

Investment

The principal difficulty in raising growth to the levels required is that the investment rate dropped sharply after 1988 and has remained at about 20 percent of GDP. The rate must be raised to 25–28 percent of GDP; this is not impossible, indeed, the country attained even higher rates in the late 1980s.

What pulled down the investment:GDP ratio? The fall in aggregate investment resulted from the cuts in public investment after 1990 that were effected as part of the stabilization measures of 1991. The authorities' thinking was that if public investment were cut back, but at the same time the private sector was permitted to enter fields (such as infrastructure) from which it had hitherto been excluded, aggregate investment would not suffer. However, while public investment fell as a result of the budgetary cuts, private investment did not rise commensurately. Therefore, aggregate investment fell almost 10 percentage points of GDP between 1990 and 2000. If Egypt is not to revert to the public sector to drive growth, then it has to devise measures to address the reasons for the lethargic response by the private sector. The critical measures that need to be addressed in order to stimulate the private business environment are discussed later in this chapter.

Savings

In the second half of the 1990s, Egypt attained a sort of balance between savings and investment. However, as can be seen from Figure 4.4, this

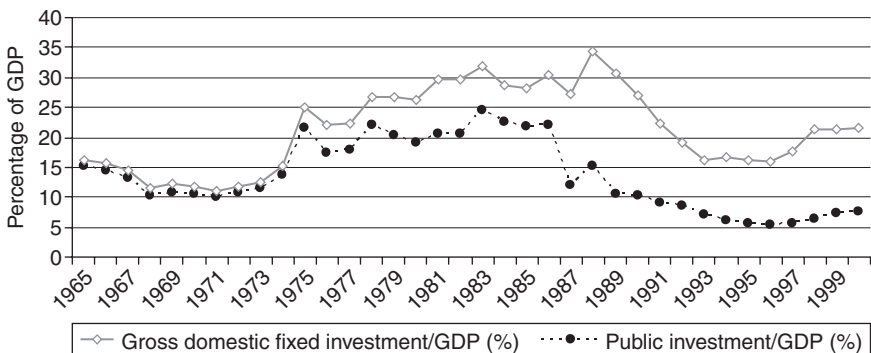


Figure 10.2 Gross domestic fixed and public investment, 1965–2000 (percent of GDP) (source: MOP; World Bank LDB).

equilibrium was brought about by reducing investment, not by raising savings. In order to accelerate the growth rate of its GDP, Egypt must raise the level of productive investment. In order to make the growth rate sustainable, Egypt must raise the level of domestic savings and increase the competitiveness of its production. The fundamentals of Egypt's economic problem have not altered in four decades.

In order to finance investment in a sustainable manner, Egypt will have to raise the domestic rate of savings from about 16 percent of GDP in 2000 to the neighborhood of 22–25 percent. This will still leave foreign savings to provide around 3–4 percent of GDP.

How can Egypt attain higher rates of domestic saving? The factors behind an enhanced savings performance are not fully understood by economists, but the experience of fast-growing countries suggests four avenues that Egypt could pursue.

These comprise *faster growth* (which would raise incomes and therefore savings); *accelerated privatization* (which would utilize assets more efficiently); *financial sector reform* (which could increase the surpluses of the pensions funds by investing them at market rates rather than in government projects, and mobilize more resources through an expanded insurance industry); and the *improvement of government finances*, particularly by holding down current expenditures through a reform of the civil service.

The development strategy

In 1965–2000, Egypt's growth was constrained principally by the balance of payments. The constraint arose because the country could not run an external deficit indefinitely. Lenders lost confidence and refused to provide more funds, or only offered them at usurious rates of interest or on other objectionable conditions. In the meantime, the country had to transfer substantial amounts of resources abroad in the shape of interest and amortization payments, thereby further reducing its ability to import capital goods and intermediate products. Egypt's balance of payments difficulties resulted largely from devoting insufficient attention to expanding exports. This chapter argues that Egypt must follow an export-led strategy for at least the next two decades or so.

A key question that Egypt must face in devising a development strategy is to identify, at least broadly, the sources that can support faster growth. The discussion in Chapter 4 showed that much of the growth that Egypt experienced in the past 35 years resulted more from the greater employment of capital and labor than from improvements in productivity. While it is obvious that the investment rate must be increased, it is also clear that such increases must be accompanied by significant progress in productivity.

An important reason for the lack of productivity improvement is the protection from competition provided to Egyptian industry. An

outward-looking strategy will be needed to spur productivity increases and to make firms move up to the “best practice” frontier. In addition to compelling firms to compete, both domestically and internationally, it would appear that Egypt’s strengths lie in some clearly defined areas. On the external side, areas offering a potential for sustained growth could be tourism, high-value agricultural products (such as fruits and horticulture), natural gas, and industries that take advantage of Egypt’s associate membership in the European Union and serve as “feeders” into major European industries. However, Egypt’s ability to export industrial products, whether to the European Union or to other countries, will not happen automatically. Sustained export success will depend upon increases in competitiveness, generated by improvements in productivity, which, in turn, will depend upon conscious efforts at institutional and other changes.

There is an urgency to implement an export-led strategy based largely on manufactures. Such a strategy is being urged on almost all developing countries by bilateral and multilateral organizations. However, as Blecker (2000) points out, under a given set of international demand conditions, the market for developing countries’ exports is limited by the capacity of the industrialized world to absorb these imports. Consequently, an export-led strategy is likely to work for only a limited number of countries at a time, particularly as many developing countries produce virtually the same range of manufactured items. The attempt by all developing countries to expand their manufactured exports at the same time might just lead to excess industrial capacity and falling prices. If Egypt is to prosecute a successful export-led strategy, it must acquire an early start.

An export-led strategy does not imply that Egypt should forgo access to foreign savings. The foregoing figures on investment and domestic savings suggest an annual inflow of foreign savings of between 3 and 4 percent of GDP, which would finance about 10–15 percent of the required investment. Completely eliminating the external deficit would impose an unnecessary burden on the economy; a few back-of-the-envelope calculations in an annex to this chapter provide some indication of these effects. Some issues that are crucial to developing a successful export-led strategy for Egypt are discussed in the following section.

Export development

The relationship between the growth of an economy and its openness to foreign trade in goods and services, investment, and technology has been the subject of almost continual analysis and empirical testing in recent years. One of the most wide-ranging and ambitious of these studies was by Sachs and Warner (1995), which measured the “openness” of an economy using five criteria: tariff rates, non-tariff barriers, black market premia over the official exchange rate, state monopolies on major exports, and whether the economic system was socialistic. The main findings were:

- During 1970–89 open developing economies grew at a rate of 4.49 percent a year, while closed economies grew at only 0.74 percent annually.
- Trade policy and openness to trade was an important factor enabling the incomes of developing countries to “converge” with those of the developed.
- Openness decreased the likelihood of severe macroeconomic crises (defined as the necessity to reschedule external debt, the existence of external payments arrears, and an inflation rate over 100 percent).

Several other studies have reinforced the finding of a strong and significant effect of openness to trade and investment on the growth of a country’s GDP.⁴ Viewed within this perspective, Egypt’s export performance has fallen well short of its potential to contribute to the development of the economy.

The failure to increase exports rapidly arose more from Egypt’s failure to increase its competitiveness than from limitations of external demand. A careful examination by Kheir El Din (2000: 8–10) of the sources of Egyptian export growth over the period 1980–95 concluded that external demand conditions constrained Egyptian exports only during the 1980–85 period; for the rest, the constraints were imposed by supply factors affecting the competitiveness of export products. A decomposition of the trade performance by Kouamé (2000) showed that Egypt failed to benefit from the surging international economy because it did not trade sufficiently in products for which global demand was increasing, and it also lost market share in its traditional exports. The study showed that Egypt did diversify its export basket, but not towards the products with the fastest rising international demand.

A World Bank study in 1997 calculated that if Egypt’s exports had grown at world rates from 1983 through 1993, then exports should have reached \$6.3 billion rather than \$3.1 billion. The causes of this “loss” of \$3.2 billion annually in 1993 were: (1) a failure to redirect exports towards markets that were growing rapidly (this represented a loss of \$0.7 billion); (2) a failure to adapt the composition of exports towards the faster-growing items (a loss of \$2.3 billion); and (3) a residual that measured the loss of international competitiveness (\$0.2 billion).

What held Egypt back from exporting products with higher international demand and penetrating the faster-growing markets? The answer is that the structure of incentives and the institutional impediments that raise the cost of doing business in Egypt impacted with particular severity on exports, and made it more profitable to produce for the home than the international market.

Three elements chiefly shaped this asymmetry:

- The effective exchange rate.
- The tariff regime.

- Production and transactions costs (including from institutional delays).

Issues connected with the exchange rate and the tariff regime were examined in Chapter 5. The impact of institutional behavior on costs will be discussed here.

Production and transaction costs

Tariffs and non-tariff barriers are but part of the *mélange* of taxes and interventions that increase the costs of production and of exports and that tilt the balance between domestic and international prices in favor of producing for the home market. Several other factors increase transaction costs, such as the General Sales Tax, bureaucratic delays in rebating duty paid on the imported component of exports, port handling services, freight rates, and import clearances.

A fiscal measure that increases the cost of exports is the General Sales Tax (GST), which is levied on both domestically produced and imported manufactured goods (and some services) at rates ranging from 5–25 percent, with the standard rate on goods being 10 percent. However, this tax has a multiplier effect because it is applied on the value including the import duty; the effect thus is to raise the cost of the imported inputs by the applicable rate of the GST multiplied by the tariff-augmented value of the imported item.

A rebate and duty drawback scheme has been available for some years in order to provide exporters with imported inputs at world prices. However, the system suffers from two major deficiencies. First, it is time-consuming and cumbersome. The Stanford Research Institute (1995: V-9) listed eight time-consuming steps that an exporter had to complete in order to obtain a refund. Second, the rebate is available only to firms that directly import the intermediate component and export the processed product; it is not available for intermediate goods bought on the domestic market. This provides much less advantage than the system used in some of the East Asian countries, for example, Rhee *et al.* (1984: 12–13) point out that Korea offered duty-free access to imported intermediate inputs whether they were imported directly or purchased locally, and also made the rebate available to Korean manufacturers who exported indirectly through other Korean firms. The scope of this incentive and the speed with which it was executed constituted major benefits.

There are also other limitations, for example, local content requirements – only if the local content of a final product reached 20 percent would the exporter be eligible for the rebate. A World Bank report described these export-promoting schemes as having become another form of transaction cost. It added that these measures only partially alleviated import duties and remained insurmountable for small enterprises.

The delays and costs of movement through the ports further reduce competitiveness. Egypt's ports are essentially state-owned monopolies characterized by high handling charges, poor service quality, and long delays. Hoekman (1996) found that, in general, Egypt's seaport charges for imports were triple those of competitors and increased CIF charges for imports to Egypt by over 10 percent. Container freight rates to Alexandria ran 15–20 percent higher than to other Mediterranean destinations; container handling costs were 60–80 percent higher than in nearby foreign ports; terminal handling charges showed similar excesses. Long turn-around times of ships added to demurrage costs; 7–8 days for freighters to turn around in Alexandria were not uncommon, compared with 7–8 hours in South-East Asian ports.

To sum up: Egyptian manufactured exports are likely to be more price-sensitive than the available measurements indicate (see Chapter 5). However, producers have also been disadvantaged by institutional and policy impediments that deter investment and make production for the domestic market more attractive than for the international. Adjustment of the exchange rate, while necessary to compensate for the disincentives, will not in itself suffice to sustain an export-driven development strategy; it must be used as part of a package comprising fiscal and monetary policies, and reforms to some major institutions. If the impediments discussed in this chapter are not addressed, it is likely that the price advantage conferred by exchange rate depreciation will be transitory, and a policy to maintain competitiveness might simply degenerate into a policy of serial devaluations.

The business environment

In order that Egypt attain and sustain a high rate of investment and growth delivered by a private-sector-led economy, the environment in which business is conducted will require a good deal of attention. Much of this attention will have to take the form of developing and strengthening some key institutions.

The word “institution” in this context primarily refers to an established law or custom, such as contracts or property rights. More formally, North (1991: 97) defines institutions as “the humanly devised constraints that structure political, economic, and social interactions. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules and regulations (constitution, laws, property rights).” The impact of institutional issues on the costs of transacting and on the growth of an economy has been highlighted in the body of work sometimes referred to as the “new institutional economics.” Indeed, for North (1981: 24–25) an “efficient system” of property rights is one that “maximizes social output,” or reduces transactions costs and “encourages economic growth.” Lack of economic growth is attributed to “inefficient property rights.”

But it is important that these rights do not exist simply on paper; the authorities must be able to enforce them in practice. In fact, North (1990: 54) asserts that “the inability of societies to develop effective, low cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the Third World.” The performance of organizations (such as the bureaucracy and the judicial system) that carry out these functions must, therefore, be scrutinized.

A caveat is in order. Rutherford (1994: 160–1) points out that the contribution of the new institutional economics is not free from ambiguity. Many references to “improved economic efficiency” in their writings refer to reductions in production or transactions costs, but their relation to welfare is left unclear. Thus, “efficient” institutional changes that reduce transactions costs or promote productivity or economic growth might do so only by affecting the distribution of income and welfare, or at the expense of important non-material values.

That said, the literature on the relationship between institutions and economic growth draws attention to an important point. In order to sustain a high level of economic growth over the next, say, twenty years, Egypt will have to give thought not only to the obvious economic levers – such as the fiscal deficit, the interest rate, the exchange rate – but will have also to attend to the underlying issues of social rules (property rights), their enforcement, the impact of these on transactions costs, and the functioning of organizations that enforce these rights and make them a reality.

An efficient and inexpensive determination of a clear set of rights governing property is fundamental to any market economy. However, establishing property rights in Egypt can be enormously complex, time-consuming, and costly. De Soto (2000: 20–1) describes how obtaining the necessary permission to build on formerly agricultural land can require six to more than 11 years of wrestling with bureaucratic procedures. Trying to acquire and legally register a lot on desert land is no better; it can take at least 77 bureaucratic procedures at 31 public and private agencies, and consume between five and 14 years. The time, costs, and effort in going through these processes has led to about 4.7 million dwellings being erected illegally. Moreover, if the settler subsequently tries to legalize his position by purchasing the rights to his dwelling, he runs a risk of having it demolished, paying a steep fine, and serving up to ten years in prison. This provides an incentive to avoid registration and thus evade detection by the authorities. Helmy (2004) reports a survey of the property market by the Egyptian Center for Economic Studies which estimated that the real estate assets of a staggering 92 percent of Egyptian property owners were unregistered and untitled.

But that means that the property owner cannot use the savings embodied in the dwelling as collateral for a loan, or as a share against an investment, or to trade these assets outside a very narrow circle. This so-called

“dead capital” (because it cannot be used to generate fresh assets) can be very substantial; De Soto (2000: 34) estimated such dead capital in Egyptian real estate at \$240 billion, which was thirty times the total value of all shares at that time on the Cairo Stock Exchange. The inaccessibility of this capital for productive purposes results from the absence of legally enforceable transactions on property rights.

The working of the institutional structure has a very different impact on economic enterprises, depending upon their size. The Egyptian private sector is segmented into two very different groups of participants.⁵ On one end are the largely family-owned formal medium and large enterprises (MLEs) that enjoy a high degree of tariff and non-tariff protection, have access to all the institutional private credit, use relatively modern technologies, make most of the country’s private investment, generate most of its private exports, and pay higher salaries. Numerically, the medium and large enterprise sector accounts for only about 10 percent of private non-agricultural establishments; however, they are by far the principal beneficiaries of government support. It is for them that most policies are developed, at whom most incentives are directed, who are the most active partners in the government’s dialogue and interaction, and to whom the government looks to provide the drive towards private sector development.

On the other end are the micro and small enterprises employing less than ten workers each, that often are informally organized – the Alexandria Businessmen’s Association (1996) quoted an estimate of the number of informal sector enterprises of 2.28 million in 1991. Despite being constrained financially and in other ways, micro and small enterprises account for over 90 percent of private non-agricultural establishments, produce nearly 80 percent of the country’s private value-added (75 percent if agriculture is excluded), and account for about three-quarters of its private non-agricultural jobs. These enterprises find it difficult or undesirable to expand beyond their current sizes, largely because of the difficulties of obtaining finance; for example, Nathan Associates (1997) estimated that in 1997 lending to the micro and small enterprises by the entire banking sector was only 5–6 percent of bank lending. They are therefore forced into the informal credit market, in which interest rates can run as high as 100 percent, compared with 12–15 percent from banks. Moreover, informal assets cannot be used as collateral or in other legally secured market transactions; De Soto’s estimate of such “dead capital” in Egypt was quoted earlier. It is true that informal assets can be used in informal markets (and then reinvested in the formal arena), but because these transactions take place outside the legal structures they tend to be very risky and therefore small and high-cost. Even when property rights existed, Cadwell (1999: 48) found significant shortcomings regarding the definition of property that might be pledged, the system of registering and giving notice of the pledge, and enforcing a pledge if a credit contract were breached.

In view of the putative advantages from acting in the formal sector, why do entrepreneurs choose to remain informal? The answer lies in the costs of becoming formal. Galal (2004) found that formalization under the existing regulatory framework would make the entrepreneur worse off by nearly LE 15,000 annually. These losses would accrue from the additional cost of abiding by the legal and regulatory procedures in the formal sector regarding entry, operation, and exit. Galal estimated that incorporating a sole proprietorship could take up to 91 steps over 232 days and involve 43 entities, at a cost of over LE 8,000, which was more than the per capita income in Egypt in 2002. The exit procedures were equally cumbersome and costly: bankruptcy procedures could take up to 53 steps over 635 days and involve 14 entities, costing entrepreneurs about LE 9,000 in cash and LE 19,000 in opportunity cost. Aggregating the results across all firms in the informal sector would provide a loss of resources to society equal to LE 6.5 billion, or 1 percent of GDP every single year.

However, if the business environment were reformed in a manner that simplified all rules and procedures regarding entry, operation, expansion, and exit of firms, the results could be quite different. Depending upon the precise reforms included in such a package – and Galal cautioned that partial reforms were not likely to be effective – the cost of establishing and operating businesses could be reduced by 90 percent, access to mortgage by 91 percent, and enforcement of pledges by 77 percent. Under such an environment, Galal found that the private value of a formalized firm could increase by 1.5 times the per capita income of Egypt in 2002. Aggregated across all firms in the informal sector, formalization under such conditions could generate an annual increase of 1.3 percent of GDP every year.

The Egyptian private sector thus remains structurally imbalanced. The incentive and protection structures have consistently been targeted towards the MLEs; micro and small enterprises have effectively been ignored and consequently have remained with only weak linkages to the rest of the private sector. The gulf between the micro and small enterprises and the large-scale sector is perpetuated by the lack of subcontracting from the large firms to the small; the World Bank (1994) found that only about 25 percent of large Egyptian firms subcontracted to smaller firms – very unlike the situation in East Asian countries.

The legal status of firms reflects the dichotomy between the large and the small. Fawzy (1999: 15) found that only about 5 percent of private establishments in non-agricultural activities consisted of joint-stock firms; the rest were established either as individual entrepreneurships (47 percent) or partnerships (48 percent). A healthy development of the private sector will (in addition to reducing the costs of formalization) require measures to expand the size of the micro and small enterprises sub-sector, to increase its links with the larger firms, and to provide it with greater access to technology and market information, while at the same

time reorienting the activities of the family-based enterprises increasingly towards the export market.

After a prolonged period of socialistic policies and of, at least, covert hostility on the part of the government towards private enterprise, it is but natural that building up the private sector's confidence and encouraging it to invest would take time. Broadly speaking, this requires movement on two fronts. First, it would require special efforts to build up the private sector, by improving the legal system, making transactions between the government and business more transparent, providing more relevant training for labor, improving access to finance, facilitating the acquisition of technology, and so on. Second, it would entail convincing the private sector that the playing field had now been made level, and that the public sector would no longer be given preferential treatment. In the private sector's view, a large public sector would have the power to extract continuing concessions from the government; a credible policy of fair treatment would therefore require a downsizing of the public sector.

Empirical findings confirm that the private sector considers regulatory processes and procedures to be significant issues affecting the effectiveness of their operations, although the perception of the relative weight of the different impediments has changed over the past decade. The responses to a survey conducted in 1991 showed that the private sector regarded uncertainty about government policies to be the most binding constraint on the sector's growth; the next most serious were taxes and tax administration, access to and the cost of finance, and the availability of material inputs.⁶ Surprisingly, labor regulations, while still significant, ranked much lower.

The seriousness of the regulatory obstacles varied by sector and by size of enterprise. For example, engineering and textile firms found taxes and tax administration to be the most binding constraints; they were less so for the food sector. The difficulty of access to finance was very important in the engineering industry, while labor regulations and the availability of inputs were considered more critical impediments in the textile. Virtually all the constraints (the chief exception was labor regulations) fell more heavily on small firms; the most important burdens being taxes and tax administration.

Subsequent studies, for example World Bank (1994: 19–20 and Annex C), reiterated many of the earlier findings, especially as regards the level of taxes and the complexity of tax administration, access to and the cost of finance, bureaucratic procedures, and the high cost of inputs. The predictability of government policies was a significant factor, but less so than in the earlier survey. As before, the smaller firms felt most constraints more sharply than did larger enterprises. Galal (1995: 12–15) showed a similar pattern. Moreover, he found that the severity of institutional constraints varied with the size of firms, the general rule being that the smaller the firm, the more binding the constraint. This was especially

apparent in relation to tax administration and in access to finance and intermediate inputs.

A more recent survey by Fawzy (1999: 22–3) in 1998 found that problems of tax administration, dispute settlement, and inadequately trained labor remained as major constraints on the efficient functioning of private enterprise. The severity of some impediments, especially access to and cost of finance, and uncertainty regarding the government’s policies had slipped lower down the scale of concerns. Again, small firms on average suffered more from the institutional constraints, especially related to taxes and tax administration. Many of these findings, especially those concerned with the enforceability of laws and regulations and with the necessity of keeping discretionary decisions to a minimum (so as to avoid losing transparency, credibility, and consistency), were further confirmed in a survey by Ghoneim (2002: 105–32).

Several of the constraints result from institutional structures that are deeply embedded in Egyptian society. Nevertheless, the issues must be addressed. Indeed, it is becoming increasingly evident that Egypt will have to undertake the “second generation reforms” if it is to sustain rapid growth in the future. As El-Ghonemy (2003: 98) puts it, the focus of the development strategy will have to change from “getting prices and the monetary system right (interest and exchange rates) to getting institutions right.” The following sections discuss the principal areas for reform in order to produce a more efficient business environment.

The bureaucracy

Egyptians frequently joke that, “Egypt did not invent bureaucracy, but it has had 7,000 years in which to perfect it.” Indeed, paeans to the advantages of bureaucratic service and exhortations to be a scribe have been found on papyri and ostraca dating to the Ramesside era. The motivations for entering this profession appear to have changed little during 3,200 years. Palmer *et al.* (1988: 38–9) report that over 50 percent of their respondents cited security of tenure, steady income, and high prestige as the chief attractions, which are precisely those highlighted in the *Papyrus Lansing* composed during the Twentieth Dynasty.⁷

The size and structure of Egypt’s bureaucracy has a major impact on the private sector environment. It slows decision-making, requires higher levels of government expenditure and hence taxation to maintain, and increases the cost of doing business.

From the viewpoint of its effects on the economy, the impact of the bureaucracy is chiefly felt in three areas: the direct budgetary cost, the addition to transactions costs, and the quality and efficiency of service. Six issues must be considered.

The size of the bureaucracy

In modern times, public sector employment and the bureaucracy have grown rapidly. Ayubi (1980: 243, Table 4) estimated that in 1952 about 350,000 persons were employed in the civilian public bureaucracy; by 2000 the figure had risen to over five million. Of course, the population had increased in the intervening years, but even on a per capita basis the increase was from about two bureaucrats per 100 of the population to nearly eight per 100, and the latter figure does not include workers in public enterprises.

The rapid expansion of public sector employment commenced in 1956 with the nationalization of French and British enterprises and accelerated with the nationalization of most major sectors of the economy in 1960–64. The ranks of the bureaucracy were swelled by the laws guaranteeing employment to all graduates of certain types of institutions. This law had little to do with the requirements of the state; rather, by providing employment, it served as a sort of social safety net. The numbers employed in the public service continued to grow, and by 2000 the public sector employed about one-third of the labor force.

In view of the size and growth of the bureaucracy, it is not surprising that efforts at reform have been more or less ongoing. Ayubi (1980: 302–13) describes significant measures being initiated in 1881, 1915, 1920, 1922, 1931, 1951, 1964, 1970, etc. Another major initiative was launched in 1994 as part of Egypt's efforts at restructuring its economy in a more market-oriented direction.

However, the authorities have not succeeded in holding down the growth of government employment; in fact, the largest contributor to employment growth during 1991–2000 was the government. Employment in the government sector grew at nearly 5 percent per annum, almost twice as fast as total employment, and contributed over 40 percent of the net job creation during this decade. The continued expansion of government employment can be attributed to the increasing proportion of persons with higher education in the population and the pressure exerted by these groups. Over 400,000 graduates are added to the labor market each year, with perhaps half of them not possessing skills required in the private sector. Thus, in the 1990s the government sector employed 55 percent of the university graduates and 47 percent of intermediate graduates; when the public enterprise sector is added, the respective figures become 70 and 63 percent.

Assaad (2000: 23) found that the biggest share of growth (34 percent) in government employment in 1988–98 was of educators. However, the next biggest expansion was that of clerical staff, which grew at a rate of almost 6 percent per annum during this period and accounted for about 27 percent of the expansion in government employment. Assaad pointed out that the growth in clerical workers could not be associated as easily

with the growth in government output as could be done in the case of educators. He attributed the continued hiring of clerical staff to the pressure to hire graduates, even though the graduate employment guarantee system was effectively suspended. Controlling the expansion of the bureaucracy still poses a challenge.

The structure of the bureaucracy

The bureaucracy is very hierarchical and marked by highly centralized decision-making. Even simple decisions are referred to senior levels within Ministries and there is little delegation of authority. Weinbaum (1986: 114) wrote that, "Government ministers resist delegating authority to their deputies who they perceive more in staff than line relationships and who, in most instances, are none too anxious to assume responsibility." The often overlapping structure means that it is frequently necessary to obtain multiple clearances and approvals, thus increasing delays and adding to costs.

The complexity and inflexibility of administrative procedures and the slow working of the bureaucracy are evident in the time taken to complete routine commercial tasks. A study by Djankov *et al.* (2000) examining entry regulations in 75 countries ranked Egypt at the bottom of the list, using as criteria the number of administrative procedures, the time needed to establish a firm, and the cost involved. In Egypt an entrant was required to complete 17 procedures regulating entry compared with 20 in Bolivia (the largest number in the sample) and two in Canada (the smallest). It took 132 days in Egypt to establish a firm, compared with 172 days in Mozambique (the worst case) and again two in Canada. The procedures cost an average of 2.2 times per capita GDP in Egypt, compared with 2.6 times in Bolivia (the worst case) and 0.0096 times per capita GDP in the USA (the best case). Indeed, MOP/World Bank (2004) reports that Egypt ranked in the top 25 percent of countries in terms of cost of registration.

An idea of the costs imposed on the economy by such procedures can be gauged from the benefits of reducing their number. Hoekman *et al.* (2001) estimated that if Egypt were to reduce the number of procedures to 13 (as in Tunisia), industry markups would be reduced by 18 percent, because of the increased intensity of domestic competition. The reduction of the number to 11 (as in Korea) would further lower markups by 38 percent.

Remuneration and incentives

The pay of civil servants has remained low and is not linked to productivity. As a percent of GDP, budgetary expenditure on wages and salaries fell somewhat after 1982, although in 2000 it still accounted for 32 percent of

current budgetary spending.⁸ This movement, while contributing to a reduction in the budget deficit, has not been without negative effects. Handoussa and El Oraby (2004: Tables 3 and 4) report that the top of the salary for the highest grade (First Under Secretary) increased only from LE 2,000 in 1964 to LE 2,600 in 1999, an increase of 30 percent in nominal terms over a period of 35 years. They calculate that in 1964 prices, the 1999 salary works out to a mere LE 73.51. Similarly, in 1964 prices, the salary range for Grade 6 (the lowest grade after 1978) dropped to LE 11.86–21.01 in 1999 from LE 330–600 in 1964. Even allowing for the vagaries of the price indices used in the calculation and the presence of supplementary benefits in 1999 that might cushion the pinch, the change must represent a brutal compression.

The low pay of the civil service destroys morale – a study by the Al Ahram Center in 1983 showed it to be, by far, the most important source of job dissatisfaction among civil servants – and encourages working at two or more different jobs. Despite the legal prohibition against government officials' holding second jobs, Palmer *et al.* (1988: 61) reported that 89 percent of their respondents acknowledged holding such second jobs. Moreover, 84 percent of those respondents holding second jobs devoted between 3–5 hours a day (i.e. half a normal working day) to the supplemental job.

The inadequate salaries and the resulting low morale of the bureaucracy could be a major impediment to fulfilling Egypt's development aims. Ayubi (1980: 507) points out that government officials are not technically ignorant of *how* to do something; rather, they are not socially motivated as to *why* they should do it. And Weinbaum (1986: 115) tellingly comments that, “[The] same ministry employees who sit idly most of the days . . . are examples of industriousness in hustling to make extra cash once off the job.” The inadequate pay obviously also increases the danger of a bureaucrat's succumbing to illegal temptations. However, increasing the pay to realistic levels for the numbers presently employed in public service would play havoc with the budget.

Productivity

Palmer *et al.* (1988: 45–71) found that productivity in Egyptian bureaucracy was very low, when measured against a variety of indicators. The reasons for the low productivity covered a wide range, with red tape (i.e. the rigid rules and regulations that had to be followed), apathy (resulting largely from low pay), and inadequate training being the most significant. Moreover, as these writers comment (p. 62), “The multidimensionality of the problem suggests that major increases in worker productivity are unlikely to be achieved overnight.”

Quality

Studies have also demonstrated a significant connection between bureaucratic efficiency and growth; in fact, Rodrik (1997) showed that differences in the quality of the bureaucracy largely explained the divergence in performance between the most and least successful East Asian economies. It is likely that the quality of the Egyptian bureaucracy is becoming diluted through a process of adverse selection. A feature of Egypt's labor market is the "guaranteed employment scheme." Under this scheme, graduates of higher educational institutions are guaranteed a job in the government. However, the average period between graduation and entry into government employment steadily lengthened, and by 2000 it exceeded six years. During this interval, the better-qualified graduates found higher paid employment in the private sector, increasingly leaving public sector employment to the less well qualified.

The mismatch of skills between the requirements of public service and those produced by the education system are staggering and persistent, and affect both the overstaffing of the government services and the quality. Waterbury (1983: 246) quotes an official report on this problem which noted that in 1975 the Ministry of Human Resources asked the Ministry of Agriculture for the number of graduates that it would need in the following year. The answer was 261 university graduates and 495 with secondary agricultural diplomas. Facing this demand was a supply of 8,000 graduates of agriculture faculties and higher institutes, and 11,000 holders of agricultural secondary school diplomas. As Waterbury (1983: 234) noted, "The ills of the educational system have been visited upon the civil service."

Lest anyone think the foregoing example outdated, recent instances are readily available. Nearly a quarter of a century after the incident described by Waterbury, the *Egyptian Mail* (December 5, 1998: 2) headlined that, "Three million employees get paid for doing nothing." The report quoted the State Minister of Administrative Development as saying that, "There are five million [public] employees in Egypt, but there are only two million jobs. It means that three million employees are doing nothing, not to mention that they can slow down the progress of the work." He went on to say that the country had to stop the habit of appointing ten persons to do the job of one. As another instance, Galal (2002) reported that the government's announcement in 2001 of the availability of 170,000 job openings was met by a deluge of over five million applications.

An efficient bureaucracy is essential to moving the country expeditiously towards a market economy. Several suggestions for reform have been put forward. The general strategy proposed by nearly all of them has been to "rationalize" (other euphemisms for "reduce" are not unknown) the numbers so that the available budgetary resources could pay the remaining civil servants a reasonable salary. A variant is the suggestion to

create élite, and higher paid, units for decisions that have a crucial bearing on economic development. An instance of this (proposed in the version of the Möller report submitted to President Sadat in 1977) was to establish an advisory and planning unit in the office of the President with smaller units in the offices of the Prime Minister and other Ministers. These elite units, by-passing the normal civil service, would provide a high-quality group of officials who could react rapidly and who would assist the principal policymaker on economic matters.

However, as Dr Atef Ebeid pointed out, élite units would only be able to play a largely advisory role, and would not be able to handle the nuts and bolts of administrative work, especially as most of this latter work required daily interaction with the public.⁹ Large numbers of civil servants were involved, and hence there really was no way of avoiding reforms that affected the bulk of the civil bureaucracy.

The original problem remains. So long as a significant part of public sector employment functions, *de facto*, as a social protection mechanism, what will happen to the employees who fall victim to the downsizing? Who will bear the political and social costs of the bureaucracy's restructuring? No doubt the most palatable solution would be faster growth of the economy, so that many more jobs were created in the private sector. However, credentials that qualified workers for a job in the public sector would not necessarily equip them for one in the private. A program of retraining and an expanded social safety net would thus appear to be critical components of any sustainable reform of the bureaucracy.

Corruption

An issue that arises with the bureaucratic apparatus in many developing countries is that of corruption. Studies have shown a strong link between corruption and investment. Mauro (1995) showed that a one-standard deviation improvement in his corruption index was associated with an increase in the investment rate by 2.9 percent of GDP for a large sample of countries. He also found that a similar improvement in the corruption index was associated with an increase of 1.3 percentage points in the annual growth rate of GDP per capita.

Objective indicators of corruption are difficult to obtain. A number of organizations have attempted to establish subjective indicators, using generally consistent definitions. Mauro (1995) provides estimates by Business International for the 1980s, using a scale of 1–10 (best), which provided scores for Egypt of 3 for red tape, 3.25 for corruption, and about 4 for bureaucratic efficiency. Transparency International (2001) ranked Egypt 54th out of 91 countries in its "Corruption Perceptions Index," with a score of 3.6. The country that came first (least corrupt) was Finland, with a score of 9.9. Some other countries in the region did better than Egypt, such as Israel (16th) and Jordan (37th). The United Nations *Arab*

Human Development Report 2002 (Table 35) estimated the prevalence of graft in Egypt in 1998 at about the average for the Middle East region as a whole; this left it worse than in Jordan, Kuwait, Lebanon, Bahrain, Tunisia, the Occupied Palestinian Territory, and some other countries in the region. Finally, Kaufman *et al.* (2002) estimated indicators such as “regulatory quality” and “control of corruption” for 2001. Egypt’s position had improved slightly from 1998, but was still significantly worse than for a number of other countries in the Middle East.

The regulatory and judicial system

Two and a half centuries ago Adam Smith observed that “a tolerable administration of justice” together with the maintenance of peace and low taxes was necessary to “carry a state to the highest degree of opulence.”¹⁰ The Egyptian legal system has undergone gradual reform during the past two decades. Since the *infitah* the government has progressively amended laws with a view to making the legal system more market-friendly. This process accelerated after 1990. Several new or revised laws with possibly significant effects on the economy were introduced, including: Capital Markets Law (1992), Securities and Banking Law (1992), Dispute Settlement Law (1994 and amendments 1997), Insurance Law (1995), Leasing Law (1995), Property for non-Egyptians (1996), and the Law on Investment Guarantees and Incentives (1997). However, by the end of 2000, several important laws remained to be reformed, for example, the Commercial Code (1883, amended 1953), the Civil Code (1948), and the Civil/Commercial Procedure Code (1968).

Most criticisms of the Egyptian legal system are leveled at its delays and expense. These are important weaknesses, because the concept of a free, private-sector-led, market economy is based on the premise of enforceable rights and contracts that are rapidly and efficiently executed.

Studies by USAID, the IMF, and the World Bank have found that in recent years the average commercial dispute took six years to be decided. The cassation phase (in Egypt’s highest court) normally takes another five years, while enforcement upon immovables can add another two to five years. Substantial delays impinge on even minor commercial transactions. Djankov *et al.* (2001) showed that, even assuming that a plaintiff had complied with all the necessary regulations and was 100 percent right, the collection of a dishonored cheque would involve 15 separate procedural actions and take 202 working days in Egypt, compared with 54 days in the United States; while an IMF/World Bank study in 2002 reported the average time to collect on a dishonored cheque in Egypt at three years, with cases of five years not unknown. Bentley *et al.* (1994, vol. 2: 68–9) found that completion of foreclosure under mortgages could easily take five years. In addition to the problems and costs that these delays impose on individuals and businesses, the long times required and the high cost

of collecting on securities and collaterals leads the banking system to demand excessive collateral, thereby restricting access, increasing the cost of finance, and losing otherwise profitable customers.

The delays in the legal system chiefly result from understaffing, inadequate litigation procedures, and poor infrastructure. Understaffing has created a very heavy and increasing caseload of the judges. Between 1987 and 1995 the annual workload of new and pending cases increased by more than 60 percent. According to the World Bank (1995a: 14), in 1993 the average lower court judge received 3,173 new cases during the year, had 9,521 cases in process and reached decisions on 4,475 cases. An average higher court judge received 975 new cases (plus appeals) a year, had 1,715 cases in process, and reached decisions in 806 cases. Overall, a judge had an average daily docket of around 200 cases. It is estimated that the average caseload in Egypt in 2000 was nearly 8,000 cases per judge. Obviously, only a small fraction of this number can be decided, while the remainder goes to swell the backlog. In the mid-1990s the clearance rate (cases resolved as a percent of those filed) in the Egyptian judicial system was 36 percent, compared with 80–100 percent in developed countries.

Let me put these matters in international perspective. A study by Dakolias (1999: 11) of the number of filed cases per judge in eleven countries found that in 1995–96 German judges received only 176 cases per year, French about 277, and state court judges in the United States about 1,300 (close to the study's average of 1,400). The Mahbub ul Haq Human Development Centre (1999: 66, Table 3.8) showed that even South Asian judges fared better than their Egyptian counterparts: in 1996 the number of pending cases per judge in Nepal was 314, in Pakistan 454, in India 2,137; the highest, for Bangladesh at 5,142, was still one-third less than the number in Egypt.

Litigation procedures are cumbersome and often repetitive; for example, they allow for the automatic appeal of sentences (nearly 80 percent of all cases are appealed) and the use of old evidence, which effectively turns the appeal into a second trial. This increases the judges' burden, lengthens the time for the final settlement, and adds to legal costs.

The judicial system is badly under-funded. It is financed largely from general budgetary revenues and consistently receives amounts well short of that required – for example, in 1994 it was allocated only 0.7 percent of total budgetary expenditures and on a per capita basis it ranked near the bottom of a sample of 12 developing and developed countries examined by the World Bank (1995a: 16). This lack of resources is reflected in the low salaries of judges (which makes it difficult to recruit and retain qualified personnel); and in weaknesses in judicial infrastructure, especially facilities for the management of case files. As the overwhelming majority of cases in Egypt is tried using written case materials, the efficient recording, retrieval, and maintenance of case files is vital.

The costs of accessing the judicial system are significant. A wide range of fees and charges is levied, and the combination of these prices raises the cost of doing business in Egypt. Bentley *et al.* (1994, vol. 2: 67) estimated that court costs associated with settling a commercial dispute amounted on average to about $7\frac{1}{2}$ percent of the judgment amount, and were very high relative to those in industrialized countries. Giugale and Mubarak (1996: 5) point out that these costs were so high because in effect the commercial legal system is set up to cross-subsidize the criminal branch of the system. The long time taken by the cases means that lawyers' fees also mount up.

In view of the delays and the attendant expense, it is not surprising that over 65 percent of sampled private firms in a World Bank study (1994: 15) preferred either to negotiate a partial settlement or to write off defaulted debts completely. Only 25 percent sought court judgment for debt recovery; 83 percent had never sued anyone in court, and 47 percent of those who did go to court settled before trial. Small businesses suffered most, recording both the lowest rate of resort to the judiciary and the highest rate of unresolved cases.

Adapting the judicial system to the requirements of a market economy will involve recruiting additional judges and paying them sufficiently to be motivated, trained, and retained. The judicial system also requires additional funding for improving the infrastructure, such as computers for easier storage and recovery of information, air-conditioners for courts so that the summer recess could be shortened, and so on.¹¹

It is impossible to overstate the importance of reforming the commercial legal system, because the lack of mechanisms for the efficient enforcement of contracts limits contestability, inhibits corporatization, increases project risk, and restricts technology transfers, especially from foreign partners. It can also hamper the development of the financial system by raising the cost of collecting on securities and collaterals. A strong legal system is essential to the functioning of a market economy, particularly in the enforcement of contracts. As Thomas Hobbes put it in 1651: "He that performeth first has no assurance that the other will perform after, because the bonds of words are too weak to bridle men's ambitions, avarice, anger, and other passions without the fear of some coercive power."¹²

Apart from improving the functioning of the commercial judicial system, Egypt may need to reform the law itself in two areas. First, an economy is unlikely to be competitive internationally unless it is kept agile by competition at home. Much of Egypt's economic system, particularly the manufacturing sector, is shielded from competition. Import tariffs and non-tariff barriers kept international competition at bay, while legal monopolies and impediments to entry and exit ensured that competition was minimized domestically. Sustainable growth will require changes in law and its implementation in the direction of permitting greater con-

testability, both between enterprises in the private sector as well as between those in the private and public sectors.

The second area in which legal reform might be necessary pertains to reductions in the labor force. Egyptian labor, particularly in the public sector, has long been granted virtually life-time security. Workers can be dismissed only for committing a "grave error," and the law specifies the types of behavior that fall into this category and the procedures that must be followed before disciplinary dismissal is permissible. These procedures are long and complex; moreover, surveys show that much of the private sector finds ways to evade these regulations.¹³ This both removes protection from workers and brings the law into disrepute. The job security provisions were instituted when the economy was more closed. In a globalizing economy, Egyptian businesses must be able to respond rapidly to changing demand conditions by appropriately adjusting the size and skill mix of their labor force. Suggestions for reform include allowing layoffs with notification, severance pay, and perhaps unemployment insurance, in order to provide workers with protection while permitting firms the flexibility they need to succeed in an increasingly competitive environment.

The tax system

Surveys have repeatedly shown that the private sector perceives the tax system as a major impediment to its efficient functioning. The World Bank (1995a, vol. 2: 34–6) noted that the key problem was that the tax system gave to tax collectors both absolute powers and collection incentives. The power arose because tax inspectors were in practice permitted to assess the profitability of a business, and thus its liability to tax, independently of records. The incentive was provided through the payment of low basic salaries and high performance-related bonuses. Moreover, there was no mechanism for appeal that was independent of the tax authorities. Tax assessments that were not settled on an informal basis became tax disputes, to be handled by committees (first an "internal" and then an "external" appeals committee) which were composed predominantly of tax officials. If agreement was not reached at the committee level, the matter went before the courts. Under the law, the taxpayer first has to pay the assessment decided by the external appeals committee; thereafter he can sue for reimbursement. Generally, the financial cost that would be imposed by the leisurely functioning of the judicial system drives the taxpayer to compromise at the stage of one of the committees.

The tax authorities follow a policy of complete auditing of all taxpayers; this imposes a heavy burden on the administration and is frequently impossible to complete punctually. A business might not know until ten years after submitting a tax declaration how much tax it has to pay. Although there is a five-year limit on claims by tax authorities, the World

Bank (1995a, vol. 2: 31) considered that the necessity of auditing every form and the limited resources of the authorities “leads to the frequent use of unfounded claims before the five years elapse in order to trigger a second, five-year period of tax inspection.”

It is not surprising, therefore, that in order to reduce uncertainty and to avoid the aggravation of prolonged negotiations with the authorities, an estimated half of all taxpayers prefer to seek (or accept) “informal” settlements. But this route has a number of unfortunate consequences – the government collects less revenue than would otherwise be due, and it creates a major barrier to private investment because large corporations will (a) find it difficult to adopt informal settlements, and (b) generally balk at projects with uncertain tax costs. Problems with the tax system are especially burdensome for foreign investors, who are largely unaware of how it works and thus are more likely to be deterred by the opacity and arbitrariness of its functioning.

The availability of long-term finance

The private sector’s access to long-term financing, i.e. for seven or more years, is quite limited. Three reasons largely explain this state of affairs. First, banks are generally reluctant to extend long-term credit to private firms. In part this stems from the banks’ difficulty in matching longer-term maturities with long-term savings, a state of affairs that could be corrected if they were allowed to bid freely for social security funds. In part it arises from the weakness of contract enforcement institutions, which increases risks for long-term lending. In part it springs from a lack of competition in the banking industry and the dominant role of public sector banks; it should be noted that public or semi-public firms have much easier access to term loans.

Second, the securities market remains thin – the American Chamber of Commerce in Egypt (1996: 111) reported that during the 1990s less than 5 percent of the capital raised by public and private sector firms came from the securities market. Most company listings are motivated by tax considerations, and their stocks are closed to public trading (usually through rights of first refusal included in the corporate charters).

Third, the potential for leasing remains untapped. Industry sources in Egypt claimed that the chief constraint on the growth of the leasing industry was the uncertain enforcement of ownership rights.

Imbalances in the market for skilled labor

The training provided by the public technical and vocational schools was designed for an economy in which growth was led by the public sector. Institutes for technical training were set up in considerable numbers and enrolment in them ballooned over the years: by 1997–98 there were over

1.85 million students in Technical Secondary Schools and over 183,000 students in vocational schools. In addition, a survey by CAPMAS (1998) identified over 1,200 vocational training centers that were affiliated to various ministries, agencies, and public enterprises that in 1997 produced another 175,000 graduates. There were also some 3,500 community-based training centers. A capacity to produce substantial numbers of skilled workers thus exists.

However, there is an evident mismatch between the skills imparted by these institutions and those in demand in a private-sector-dominated market, especially in the institutions forming part of the system of higher education. In 2000, the higher education sector in Egypt consisted of 12 public universities, four private universities, and 51 public non-university institutions. Of these last-named, 47 were middle technical institutes. It was found that in recent years over 60 percent of the graduates of these institutes remained unemployed for at least two years following graduation.

There are two main obstacles to building relevant skills in Egypt. Based on a survey of 208 private firms, World Bank (1995a, vol. 2: 45, Table 3.8) found that, first, many of the technical institutions were market-insensitive in that: (a) they turned out an enormous quantity of graduates relative to market needs (about six to seven times more technical and vocational graduates per year than the demand); and (b) the job-specific skills acquired by these graduates were of little use for small enterprises, which was the only sector in which evidence of unsatisfied demand for formally-trained technicians was found. Second, the private sector seldom participated in a formal training process; the CAPMAS survey referred to earlier listed only 15 private sector vocational training centers (in an admittedly incomplete census, but other evidence also points in the same direction). Larger firms are reluctant to make long-term investments in human capital because of fears of labor turnover, and micro and small enterprises generally lack the resources to provide training.

The issue is how to produce the skills demanded by the market. This will demand, first, a change in philosophy – away from producing a *trained* labor force drilled in rigid ways in obsolescing technology, towards a *continuously trainable* labor force that can react more flexibly by understanding the principles of the technology and being better skilled at problem-solving. Second, it will require an involvement of the private sector in redesigning the curricula for the vocational and technical training institutions, so that the training that is provided is in fact relevant to demand conditions in an increasingly private-sector-led economy. Third, it will call for a significant injection of resources for training the trainers; according to the CAPMAS (1998) survey of 1,237 vocational centers, only 35 percent of the trainers had any pedagogical training and only 50 percent had attended any advanced practical training.

A strategy for poverty alleviation

It is difficult to see how a strategy for sustained growth that requires significant sacrifices from the population can be maintained in the absence of a visible improvement in the standard of living of the poorest. An earlier chapter described how poverty is estimated to have increased between 1982 and 1996 and declined thereafter until 2000. It is beyond the scope of this chapter to prescribe a detailed strategy for poverty alleviation; such an enquiry would have to scrutinize virtually every part of the economy. This chapter attempts something more modest: an outline of an approach and of policies that would be essential in a program of poverty alleviation.

The salient facts on poverty described in Chapter 9 and the myriad of studies on poverty reduction suggest that a strategy for poverty alleviation should be based on four elements: rapid growth of the economy; emphasis on education and relevant training; an explicit plan for the development of Upper Egypt; and a reinforced social safety net.

Growth

This chapter has laid out the rationale for rapid economic growth, discussed the main policies required to generate it, and described the institutional reforms necessary to support it. The remainder of this section will therefore concentrate on the other elements of the approach to alleviating poverty.

Education

It was shown in Chapter 9 that education was the most prominent correlate of poverty; thus it is likely to provide the most promising path out of it. Figure 10.3 shows the chances of being poor by level of education; these range from 24 percent for the illiterate to 2 percent for those with university education.

The HIES 2000 and MOP/World Bank (2004: 29) point to four major links between poverty and education.

- The poor suffer from high illiteracy: 46 percent of the poor are illiterate. The situation is particularly serious because households with illiterate heads tend to have a higher proportion of illiterate children; illiteracy tends to be perpetuated across generations.
- A person who can read and write, but has no other formal education, earns a much higher income than someone who is illiterate.
- Rates of return are low for basic and secondary education, which suggests that the quality of education at these levels is poor. Indeed, MOP/World Bank (2004: 29–30) suggested that moving up from simple literacy to completing basic education could produce negative private rates of return. In other words, the higher income earned by

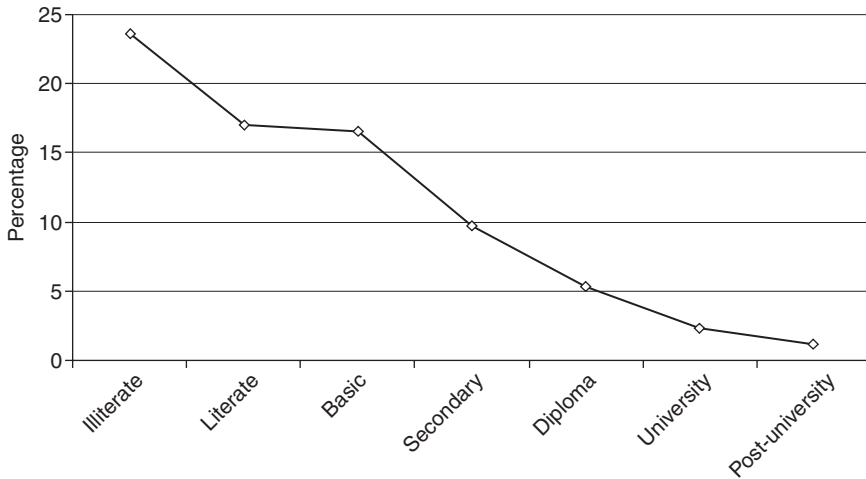


Figure 10.3 Chance of being poor by level of education, 2000 (percent) (source: CAPMAS (2002; MOP/World Bank (2004)).

someone completing basic education does not necessarily compensate him for the income he forgoes while acquiring this education.

- The indirect costs of education, especially the income forgone, can be burdensome for poor families. MOP/World Bank (2004: x) estimated the income forgone from attending secondary school at LE 2,615 in 2000.

Continued efforts to eradicate illiteracy must form the linchpin of a poverty-alleviation strategy. The government should be able to enroll the assistance of groups from civil society to supplement its own efforts. Second, the distribution of primary school classrooms shows a marked correlation with the poverty of the governorate. An accelerated program to expand the number of classrooms in the poor governorates, especially in Upper Egypt, is imperative. Third, the enrolment of girls must be stepped up. Fourth, the quality of basic and secondary education must be improved, because the very low or negative rates of return suggest that the private sector is not prepared to pay high wages for the products of the educational system at these levels. Measures that would help in this direction would be to emphasize performance and link it to awards for schools and teachers; to improve teaching skills; and to emphasize technology skills that would bring education more in line with what the market demands. Fifth, special measures will be needed to enhance the access of the poor to education. MOP/World Bank (2004: 27) studied the incidence of benefits for different income groups from public spending on education. It found that the poorest quintile received only 15.6 percent of

total public spending on education in 2000, while the richest quintile received 21.8 percent. This was largely because (a) enrolment in almost all levels of education was lower for the poor than for the non-poor; and (b) a significant fraction of public spending went to post-basic education (secondary, university, post-university, and technical institutes) in which the enrolment of the poor was very low. The report suggested that education spending be reallocated to types of schools where the poor were most likely to enroll, i.e. basic education, and to regions in which the poor were concentrated.

The special problem of Upper Egypt

A notable finding from the HIES 2000 was that during a period (1996–2000) in which poverty decreased in other parts of the country, it increased in Upper Egypt. This suggests that a passive “trickle-down” policy is unlikely to work.¹⁴ An active policy, targeting the poverty characteristics of Upper Egypt and tailored to that region’s resource endowments and social realities, will have to be adopted.

The pattern of regional growth witnessed during the 1990s is not altogether surprising. The Metropolitan governorates benefit from their geographical location, and from their administrative position in an economic system that requires government permission for the conduct of most economic activities – three of these governorates are port cities while the fourth is the country’s capital.¹⁵ Hence, they have the advantage of lower transport costs which are particularly important when manufacturing contains a high import component, as it does in Egypt. They also gain from easier access to government officials for obtaining the requisite permissions and licences. Moreover, because these cities are home to large numbers of high government officials, the infrastructure and other facilities in these areas are substantially better; this acts as a further magnet for industry and other desirable activities. Not unexpectedly, MOP/World Bank (2002: 47) found that in 1996–2000, all manufacturing sector employment growth and the largest growth in public administration workers took place in the Metropolitan/Lower Egypt region.

The facts of geography and administrative structure described above pose a challenge. While not much can be done to move Upper Egypt closer to the sea, it should certainly be possible to improve communications between it and the rest of the country, and thereby reduce transport costs. As part of the institutional reforms, it should be possible to eliminate most of the bureaucratic interventions in the economic process, thus removing several of the most pressing compulsions for locating economic activities near Cairo. A great deal can also be done to improve the infrastructure, especially educational facilities, in Upper Egypt. A region-specific development strategy for Upper Egypt will have to be prepared. In the long run, the development of Upper Egypt may have to concentrate

on the production of high-value, low-weight items, such as computer chips and electronic items, and on the provision of services (such as accounting) “out-sourced” for large parts of the domestic and possibly international market (as is already done in India for many US-based multinational enterprises). This latter activity will again require investment in education and in better communication facilities, and possibly legal reform.

Social safety nets

Finally, there will always be individuals who, for reasons of health, education, location, or some other disadvantage will be unable to benefit from the country’s economic growth, and there will always be temporary periods when an individual or family requires support in the form of a safety net. Even in its quest for economic efficiency, a humane society must recognize the need to temper the wind to the shorn lamb.

The existing social safety net consists of three main programs: the consumer food subsidies, the cash transfers from the Ministry of Social Affairs, and the Social Fund for Development. In addition, there is the social insurance system (described earlier).

The food subsidy program is by far the largest safety nets program, accounting for about 1.5 percent of GDP (nearly LE 75 per capita) in 2000. The subsidy on *baladi* bread was the most effective subsidy in lifting people out of poverty.¹⁶ MOP/World Bank (2002: 57) estimated that without the bread subsidy 730,000 more people would have been in poverty in 2000. However, Upper Egypt and rural areas derived less benefit from the *baladi* bread subsidy, because they had fewer outlets. This argues for better geographical coverage of the subsidy program.

Because poverty in Egypt is shallow, i.e. most poor people are clustered just below the poverty line, a relatively small increase in the income of the poor can lift a substantial number out of poverty. MOP/World Bank (2002: 58) estimated that if there had been perfect targeting of the social security transfers of the LE 449 million in 2000, the poverty rate would have been just over 14 percent and 1.9 million persons (18 percent of the poor) would have come out of poverty. The perfect distribution of even this small amount would exceed the impact of a 3 percent annual growth rate of GDP. A strengthening of the social safety nets, involving greater expenditures and better targeting, must therefore form an effective element in the poverty-alleviation strategy.

The environment

Egypt’s environmental resources – air, water, and land – are under stress. A report by the World Bank (2002) estimated the damage cost of environmental degradation in 1999 at LE 10–19 billion, or 3.2–6.4 percent of

GDP, with a mean estimate of LE 14.5 billion or 4.8 percent of GDP. This is a very substantial share of GDP and is about two times higher than in high-income countries.¹⁷ Applying the same methodology, Sarraf (2004: Table 1) found that the cost of environmental degradation was also substantially higher in Egypt than in other developing countries in the region. The average cost (as a percentage of GDP) was: Tunisia 2.1; Syria 3.3; Lebanon 3.4; Algeria 3.6; and Morocco 3.7.

The cost of air pollution was put at 1.1–3.2 percent, followed by soil degradation (from erosion and salinity) at 1.0–1.4 percent of GDP. Of the total damage cost, about two-thirds was from damage to health and one-third from the degradation of natural resources. Moreover, the foregoing estimates were only partial. No costs were attributed to degradation associated with industrial, hazardous, and hospital waste; even though these could be substantial. Thus, a study for USAID by PRIDE (1994, vol. 1: III-7) estimated that industry and hospitals in Cairo alone produced up to 65,000 tons annually of hazardous and infectious wastes that received no special management but were simply dumped. The World Bank report could also make only limited estimates of degradation caused by inadequately treated waste water, but regarded the problem as substantial. In addition to the costs to Egypt, there was a further cost to the global environment, which was estimated at 0.6 percent of GDP.

The health and other impact of the environmental degradation were serious. It is estimated that about 17,000 children die (20 percent of all child deaths) every year in Egypt from diarrheal diseases caused by sub-standard water quality, and inadequate sanitation and hygienic facilities. Apart from death, the degraded environment also leads to higher morbidity, and to other enduring damage. Thus, the PRIDE study (1994, vol. 2: D-28) estimated that because of exposure to lead in Cairo, an average of 4.25 IQ points was lost per child, and that over 11,000 heart attacks and premature deaths could be prevented annually in older adults if the blood lead levels in Cairo were reduced to those in the United States.

The World Bank's mean estimates of the annual cost of environmental degradation in 1999 are displayed in Table 10.1. The estimates are necessarily rough but, if anything, probably err on the low side and provide an interesting first approximation.

Nile water

No exploration of Egypt's economic future can be complete without discussing the issue of water. Much of the new development that is envisaged – additional cultivated acres, new cities in the desert, self-sufficiency in basic foodstuffs, population transfers out of the Nile Valley – carries serious implications for water availability and use. More than 20 years ago, Waterbury (1979: 231) recommended that Egypt weigh all projects in

Table 10.1 Annual cost of environmental degradation, 1999 (mean estimate)

	<i>LE million per year</i>	<i>Percent of GDP</i>
Air	6,400	2.1
Soil	3,600	1.2
Water	2,900	1.0
Coastal zones, cultural heritage	1,000	0.3
Waste	600	0.2
Sub-total	14,500	4.8
Global environment	1,900	0.6
Total	16,400	5.4

Source: Sarraf (2004).

terms of their water components and assess their final costs in full recognition that water was a very limited resource.

Egypt receives the bulk of its water from the Nile. The Nile basin falls into two spheres: the eastern and the southern. Egypt receives on average about 86 percent of its water from the Ethiopian Highlands, predominantly from the Blue Nile. Only about 14 percent of the water comes from the southern Nile basin along which are grouped the nations of Burundi, Zaïre, Kenya, Rwanda, Tanzania, and Uganda.

Egypt's use of Nile water is governed by two main treaties, negotiated in 1929 and 1959. At the time of the 1929 agreement between Great Britain and Egypt, the former was acting for Sudan, Kenya, Tanganyika, and Uganda. While Egypt regards the treaty as valid, Kenya, Tanzania, and Uganda claim non-devolution of this treaty into their national law at the time of their independence and consider the treaty non-binding. The 1959 agreement was a bilateral treaty between Egypt and the Sudan under which Egypt was assigned 55.5 billion and the Sudan 18.5 billion cubic meters annually. Both the 1929 and the 1959 agreements stipulated water allocations for Egypt and the Sudan, but not for the other Nile riparian countries.

The populations of all the countries along the Nile have increased rapidly since 1929 and consequently expanded the demand for water for human consumption, agriculture, power generation, and manufacturing. It is therefore not surprising that some of the Nilotic countries seek to revisit earlier allocations of Nile water, particularly as a number of them consider the 1929 agreement to be an unequal treaty that they were compelled to accept during their colonial period. It goes without saying that water is a life-and-death matter, and that the emotive, political, and economic stakes could not be higher.

From a technical point of view, it is possible to increase the supply of water to the Sudan and Egypt. The proposals for doing so involve storing Nile water in the Ethiopian Highlands (rather than in desert reservoirs)

and draining the giant Sudd swamp in the southern Sudan. Both these projects would increase the supply of water by decreasing the huge losses that currently occur through evaporation. However, each of these schemes faces serious difficulties. Egypt is reluctant to risk storing a substantial part of its water in some other country, while draining the Sudd could destroy the livelihood of the population that lives in the region by eliminating the grazing grounds on which the pastoralists of the area depend, and by adversely affecting the rainfall and climate by reducing the evaporation to the atmosphere.

Only a cooperative effort by the major affected countries can create a “win-win” outcome. Such an effort will require the building of trust between the major riparian countries (a process that would be facilitated by joint activities beyond those connected exclusively with the use of the river), a conviction by them of the importance of rational management of the entire watershed in order to ensure sufficient water for their development plans, and a recognition that the greater integration of their economies could enable Nile water to be used in a manner that benefited more than just the country directly using it.

Planning and economic management

Traditional methods of planning will have only limited efficacy or even acceptability in the evolving economic environment. A review of the accuracy of planning projections during the last two decades demonstrates the difficulty of making such projections in an economy that is becoming increasingly privatized, decentralized, and globalized. The accuracy of forecasts can be assessed using different indicators, such as the average error of the forecast, the mean absolute error of the forecast, and the root mean squared error (RMSE).¹⁸ The method used in the Centraal Planbureau of the Netherlands employs a variant of Theil’s “U-statistic,” defined as the quotient of the RMSE of the forecast and the RMSE of the corresponding naïve forecast. The naïve forecast is taken to be equal to the estimated realization of the variable in the preceding year.¹⁹

The U-statistic has a number of properties that make it attractive for assessing the precision of forecasts. The most important are that $U = 0$ if and only if the forecasts are all perfect (the projected outcome is equal to the realized outcome); and that $U = 1$ when the projection procedure leads to the same RMSE as the naïve projection. The U-statistic has no upper bound, which means that it is possible to do considerably worse than by extrapolating on a naïve, no-change basis. Thus, the higher the value of U, the less precise is the projection, and if $U > 1$, then the projections are on average worse than the naïve forecasts. Theil (1966: 27–8) provides an interpretation of the U statistic – a value of, say, $U = 1.25$ means that the RMSE is 125 percent of the RMSE that would have been observed if the forecaster had confined himself to a no-change extrapolation.

Table 10.2 displays the value of U for the projected GDP growth rate, for public and private investment, and for employment in each of the five-year plan periods from 1983–2002. It shows that the forecasts of the vast majority of these variables were less precise than a simple “no-change” extrapolation; the exceptions were the GDP growth rate in the Third Plan, and employment in the Third and Fourth Plans. The performance of the employment forecast is not surprising: aggregate employment is much less volatile than GDP growth or investment. The level of employment in any year depends rather strongly on its level in the previous year, and this relationship can make it easier to predict this variable. As might be expected, the projections of private investment were the least satisfactory. Since private investment now occupies a very large part of the total – the Fifth Plan (2003–07) projects it at about two-thirds of total investment – and is expected to keep increasing, the consequences of imprecision in estimating this variable are bound to become even more important.

Changes in the economic environment mean that in the coming years the methods of planning and economic management will have to be fundamentally revised. The altered role of planning is occasioned by two major considerations: the increasing privatization of the Egyptian economy and the pressures of globalization. These two changes are steadily diminishing the space within which the government can exercise direct control over the economy, and increasing the degree of uncertainty attending on economic decisions. Consequently, an approach to planning that takes the form of mandating targets for investment, employment, distribution, and so on, is unlikely to work, because the government will lack the tools to ensure compliance. Increasingly, methods of managing the economy will have to be more indirect, and will have to rely on the use of financial incentives and disincentives. The authorities will also have to focus much more on coordinating the actions of different decision makers in the economy in pursuit of goals that are clearly seen to be beneficial to all parties. Substantive consultations with the private sector on its plans for investment, production, export, pricing, and employment will therefore be imperative in the development of future plans.

Table 10.2 Precision of plan forecasts, 1983–2002 (Theil’s U-statistics)

	<i>First plan</i> (1983–87)	<i>Second plan</i> (1988–92)	<i>Third plan</i> (1993–97)	<i>Fourth plan</i> (1998–2002)
GDP growth rate	1.13	1.65	0.91	1.57
Public investment	2.02	2.11	3.59	1.97
Private investment	4.65	2.33	1.21	2.34
Employment	1.09	1.10	0.35	0.68

Source: Computed from Ministry of Planning data.

Reinforcing these factors is a further issue. As Egyptian society becomes more decentralized and democratic, it might be unduly limiting on an individual's freedom of choice to have a central authority continually tell him or her what is best. In any case, such an approach would become increasingly difficult to implement as the economy became more complex and individuals' tastes and demands more diverse. In this situation, it would be more politically responsive to try to ascertain from communities their ordering of preferences from choices that could be made available to them. Experience (including a pilot exercise in Egypt's 1978–82 Plan) has shown that this “participatory” approach need not entail a higher financial cost to the government than would the allocation of resources by fiat, and brings much higher political dividends because it responds to clearly felt needs.²⁰

The method of planning that has found increasing favor in countries with mixed economies is “indicative” planning. This type of planning was intended to respond to the perceived failure of the market system in attaining socially desirable objectives. It is distinguished from other policy instruments that deal with market failures in that it focuses on market failures that result from failures in the nature or availability of information.

The basic theory behind indicative planning has been articulated by Meade (1970), Estrin and Holmes (1983), Crémer and Crémer (1994), and others, but perhaps most succinctly by Brada and Estrin (1990). The latter argue that since forward markets do not exist for many commodities and services, economic agents are forced to make decisions based on incomplete or incorrect information. This lack of coordination is likely to produce a sub-optimal allocation of resources, which will impact adversely on saving, investment, and future growth. On the other hand, if credible forecasts of future production, exports, imports, labor market trends, and so on were available, they would provide much the same information as would prices generated by a complete system of forward markets. The provision of missing information about the future by means of indicative plans would enable economic actors to share a coherent view of the future. This should lead to more efficient decisions and a more optimal allocation of resources. The government would reinforce the informational and exhortative effects by measures such as taxes, subsidies, and interest rates, to push private decisions in directions that were judged to be socially optimal.

Some concluding remarks

This book has covered too much ground to permit an easy summary, but it may be useful to reiterate some points.

- 1 Population growth has slowed to about 2 percent per annum, but even at this rate the population will double in a generation. Moreover, the previous and present growth of population will continue to add

substantial numbers to the labor force, for whom productive employment will have to be created. Thus, Egypt cannot afford to relax efforts to curb the rate of population growth.

- 2 The principal impediment to Egypt's economic growth during 1960–2000 was the foreign exchange constraint. Egypt grew when the foreign exchange constraint was lifted, which during this period was generally brought about by extraneous events. In the mid-1970s the constraint was removed by the fortuitous concurrence of the “Big Five” and the actions of GODE. In the mid-1980s and in the first half of the 1990s, the constraint was eased by forgiveness and restructuring of external debt. However, these successive *dei ex machina* disguised the problem, rather than correcting it. If Egypt is to become less vulnerable to the vagaries of external events and to the caprices of foreign donors, it must make a concerted effort to increase its own foreign exchange earnings.
- 3 A major barrier to increased investment, and hence to growth, was the low level of savings. During 1960–2000, domestic savings fell short, at times seriously short, of investment. This, of course, increased the vulnerability of the country because the gap had to be filled by foreign savings.
- 4 The cost of doing business in Egypt remained high because of inadequate infrastructure and severe institutional constraints. In order to sustain a real growth in its GDP of around 7 percent a year, the country will have to put in place a number of “second generation reforms.” These reforms focus chiefly on institutions such as the bureaucracy, the commercial judicial system, the system of taxation (which affects the incentives to work and to invest), the labor market and the systems of human resource development, and the financial system. The absence of such reforms is likely to severely restrict the economy's trajectory.
- 5 Policymaking will have to focus more on devising policy *packages* rather than concentrating on single policies. For example, the effects of exchange rate adjustment will be larger and more durable if they are accompanied by simultaneous reforms to the export credit mechanism and to the working of the ports; changes in tax rates will produce substantially more revenues if tax administration is strengthened at the same time as rates are adjusted, and so on.
- 6 Sustainable growth will require a change in the approach to dealing with some crucial sectors of the economy. Perhaps the most important of such philosophical changes is the attitude towards export growth. A lesson for Egypt from the fast-growing economies of East Asia is that a spectacular growth of exports can be founded on imports, and is not limited by natural resources indigenous to the exporting country. Most of East Asia's chief exporters – such as Japan, Korea, Taiwan, Hong Kong, Singapore – are poorly endowed with natural resources.

Their striking growth is based on importing raw materials and semi-finished goods, adding value efficiently by a well-trained labor force, and then exporting the final products at a competitive exchange rate. It is important, therefore, to level the playing field as regards Egyptian import costs with those of competitors. These issues have been discussed in detail in this book, and involve measures such as the lowering of import tariffs, the reduction of handling costs, and the expeditious and costless rebating of import duties on the imported component of exports.

- 7 The key to Egypt's accelerating its growth is higher investment and increased productivity. The reason for harping on improved productivity (apart from questions of competitiveness) is that without an improvement, achieving the required GDP growth rate will require a sustained rate of investment that is unlikely to be realized. A back-of-the-envelope calculation can illustrate this.

The Cobb–Douglas production function can be rewritten as:

$$Y^* = A^* + \beta_L L^* + \beta_K K^*$$

to show how the growth rate of output depends on the growth rates of the inputs. Y^* , A^* , L^* , and K^* are the rates of growth of, respectively, output, total factor productivity, labor, and capital, and β_L and β_K are weights, the economic interpretation of which is the marginal products of labor and capital. This equation is the standard growth accounting framework for analyzing the sources of output growth.

The question to be addressed is: how can the output growth be increased to 7 percent per year? Without productivity growth, the entire output growth must come from the growth of labor and capital. The labor force is projected to increase at an annual rate of 2.7 percent. Mohammed (2001) estimated its weight in the Cobb–Douglas function at 0.4; thus, the expanding labor force would provide a GDP growth of 1.08 percent a year.

The rest of the growth would have to be provided by increasing the rate of growth of the capital stock. The growth of capital stock (i.e. net investment) gets a weight of 0.6. In order to generate the remaining output growth of about 6 percent a year it would have to grow at an annual rate of nearly 10 percent in real terms – virtually double the 5.3 percent a year reported for the decade 1990–2000. A significant increase in productivity is necessary so that the required GDP growth can be brought about with a growth in the capital stock that can realistically be expected.

This chapter has attempted to develop a framework for thinking about issues that will be crucial to sustaining a high rate of economic growth in Egypt over the next two or three decades. In highlighting some areas, I am conscious that I have occluded others. The principal omission is a discussion of sectoral issues.

I must, however, touch upon a vital question. This chapter has examined issues of improving governance, strengthening institutions, and protecting the environment. However, the focus has largely been on what must be done to sustain the growth of GDP, because this indisputably is one of the most important means by which Egypt can provide a better life for its citizens. But one must not be blinded to the crucial questions of the nature and purpose of this growth.

At the beginning of his *Nicomachean Ethics*, Aristotle observed that “wealth is evidently not the good that we are seeking, for it is merely useful and [sought] for the sake of something else.” In modern times, the work of Amartya Sen, Mahbub ul Haq, Paul Streeten, and others has drawn attention to the shortcomings of the GDP as a measure of human welfare, and emphasized the necessity of taking a wider view of the aims and the process of development. Thus, Sen, who has elaborated this line of thinking most fully, writes (1999: 14), “An adequate conception of development must go much beyond the accumulation of wealth and the growth of gross national product and other income-related variables. Without ignoring the importance of economic growth, we must look well beyond it.” Furthermore (Sen, 1995: 8), “It is crucial to avoid the mistake of taking the growth rate of GNP to be the ultimate test of success, and of treating the removal of illiteracy, ill-health and social deprivation only as possible means to that hallowed end.” Or as Haq (1995: 4) expressed it, “GNP can increase while human lives shrivel.”

For Sen (1999: 14–15), economic development cannot be an end in itself, “but has to be more concerned with enhancing the lives we lead and the freedoms we enjoy.” Haq (1995: 3) similarly argues that “people are both the means and the end of economic development,” and develops this point in his other writings and in the series of the UNDP’s *Human Development Reports* that he pioneered. Economic growth is essential to human development, but one must pay attention to its quality and distribution, its link with human lives, and its long-term sustainability.

These writers do not decry GDP growth, but they emphasize it as an important means of development, not its end. The end of development is something wider; as Sen (1999: 74) argues, it is the creation of “the substantive freedoms – the capabilities – to choose a life that one has reason to value.”

It is for these reasons that I said at the beginning of this chapter that the provision of an adequate income was only a starting point for Egypt’s meeting its societal challenge. The broader themes of the content of economic growth, the social and other changes that are its inevitable companions, its distributional and environmental costs, and how all these impact on the lives of Egyptians cannot be isolated from a vision of long-term development for Egypt, and are crucial issues for societal debate. However, reasons of space preclude a discussion here, and it will have to be deferred to another work. *Insha Allah*.

Annex

Some simple calculations are given here to provide an indication of the orders of magnitude that would be involved if the policymakers sought to completely eliminate the external deficit at one swoop.

First, if policymakers had wanted to completely eliminate the external deficit in 2000 through contractionary macroeconomic policy, by how much would income have had to be cut in order to secure the necessary reduction of imports?

In a simple Keynesian open-economy model that includes both government and foreign trade, the international trade multiplier can be defined as: $k = 1/(s + m + t)$, where s and m are the marginal propensities to save and import, and t is the marginal rate of taxation.²¹ Between 1992 and 2000, rough estimates for Egypt would be $s = 0.16$, $m = 0.19$, and $t = 0.09$ (excluding taxes on the Suez Canal and EGPC).²² The multiplier consequently works out to 2.27. This, let it be repeated, is only a rough figure and ignores some complications that a more sophisticated exercise would incorporate.

The estimate is lower than the 2.63 calculated by Tsegaye (1981) for Egypt in the 1970s. However, it is not far from careful estimates of the multiplier derived from econometric models for developed countries, which typically range between 1.4–2.0 (although one of the Brookings models for the USA reported a multiplier of 2.79); see Hopkin and Godley (1965), Surrey (1971), Thirlwall (1974), and Church *et al.* (1995) for the United Kingdom, and Artus (1989: 137) for France, the USA, and Canada. The rough estimate of this chapter is also consistent with Blinder and Solow (1974: 88) who, after summarizing the empirical evidence for the United States, remark that “a fiscal policy planner will not often be led astray if he uses a multiplier of two in his back of the envelope calculations.”

In 2000, the overall deficit, excluding official transfers, was estimated at LE 15,265 million, while the current account deficit was LE 7,760 million. If the overall deficit were to be reduced to zero, then GDP would have to be reduced by $\Delta M = m\Delta Y$, where M is total imports and Y is the GDP.

$$\text{i.e. } -15265 = 0.17\Delta Y$$

$$\text{i.e. } \Delta Y = -15265/0.17 = -\text{LE } 89,795 \text{ million.}$$

GDP at market prices in 2000 was LE 339,000 million, so a reduction of about 26 percent in GDP would have been required to reduce imports sufficiently to eliminate the overall deficit. A similar calculation shows that GDP would have to fall by 13.5 percent in order to reduce imports by LE 7,760 million, to balance the current account. These are substantial losses, and would require consumption to be squeezed very hard, or investment and future growth prospects to be severely compromised. It points out a

potential conflict between the attainment of an “internal” target for the country, such as poverty reduction, and an “external” target, such as the total elimination of a balance of payments deficit.²³

Second, what if policymakers wanted to eliminate the deficit by increasing foreign exchange earnings, while still maintaining equilibrium in national income? Could they do this by expanding exports (used here as a shorthand for foreign exchange earnings) by LE 15,265 million? An increase in exports will increase GDP, but this in turn will also induce additional imports. Thus, policymakers must aim at increasing exports by LE 15,265 million more than the increase in induced imports, i.e. the aim is $\Delta X - \Delta M = 15,265$. The change in M induced by the increase in Y is $m\Delta Y$; hence, the aim is $\Delta X - m\Delta Y = 15,265$. The change in Y induced by the export expansion is ΔX times the multiplier, i.e. $k\Delta X$. Thus,

$$\begin{aligned} \Delta X - mk\Delta X &= 15,265 \\ \text{i.e. } \Delta X - 0.17[1/(0.16 + 0.09 + 0.19)]\Delta X &= 15,265 \\ \text{i.e. } \Delta X - 0.17(2.27)\Delta X &= 15,265 \\ \text{i.e. } \Delta X &= \text{LE } 25,025 \text{ million.} \end{aligned}$$

Total earnings (merchandise exports, non-factor services, investment and other income, and workers’ remittances) in 2000 were LE 79,540 million. Hence, eliminating the overall deficit by expanding foreign exchange earnings would have required the latter to increase by about 32 percent.

The foregoing calculations are intended only to give some indication of the orders of magnitude involved in making these policy choices. In practice, more detailed computations would have to be undertaken using input–output tables to provide disaggregated import coefficients, and an alternative definition of the multiplier might have to be employed. For example, Thirlwall and Gibson (1994: 130–9) criticized the traditional formulation of the multiplier, which relates increases in imports to income *via* the marginal propensity to import (as was done here). In their view, imports should be linked to expenditure, not income, because relating imports to income implicitly assumes that all expenditures have the same ratio of imports to expenditure. Thirlwall and Gibson show that the multiplier will vary according to the import content of the initial autonomous expenditure change (i.e. depending on whether it is government investment, private investment, government consumption, private consumption, exports, etc.) and that the value of the multiplier that takes these distinctions into account will, in general, differ from that of the multiplier defined in the usual manner. Thus, Tsegaye (1981) used the 1954 input–output table for Egypt to calculate such differentiated multipliers, obtaining values ranging from 5.05 for an increase in private consumption to 5.47 for an autonomous increase in exports.

Notes

1 Economic development and policymaking, 1952–73

- 1 Quoted in Baker (1978: 102).
- 2 Until June 1972 the Egyptian fiscal year ran from July 1 to June 30 of the following year, and was frequently written as a split year; for example, the fiscal year ending in June 1972 would be written as 1971/72. From 1973 to 1979 the fiscal year was changed to a calendar year basis, but from July 1980 it reverted to a June–July basis. In this book, a simpler transcription has been adopted; thus the fiscal year ending in June 1972 simply appears as 1972. The text will make clear if a calendar year is meant.
- 3 Wahba (1994: 54–5); O’Brien (1966: 71–2).
- 4 O’Brien (1966: 85).
- 5 Mead (1967: 272–3); O’Brien (1966: 100, 107), and Mansfield (1965: 136); see also Wahba (1994: 73) who gives private sector share of GDP in 1961 as 76 percent. The figures probably understate the share of government in GDP, but even after correcting for this, O’Brien (1966: 107–8) concludes that at least two-thirds of GDP took place outside the government’s contribution.
- 6 Availability of resources = GDP (market prices) + Indirect Taxes + Imports.
Resource use = Consumption + Investment + Exports.
- 7 The *Charter* (nd: 49–74). For a summary of the economic sections, see O’Brien (1966: 132–6); and Mansfield (1965: 130–2).
- 8 Sadat (1978: 245).
- 9 Quoted in Scobie (1981: 31).
- 10 For a brief history and description of Egypt’s food subsidy system see Alderman *et al.* (1982: 13–35).
- 11 Direct subsidies were provided for the so-called “supply commodities,” i.e. certain items of mass consumption – wheat and flour, edible oil, maize, and sugar – and for fertilizers, pesticides, and “utility” (i.e. low-grade) cloth. Since 1973, two-tier pricing had been introduced for some commodities: a certain quantity of the rationed items was made available at the subsidized price while additional items were sold at prices that yielded a profit to the General Authority for Supply Commodities. The difference between the loss on the subsidized part and the profit on the rest constituted the net cost of subsidizing the “supply commodities.”
- 12 The Central Agency for Public Mobilization and Statistics (CAPMAS) uses a Laspeyres-type estimator as the Consumer Price Index. This type of index number assumes that quantities remain fixed from time period to time period, until the weights are revised; at the time under discussion, the index was based on weights estimated in 1965, i.e. about ten years earlier. There were also questions concerning the coverage of the index, and other technical problems in its

- construction that were pointed out by World Bank, IMF, and USAID statisticians.
- 13 The foreign exchange budget estimated that, in addition to the approximately \$2.1 billion required to repay the bankers' facilities falling due in 1975, an additional \$470 million in cash would be needed to pay for services such as shipping and insurance, and to make down-payments on capital goods that could not be financed entirely on credit.
 - 14 United Arab Republic (n.d).
 - 15 Interviews, December 29, 1999 and July 7, 2001.
 - 16 Dr Hegazy was Minister of the Treasury 1968–72, Minister of Finance and Foreign Trade 1973–74, and Prime Minister 1974–75. He was interviewed on December 28, 1999; July 11, 2000; and July 4, 2001.
 - 17 Ministry of Planning (1977a: 5).
 - 18 Ministry of Planning (1977a: 5–6).
 - 19 Dr Hegazy wryly described how some of the demonstrators marched around chanting rhyming slogans provided by dissidents in the Cabinet: “*Hegazy beh, Hegazy beh/Il lahma ba’a bi gineh*”; [Mr Hegazy, Mr Hegazy/Meat has become a pound (a kilo)]; and “*Hukuuma Hegazy?/Walla hukuuma Nazi?*”; [A Hegazy government?/Or a Nazi government?].

2 Economic development and policymaking, 1973–87

- 1 The dilemma is not new, cf. the remark attributed to Jean Baptiste Colbert (1665), chief financial officer of King Louis XIV of France: “The art of taxation consists in so plucking the goose as to obtain the largest amount of feathers with the smallest possible amount of hissing.” Quoted in Tripp (1970).
- 2 In an interview on July 5, 2001, Dr Abou Ismail reconfirmed that in 1975 he had repeatedly told representatives of the Fund that there would be a “revolution” in Egypt if their proposals on subsidies were accepted. He was glad that the Cabinet in which he had served had not accepted the Fund’s terms.
- 3 Interviews, April 10 and August 27, 2000.
- 4 Möller (1980: 57; 124–5).
- 5 Weinbaum (1986: 51) reports that “US aid programs normally stipulate that concessional financing be tied to US-made products, regardless of more competitive prices elsewhere and irrespective of Egypt’s ability to produce the same items.”
- 6 *Grant element* measures the concessionality of a loan. It is defined as the difference between the face value of a loan and the discounted present value of the stream of repayments (including interest) to which it will give rise, expressed as a percentage of the face value. By combining the effects of the various elements of the terms into a single measure, the grant element enables loans with differing terms to be compared. For example, if a set of terms (interest, maturity, and grace period) produces a grant element of, say, 30 percent, it essentially means that the recipient of the funds should be indifferent between receiving a grant of 30 percent of the face value, or a loan of 100 percent of the face value on the terms that gave rise to the 30 percent grant element. See Schmidt (1964), Pincus (1965), and Ohlin (1966: especially 102–5 for derivation of the relevant formulae).
- 7 Based on the ratio of present value of total debt service to GNP, and the ratio of present value of total debt service to foreign exchange earnings.
- 8 For details see Chapter 5.
- 9 Such anomalies continue. The United Nations’ Food and Agriculture Organization (1999: 32–4) concluded that the cultivation of sugarcane was profitable for private farmers because they did not have to pay for water, but caused a

- substantial economic loss for the country because water was the most binding constraint on Egyptian agriculture, and sugarcane is a very water-intensive crop.
- 10 A detailed description of Egypt's exchange and trade system as it stood at the end of 1981 can be found in IMF (1982).
 - 11 "Commodity sectors" in the Egyptian national accounts comprised agriculture, industry and mining, oil and oil products, electricity, and construction.
 - 12 Ministry of Planning (1977a, vol. 1: 19).
 - 13 Interview, March 27, 2000.
 - 14 Similar judgments were voiced by Weinbaum (1986: 3), who also went on to say (32–3) that, "[T]he level of funding was not . . . based on any careful assessment of Egypt's budgetary and development needs or, for that matter, on what it could absorb successfully."
 - 15 For example, March 28, 1987 and May 23, 1987.
 - 16 For names and periods of incumbency see Guwwadi (1997). Weiss (1993: 66) also remarked that during the work of the Möller team "a series of ministers was replaced every six months on average, and prime ministers changed almost annually."
 - 17 Weiss (1993: 66).
 - 18 Figure 4.3 shows the relationship between GDP growth and oil prices in 1974–2000.
 - 19 The real effective exchange rate is defined as the weighted change in nominal exchange rates, adjusted for changes in the relative retail prices at home and abroad. See Chapter 5 for more discussion.
 - 20 World Bank (1990c, vol. 2: 54). The major debtor countries were defined as those with outstanding external debt of \$9 billion or more.

3 Economic development and policymaking, 1987–2000

- 1 The implicit exchange rate subsidy was calculated as the difference between the Central Bank rate (LE 0.7/\$) and the official Free Bank's Market rate (LE 2.25/\$). By 1988, this implicit subsidy had reached close to LE 5 billion, or 8.3 percent of GDP.
- 2 This comparison is perhaps less meaningful than it appears, because it compares a stock (debt) with a flow (GDP) in a single year, and the entire stock does not have to be paid off with the flow of a single year. However, the comparison is given here because it is frequently used in the literature.
- 3 Interview, July 7, 2003.
- 4 Seigniorage is the revenue generated by the government as a result of its monopoly power to print money. The real seigniorage ratio is calculated as the yearly sum of deflated monthly changes in the money base divided by real GDP. What the government receives at any point in time from money creation is not the inflation tax, but rather seigniorage. The role of seigniorage and the inflation tax in Egypt is discussed further in Chapter 6.
- 5 This compares with a probability of 58.7 percent for the USA. For most developing countries with floating exchange rates, the probability (in percent) of this degree of actual rigidity was substantially lower than for Egypt: for example, 63.5 for Mexico, 66.2 for South Africa, 71.4 for Peru, 72.2 for Kenya, 74.5 for Nigeria, and 74.9 for the Philippines.
- 6 Williamson (1982: 45) shows that the variance of the REER can be decomposed into:

$$\text{var}(\text{REER}) = \text{var}(\text{EER}) + \text{var}(\text{RP}) + 2 \text{cov}(\text{EER} * \text{RP})$$

where REER is the real effective exchange rate; EER is the effective exchange rate; and RP is relative prices (i.e. the inflation differential).

- 7 Prime Minister 1999–2004, and previously Minister of Public Enterprise Sector (Interview, September 9, 2000).
- 8 The World Bank judged that while the public enterprises might be substantially overstaffed, the Economic Authorities were not excessively so.
- 9 These are gross figures. The public enterprises were still considered to be overmanned in 2000 because they continued to hire employees even as they laid off other workers.

4 Growth, productivity, and structural change, 1960–2000

- 1 The first reasonably reliable census of Egypt took place in 1897, and thereafter censuses were conducted every ten years until 1947. The 1957 census was postponed until 1960 because of the Suez Canal war and there was a simple enumeration in 1966, with the next complete census taken in November 1976.
- 2 A feddan = 1.038 acres = 0.42 hectares.
- 3 Until June 1972 the Egyptian fiscal year ran from July 1 to June 30 of the following year, and was frequently written as a split year; for example, the fiscal year ending in June 1972 would be written as 1971/72. From 1973 to 1979 the fiscal year was changed to coincide with the calendar year, but from July 1980 it reverted to a June–July basis. In this book, a simpler transcription has been adopted; thus the fiscal year ending in June 1972 simply appears as 1972. The text will make clear if a calendar year is meant.
- 4 Permanent private disposable income and permanent government saving were estimated by decomposing these variables into a deterministic trend and a purely cyclical random component, and assuming that the permanent element was represented by the trend.
- 5 The proposition that extra domestic borrowing has the same, or “equivalent” effect on the economy as extra taxation. Strong conditions – such as perfect capital markets, rational expectations, non-distortionary taxes – are required for “Ricardian equivalence” to hold. The equivalence proposition was also tested by Haque and Montiel (1987) for 16 developing countries, comparing the effects of taxation and borrowing on aggregate demand. They concluded that full Ricardian equivalence could be rejected for 15 of the countries, including Egypt.
- 6 The 1965 figures for labor force and employment (7.9 million and 7.3 million respectively) are reported in World Bank (1969: Statistical Annex, Table 14) and are subject to similar qualifications as those attaching to later figures. See the comments on data at the end of this chapter and in that on Labor Force and Employment.
- 7 But see the discussion of the size of the labor force and the non-enumeration of “discouraged workers” in the chapter on Labor Force and Employment.
- 8 Mapping unemployment against “anticipated inflation” (using the assumption of adaptive expectations, i.e. that $\pi_t^e = \pi_{t-1}^e$), did not materially change the relationship shown in Figure 4.8.
- 9 Bernier and Simon (2001: 337) report that the NAIRU in France was estimated at 4.4 percent in 1972, but from 1978 to 1994 it was put at 7–8 percent of the active population.
- 10 According to the rational expectations hypothesis, expectations are formed by individuals who understand the working of the economy. They take into account all the information available, and do not commit systematic expectation errors; any systematic deviation will be incorporated into the process by which expectations are formed. The only errors possible in their expectations of inflation are due to random shocks. The rate of expected inflation is thus equal to the actual rate of inflation plus an error term that is on average zero.

- (If the random element differs from zero in any systematic fashion, expectations (π^e) are not rational.) Therefore, under the rational expectations hypothesis, $\pi^e = \pi + \epsilon$, where ϵ is a random error term with an expected value of zero.
- 11 Once again, the caution on figures relating to investment and its components, especially the change in stocks, must be repeated. Moreover, as domestic savings are generally calculated by subtracting the current account deficit from the estimated investment, the savings figure must also be regarded with a degree of circumspection.
 - 12 i.e. Total Factor Productivity, which attempts to measure productivity taking into account all factors of production.
 - 13 See, for example, Robinson (1953, 1956, 1971); Solow (1956, 1957); Harcourt (1972). In practice, many of the empirical studies use the “perpetual inventory method” for calculating the capital stock. See the Annex to this chapter for a brief description of the method.
 - 14 Ray (1998: 118–19).
 - 15 The ratio of the marginal products of the factors gives the marginal rate of substitution between the factors.
 - 16 Hahn and Matthews (1965: 51).
 - 17 For a derivation see Foley and Michl (1999: 160–2).
 - 18 Hahn and Matthews (1965: 52) point out that steady growth is compatible with other production functions, provided that they are Harrod-neutral.
 - 19 However, they add that the import of improved technology can be an important factor in growth and thus “manna from abroad” can be significant even if manna from heaven is not.
 - 20 The earliest proponents of this view were Young (1992, 1995), and Kim and Lau (1994); see also Felipe (1999).
 - 21 Human capital-adjusted labor incorporates the contribution of education and size of the labor force to labor input.
 - 22 Sometimes called changes in the “best practice” production frontier.
 - 23 This note refers to data issued during the period 1965–2000; it does not cover subsequent changes.
 - 24 Waite *et al.* (1998: 12).
 - 25 To quote examples from three continents: Portes (1996: 160) estimates Mexico’s informal economy in 1985 at 26 to 38 percent of official GDP, depending on the methodology used; Chugh and Uppal (1986), after reviewing several studies put the figure for India in the 1980s at around 20 percent of GDP; while World Bank (1996: Vol. 1, 19) quotes the National Informal Sector Survey of Tanzania as estimating the size of the informal sector at 32 percent of official GDP in 1991 (other estimates are mentioned that put it even higher).
 - 26 An exception is Galal (2004), the findings of which are discussed in Chapter 10.
 - 27 I am indebted to Marcelo Giugale for providing a complete description of the effort.
 - 28 Fergany (1995, 1996a, 1999); Assaad (1997, 1999).
 - 29 This phenomenon is not confined to Egypt. Frank and Bernanke (2001: 147–8) give an example from the United States: in February 2000, the unemployment rate was 4.1 percent; when “discouraged” and “involuntary part-time” workers were added, it became 7.6 percent.
 - 30 Of course, mathematically the “real” rate will always be higher than the government’s, as one is adding the same constant to the numerator and the denominator of a fraction that lies between zero and unity.

5 The external sector

- 1 See Winters (1991), McCombie and Thirlwall (1994) and the references cited there. The view of the latter writers (430) is unambiguously that, "The income elasticity of demand for exports is, . . . probably the most important determinant of comparative export performance."
- 2 If x_{ij} is the value of country i 's exports of commodity j , and X_{ij} is the country's total exports, its revealed comparative advantage index is:

$$RCA_{ij} = (x_{ij} / X_{ij}) / (X_{iw} / X_{w})$$

where the w subscripts refer to world totals.

- 3 See World Bank (1995b: vol. 2, Table 5.7 and Annex, Table 5.1); GOE Ministry of Economy and International Cooperation (1996); Yeats (1995).
- 4 A clear exposition of this technique is provided in Leamer and Stern (1970: 171–83).
- 5 This and the next paragraph are based on Kouamé (2000).
- 6 Hinkle and Nsengiyumva (1999: 41–111) provide an excellent discussion and application of the relevant concepts.
- 7 Between 1997 and 2000 the degree of overvaluation against the equilibrium rate was estimated to have increased by about another 5–7 percentage points.
- 8 Some writers who had reservations about the effectiveness of elasticities – for instance, Al Shawarby (2000) – did recognize that structural impediments, such as the limited capacity of Egyptian firms (especially in the public sector) to respond to market signals, the slow working of the bureaucracy, the policies regarding tariffs, and other incentive- and cost-distorting measures diluted the effects of devaluations.
- 9 Named after Marshall (1924: Appendix J) and Lerner (1944: 377–9). Sometimes the name of Joan Robinson (1937: 138–46) is added.
- 10 For derivations and elaboration see Stern (1973: 128–39).
- 11 Al-Shawarby (2000) is an exception.
- 12 The nominal tariff rate (t) on an industry is defined as $t = (p^* - p)/p$, where p^* and p are the unit prices of the industry's output with and without tariffs respectively. The effective rate of protection (e) is defined as $e = (v^* - v)/v$, where v^* and v are the value-added per unit of output with and without protection, respectively. For useful surveys of the main issues see Balassa *et al.* (1971), Grubel and Johnson (1971), Johnson (1971), and Corden (1971).
- 13 That is, "taxation" by holding domestic prices below international.
- 14 Amin (1995: 1–21) provides an interesting discussion of issues relating to Egypt's external debt since the 1960s. For very readable accounts of earlier periods, see Landes (1958) and Marlowe (1974).

6 The public finances

- 1 This refers only to the defense expenditures shown in the budget. It is believed that a significant amount of defense spending is off-budget.
- 2 An important qualification must be entered at this point. The activities of the National Investment Bank and the social security and pension funds have not been treated consistently in budgets; correcting for this could significantly change the details for certain years.
- 3 However, significant indirect subsidies remained; for example, it was estimated that even in 1998 the average price for electricity was 80 percent of long-run marginal cost (LRMC). Small residential and commercial consumers received a cross-subsidy, paying 41 percent of LRMC, while large commercial consumers paid 132 percent of LRMC.

- 4 The explanation of the more than 100 percent financing is that domestic financing had to cover negative external financing, i.e. amortizations on external financing exceeded disbursements.
- 5 But note a certain ambiguity. If the intent is to measure in some sense the burden carried by Egyptians, then the figure can be misleading. A large proportion of the taxes represent transfers to the budget from the Egyptian petroleum company and the Suez Canal Authority, the incomes of both of which are primarily generated by non-Egyptians. The burden of the taxes, therefore, is borne essentially by foreigners.
- 6 The General Income Tax was introduced in 1949. The rates were progressively increased until in 1965 the highest rate reached 95 percent. These measures were not very effective; Scioli (1976: 62) found an inverse relationship between the increase in the rates and the yield of the tax.
- 7 Following Thirlwall (2003: 516) one may write the overall buoyancy of a tax system as:

$$(\Delta T/T)/(\Delta T/T) = (\Delta T/T)/(\Delta B/B) * (\Delta B/B)/(\Delta Y/Y)$$

The expression says that the overall buoyancy of a tax system is measured as the proportional change in total tax revenue ($\Delta T/T$) with respect to the proportional change in national income ($\Delta T/T$), and is composed of the elasticity of tax revenue with respect to the tax base [$(\Delta T/T)/(\Delta B/B)$], and the elasticity of the tax base with respect to national income [$(\Delta B/B)/(\Delta Y/Y)$].

- 8 For an extended discussion of these concepts see Musgrave (1959: 160–83).
- 9 In real terms, the seigniorage, R_s , is given by $R_s = \sigma M/P$ where σ is the money growth rate, M the money balances, and P the price level. The inflation tax, R_p , on the other hand, is given by $R_p = \pi M/P$ where π is the rate of inflation. This is not a revenue directly received by the government in the period in question, but is a capital loss sustained by the holders of money. Seigniorage is identical with the inflation tax only when $\sigma = \pi$, i.e. if households maintain a constant value of real money balances. Since the inflation tax is the product of the inflation rate and the demand for real high-powered money (the demand for which falls as inflation rises), the inflation tax has a theoretical maximum, depending upon the interest elasticity of demand for high-powered money (i.e. the monetary base, consisting of currency and banks' deposits with the Central Bank of Egypt). See the discussion in Burgess and Stern (1993: 768–70).
- 10 Dinh and Giugale defined the inflation tax to include the erosion of the real value of money balances as well as the difference between the inflation rate and the nominal remuneration that the private sector received on its holding of time and saving deposits.
- 11 World Bank (1989: 188); IMF, *International Financial Statistics* (various issues).
- 12 This part follows Leddin and Walsh (1992: 102–4). I am indebted to Professor Walsh for clarifying some matters in correspondence.
- 13 Consumers have more disposable income (because they paid lower taxes than they would have had to pay if government expenditure were not partially financed by borrowing), hence, they consume more.
- 14 For a balanced review of the theoretical and empirical issues connected with Ricardian equivalence see Elmendorf and Mankiw (1999: 1640–59).
- 15 Elmendorf and Mankiw (1999: 1641) give the following example: "If the government cuts taxes today and households expect this tax cut to be met with future cuts in government purchases, then households' permanent income does rise, which stimulates consumption and reduces national saving. . . . The reduction in expected future government purchases would alter permanent income and consumption because they imply lower taxes at some time, even if current taxes are unchanged."

7 The financial sector and monetary policy

- 1 In September 2001 it was further lowered to 14 percent, in order to increase liquidity.
- 2 This, combined with the large differential in favor of domestic over international interest rates, encouraged banks to borrow abroad and to on-lend these to domestic borrowers at the higher rates.
- 3 For example, Barker and Holdsworth (1993), Cole and Gunther (1998), Hirtle and Lopez (1999).
- 4 The IMF pointed out that a more stringent loan-to-deposit ratio would render a cash reserve requirement redundant. If one minus the loan-to-deposit ratio exceeded the reserve ratio, the loan-to-deposit ratio would be binding and the reserve ratio redundant.
- 5 A “repo” is a liquidity-injecting operation by which the CBE buys treasury bills from a commercial bank that agrees to repurchase them from the CBE after a stated interval (usually about one to ten business days). The ratio between the initial and final prices determines the interest for the implicit loan. A “reverse repo” is a liquidity-absorbing operation by the CBE in which it sells treasury bills to a commercial bank, and agrees to repurchase them from the bank after a stated interval.
- 6 This would, of course, require the CBE to have available a sufficient stock of Treasury bills to conduct the operation.
- 7 The World Bank pointed out that the tax structure created a perverse risks/reward relationship. Income from the least risk-bearing securities (Treasury bills and bank deposits) was substantially exempt from tax, while dividend and interest income on higher risk securities, such as corporate bonds and shares, were subject to various kinds of tax. The result was a generally declining after-tax yield curve with regard to term and risk.
- 8 World Bank (1993a, vol. 2: 117).
- 9 The definition of SME used by the Ministry was 1–4 employees for micro enterprises, 5–18 for small, and 19–49 for medium enterprises.

8 Labor force and employment

* Nagwa Riad was particularly helpful in the preparation of this chapter.

1 See also “A Note on Data,” Chapter 4.

2 For a discussion of the conceptual ambiguities of the “informal sector” as defined in Egypt see Chapter 4 and the discussion later in the present chapter.

3 This mismatch was initially suggested by Hansen and Radwan (1982) as the main problem for the observed pattern of unemployment. Subsequent studies showed unemployment to be rooted in a larger problem of insufficient effective demand for labor.

4 Fergany (1991) reports slightly higher participation rates, also using PC data, due to higher labor force figures that are adjusted for migration. The labor force figures reported for 1960, 1967, and 1986 are respectively, 7.82 million, 10.98, and 13.68 million, with corresponding activity rates of 30.1 percent, 30.1 percent, and 28.4 percent.

5 For instance, Fergany (1995) adjusts the LFSS series after 1988 based on parameters anchored in the October 1988 LFSS round. Adjustments are mainly related to female unpaid household employment (excluding those less than 15 hours per week) and to unemployment, factoring in the discouraged unemployed, which were “definitionally” excluded in the new series. Assaad (1997) adjusts for female employment in agriculture, aged 12–64, in both urban and rural areas by assuming its proportion to the female participation in the same age group constant at its 1991 level.

6 The 1986 PC reports a female labor force size of 1.1 million and 0.4 million in

- urban and rural areas, respectively; the corresponding figures from LFSS 1988 are two million and 4.8 million (Fergany 1995).
- 7 According to Fergany (1995), the proportion of discouraged unemployment, during 1988–93, was highest for rural females (48 percent) and lowest for urban males (16 percent), and for both urban females and rural males it was 21 percent. Males in both urban and rural areas, as well as urban females, showed relatively high proportions of discouraged unemployment at old ages.
 - 8 However, there exists a bias in these correction factors, which is greater for women in rural areas and increases with time.
 - 9 See footnote to Table 8.1 on adjustments made by Fergany (1995) to the LFSS series after 1988.
 - 10 Using Fergany's (1996a) adjusted series, the unemployment rate in 1993 stood at 13.5 percent, as opposed to a reported 10.3 percent.
 - 11 The ELMS 1998 reports unemployment estimates based on the extended labor force definition only whereas the LFSS is likely to use an equivalent-to-a-market definition. This is likely to inflate the size of the labor force in the ELMS 1998 by including the large number of women engaged in subsistence activities, and therefore result in estimates of unemployment that are generally lower than those regularly reported by the LFSS. The inclusion of the search requirement is likely to further underestimate the magnitude of unemployment.
 - 12 Visible underemployment is measured in terms of actual work hours during the reference period compared to some norm. Fergany (1996a) used information from the 1988 LFSS on time worked during the reference period, and a norm of a 40-hour work-week. Visible underemployment and overemployment was estimated by comparing the time actually worked with the norm.
 - 13 The *underemployment ratio* is a composite index consisting of three components expressed as a proportion of the working age population 15–64: (i) the openly unemployed; (ii) the visibly underemployed, those working less than 40 hours per week (part-time) involuntarily and are available for more work; and (iii) the discouraged unemployed, those who have done no work during the reference week, are available and ready to work, but have not actively searched for work in the 3-month reference period that ends with the reference week.
 - 14 In 1996, further classifications of economic activities were introduced. To allow some form of trend analysis of employment, the new categories were lumped with the relevant or most appropriate "existing" ones. Caution should therefore be exercised when making inferences about certain sectors in 1996.
 - 15 Assaad (1996a) points out that until 1978 the centralized manpower system, responsible for implementing the employment guarantee scheme for graduates, applied to both the government and public enterprise sectors. After 1978, this system applied only to civil service (government) appointments.
 - 16 A job is classified as protected if it is covered by a legal contract. Permanent or temporary jobs are further classified as regular while intermittent or seasonal jobs are classified as irregular, the latter typically not covered by a legal contract.
 - 17 Estimates on the magnitude of the informal sector using the size criterion vary across authors. Fergany (1991) estimates the informal sector to have grown from less than one million in 1960 to nearly 2.3 million in 1985. Rizk (1991) estimates the informal sector in 1976 to be around 2.4 million, which rises to three million in 1985 according to a CAPMAS study. Assaad (1997) reported a figure of 3.5 million in 1992 and Radwan (1997) quoted 3.7 million in 1995 (based on LFSS). These estimates in general point to the significant growth of this sector over the past three decades or so, to account for over 20 percent of total employment in 1995. The definition of informality also varies by author. For instance, a criterion adopted by Wahba and Mokhtar (1999) was the exist-

ence of a job contract in distinguishing formal from informal employment. However, this criterion may be misleading, since most employment in the *formal* private sector is also not covered by a legal contract.

- 18 A graduate is classified as unemployed by the Ministry of Manpower and Training if his/her name appears in the register of applicants at a given date.
- 19 According to Assaad (1995), a lower bound estimate of government non-wage value is approximately 50 percent of the observed government wage. In a further model, Assaad (1996a) estimates the non-wage benefits in the public enterprise sector to be 86 percent of the monetary wage.
- 20 Assaad (1996a) estimated rents in the civil service (government) and public enterprise sector to be nearly similar for workers with lower education, with the gap in favor of the public enterprise sector increasing with education. The average rent of a public enterprise worker was estimated at 100 months' worth of salary, or LE 16,000.

9 Poverty and income distribution

* Nagwa Riad was particularly helpful in the preparatio of this chapter.

- 1 For an explanation of the concepts, see "Conceptual issues in measuring poverty" at the end of this chapter.
- 2 To bridge the gap between the survey estimates of per capita expenditure and those implied by national accounts, Bartsch assumed that the "rich" who had been excluded from the survey account for the magnitude of deviation (LE 45 billion) between national accounts and survey data. To estimate the number of the rich based from the survey (because they were presumably excluded), the highest per capita food expenditure brackets of LE 1,400 were classified as "rich." The gap between national accounts and survey data was then added to the total expenditure estimated for this group of 1.6 million individuals in 700,000 households (about 5 percent of survey sample). By augmenting the expenditure of the highest per capita expenditure brackets to a level at which total household expenditure as implied by the survey equaled that in the national accounts, expenditures in the lower brackets of the distribution were unchanged.
- 3 In this procedure, poverty measurements, such as the headcount index, are plotted against a wide range of values for the poverty line (in the case of El-Leithy *et al.* (1999), these were 30 percent to 100 percent of the average per capita expenditure). These curves are then used to rank poverty incidence over the reference data points. A measurement is said to be robust if for any two given years, poverty incidence in one year is consistently above (below) that of the other years for the range of poverty lines used.
- 4 In El-Leithy and Osman (1996), the background paper for the UNDP (1996), the critical value at which poverty lines intersect is LE 470.
- 5 Quoted in Bhattacharyya (1998).
- 6 Using household data for Pakistan, Lanjouw and Ravallion (1995) have shown poverty rankings to be reversed, especially for the headcount and poverty gap indices, when household size elasticities are considered. El-Leithy *et al.* (1999) also show rank reversals of poverty measurements in Egypt when different assumptions about household sharing of non-food consumptions are made. The impact of these elasticity assumptions is largest on the distributionally sensitive measures, i.e. the poverty gap and severity indices.
- 7 The figures for "never attending school" for the same classification of reasons were very similar (see Table 13 in Datt *et al.* 1999).
- 8 One feddan = 24 kirats = 4,201 m² = 1.038 acres.
- 9 The socio-demographic characteristics include: dependency ratio, education level, main occupation or activity, employment status, and age of household

- head. The housing characteristics include: dwelling construction material, number of persons per room, access to potable water and to sanitation networks, and ownership of some durable goods.
- 10 In Haddad and Ahmed's (1999, 2003) definition, for two reference periods or data points, chronic poverty refers to households whose average (per capita) expenditure was below the established poverty line in both periods, whereas transitory poverty refers to households whose average expenditure was above the poverty line in one period, but below it in the second.
 - 11 Note that this comparison uses the lower poverty line.
 - 12 For a more detailed elaboration of these questions see El-Leithy *et al.* (1999) and Fields (2001).
 - 13 The three aspects of deprivation are proxied by the following indicators, respectively: the proportion of children under five who are underweight; the proportion of births unattended by trained health personnel; and female illiteracy (UNDP, 1996).
 - 14 The first aspect of deprivation is proxied by the percentage of people not expected to reach age 40; the second by percentage of illiterate adults; and the third aspect is a composite index of three variables: the percentage of people without access to safe drinking water, access to health services and the percentage of moderately and severely malnourished children under five.
 - 15 Adult equivalence scaling assigns each household member a value between zero and one, depending on the age and gender. The standard practice is to assign a value of one to adult males and less than one to adult females and children (Ravallion 1992).
 - 16 See the discussion in World Bank (1995b: Annex 1.1) and Fields (2001: 73–86).
 - 17 World Bank (1995b: 119).
 - 18 The normalized gap function: $p(y_i, z) = (z - y_i)/z$ if $y_i < z$, and $= 0$ otherwise. Fields (2001: 77) describes it as a loss function, indicating the loss from having income y_i when the poverty line is z . To get a poverty measure for the economy as a whole, the individual function is aggregated over the entire population.

10 Towards sustainable growth and institutional issues

- 1 Radwan (2002: 3) argues that the actual increase in the labor force is likely to be larger than the demographically-driven increase, because a more careful measure would take into account the output of the educational system and the dropouts who join the labor market every year. Adjusting for these, Radwan estimates the annual number of new job seekers at 896,000 in 2000–10. Even though not all these will have to be provided with jobs, because we are defining full employment as employing 95 percent of the labor force, it is clear that the challenge of providing full employment is considerable.
- 2 The usual Cobb–Douglas production function, $Y = Ae^{nt}K^\alpha L^{1-\alpha}$ then becomes $Y^f = Ae^{nt}K^\alpha N^{1-\alpha}$; i.e. in the expression for the full-employment output, Y^f , actual employment, L , is replaced with N , the full-employment labor force.
- 3 The illustrative calculations in this chapter were based on reaching full employment in 2010, because it was assumed that an appropriate development strategy would go into effect from 2000. In fact, a comprehensive strategy had not been formulated even by the end of calendar 2004. Moreover, GDP growth in the fiscal years 2001–03 averaged only 3.5 percent a year and increased the number of unemployed, thereby lengthening the period and deferring the date for attaining full employment.
- 4 For example, Dollar (1992); Edwards (1993); Baldwin and Seghezza (1996); Harrison (1996); Coe *et al.* (1997).
- 5 The following discussion draws on World Bank (1994).

- 6 World Bank (1992, vol. 2: 32–3 and Annex A); Galal (1995).
- 7 See Lichteim (1976, vol. 2: 167–71).
- 8 This has not changed much over 50 years. Ayubi (1980: 240) reports an estimate by A.P. Sinker that in 1950 about 35 percent of the budget was spent on salaries and other emoluments of the public service, compared with 9 percent in Britain.
- 9 Dr Ebeid was Prime Minister from 1999 to 2004, and before that Minister for Administrative Reform. Interview, February 15, 2001.
- 10 Quoted in Messick (1999).
- 11 For more details see Shihata (1996).
- 12 Hobbes (1651), quoted in Messick (1999).
- 13 Common methods are to classify workers as “provisional,” “temporary,” or “seasonal”; or to find reasons for not giving them labor contracts; or to obtain from workers undated letters of resignation when they are hired.
- 14 Galbraith (1992) famously had the last word on the “trickle-down” approach, describing it as “the less-than-elegant metaphor that if one feeds the horse enough oats, some will pass through to the road for the sparrows.”
- 15 Moreover, while the categories “Lower” and “Upper” Egypt represent geographical locations, the category “Metropolitan” Egypt is simply an arbitrary administrative classification. Administrative entities have to be physically located in some geographical area. Alexandria, Port Said, and Suez (and even Cairo) could be said to be geographically located in Lower Egypt, and thus the distinction between “Metropolitan” and “Lower Egypt” is largely artificial.
- 16 The cooking oil subsidy was the least effective, raising less than 170,000 individuals from poverty.
- 17 For the most part, the health impact of environmental degradation was expressed as Disability Adjusted Life Years (DALYs), in which illnesses are weighted by severity. The methodology employed was developed by the World Health Organization (WHO) and has been used in several countries. The paucity of specific studies for Egypt required a greater use of a range for most of the estimates to reflect their uncertainties.
- 18 The Root Mean Squared Error:

$$\text{RMSE} = \sqrt{\frac{\sum (P_i - A_i)^2}{N}}$$

where P_i and A_i are, respectively, the projected and actual values, and N is the number of observations.

- 19 See Donders and Kranendonk (1999), van Welzenis (1999).
- 20 An exploratory project on participatory planning, with the assistance of the German Technical Assistance Organization (GTZ), has been commenced by the Ministry of Planning in three urban governorates.
- 21 Of course, this simplified model ignores some interactions in the real world that would reduce the value of the multiplier, for example, that planned investment is not autonomous, but depends also on the interest rate. And since budget deficits have to be financed by borrowing, this may increase interest rates; the calculation therefore assumes that monetary policy is “accommodating” – the supply of money is increased in line with the demand – thereby preventing an increase in rates of interest. However, the intent of this chapter is simply to develop a framework for thinking about the problems, and ignoring some of the niceties does not do much violence to the estimates that are derived for Egypt when these are compared with more precise calculations for other countries.
- 22 If these taxes are included, the marginal propensity to tax is 0.14 and the multiplier works out to 2.04.
- 23 Appleyard and Field (1998: 560–5); Thirlwall and Gibson (1992: 136–48).

Bibliography

- Abdel-Fadil, M. (1975) *Development, Income Distribution and Social Change in Rural Egypt (1952–70)*, Cambridge: Cambridge University Press.
- Abdel-Khalek, G. (1997) “Stabilization and structural adjustment policies in Egypt: economic reform or Dutch disease?” Paper presented at the Fourth Conference for Arab Economic Researchers, Cairo, Dec. 2–3, 1997 (Arabic).
- Abdel-Khalek, G. (1998) “Egypt’s Economic Reform and the Challenges of Globalization,” in D. Heisel (ed.) *The Middle East and Development in a Changing World, Cairo Papers in Social Science* 20:2, Cairo: American University in Cairo Press.
- Abdel-Khalek, G. (2001) *Stabilization and Adjustment in Egypt*, Cheltenham: Edward Elgar.
- Abdel-Khalek, G. and Tignor, R. (1982) *The Political Economy of Income Distribution in Egypt*, New York: Holmes and Meier.
- Abu Ali, Sultan (1987) “A scenario for the next five year plan,” *L’Egypte Contemporaine* (Jan.–Apr.): 5–22 (Arabic).
- Acharya, S. (1985) *Aspects of the Black Economy in India*, New Delhi: National Institute of Public Finance and Policy.
- Acharya, S. (1988) “India’s Fiscal Policy,” in R. Lucas and G. Papanek (eds) *The Indian Economy*, Boulder, Co: Westview.
- Acharya, S. and Associates (1986) *Aspects of the Black Economy in India*. New Delhi: National Institute of Public Finance and Policy.
- Adams, R.H. “Evaluating Development,” in M. Riad El-Ghonemy (ed.) *Egypt in the Twenty-First Century: Challenges for Development*, London: Routledge.
- Adams, R.H. and Page, J. (2003) “Poverty, inequality and growth in selected Middle East and North Africa countries, 1980–2000,” *World Development* 31(12):2027–48.
- Ahmed, S. (1984) “Public finance in Egypt,” Staff Working Paper No. 639, Washington, DC: World Bank.
- Alba, P., El-Shawarby, S., and Iqbal, F. (2004) “Fiscal and public debt sustainability in Egypt,” Egyptian Center for Economic Studies (ECES), Working Paper No. 97, Cairo: ECES.
- Alderman, H., von Braun, J., and Ahmed Sakr, S. (1982) *Egypt’s Food Subsidy and Rationing System: A Description*, Washington, DC: International Food Policy Research Institute.
- Alexander, S. (1952) “The effects of devaluation on a trade balance,” *IMF Staff Papers* 3(1):263–78.
- Alexandria Businessmen’s Association (1996) “Small and Micro Enterprises in

- Egypt," in M. Giugale and H. Mubarak (eds) *Private Sector Development in Egypt*, Cairo: American University in Cairo Press.
- Ali, S. and Adams, R.H. (1996) "The Egyptian food subsidy system: operation and effects on income distribution," *World Development* 24(11):1777–91.
- Al-Sayyid, A.L. (1969) *Egypt and Cromer*, New York: Frederick A. Praeger.
- Al-Shawarby, S. (2000) "Estimating the Impact of the Egyptian Exchange Rate on Exports," in H. Nassar and A. Aziz (eds) *Egyptian Exports and Challenges of the 21st Century*, Cairo: Center for Economic and Financial Research and Studies, Cairo University.
- American Chamber of Commerce in Egypt (1996) "Financing Private Sector Development in Egypt," in M. Giugale and H. Mubarak (eds) *Private Sector Development in Egypt*, Cairo: American University in Cairo Press.
- Amin, G. (1968) "The Egyptian Economy and the Revolution," in P.J. Vatikiotis (ed.) *Egypt Since the Revolution*, New York: Praeger.
- Amin, G. (1995) *Egypt's Economic Predicament*, Leiden: E.J. Brill.
- Anand, S. (1997) "The Definition and Measurement of Poverty," in S. Subramanian (ed.) *Measurement of Inequality and Poverty*, Delhi: Oxford University Press.
- Anis, M.A. (1950) "A study of the national income of Egypt," *L'Égypte Contemporaine* 261–2, Cairo: SOP Press.
- Appleyard, D.R. and Field, A.J. (1998) *International Economics*, 3rd edn, Boston: Irwin.
- Arrow, K.J. (1962) "The Economic Implications of Learning by Doing," *Review of Economic Studies* 29(3):155–73.
- Artus, P. (1989) *Macroeconomie*, Paris: Presses Universitaires de France.
- Assaad, R. (1995) *The Effects of Public Sector Hiring and Compensation Policies on the Egyptian Labor Market*, Cairo: Economic Research Forum.
- Assaad, R. (1996a) *An Analysis of Compensation Programs for Redundant Workers in Egyptian Public Enterprises*, Cairo: Economic Research Forum.
- Assaad, R. (1996b) "Structural Adjustment and Labor Market Reform in Egypt," in H. Hopfinger (ed.) *Economic Liberalisation and Privatisation in Socialist Arab Countries*, Stuttgart: Justus Perthes Verlag Gotha.
- Assaad, R. (1997) "The Employment Crisis in Egypt: Current Trends and Future Prospects," in Karen Pfeiffer (ed.) *Research in Middle East Economics*, Vol. 2, Greenwich, Conn.: JAI Press.
- Assaad, R. (1999) "The Transformation of the Egyptian Labor Market: 1988–1998," Paper presented at the Conference on Labor Market and Human Resource Development in Egypt, Cairo, November 1999.
- Assaad, R. (2000) *The Transformation of the Egyptian Labor Market: 1988–1998*, Cairo: Economic Research Forum.
- Assaad, R. and Rouchdy, M. (1999) "Poverty and poverty alleviation strategies in Egypt," *Cairo Papers in Social Science* 22(1), Cairo: American University in Cairo.
- Assaad, R., El-Hamdi, F., and Ahmed, A. (1999) *The Determinants of Employment Status in Egypt*, Washington, DC: International Food Policy Research Institute.
- Ayubi, N. (1980) *Bureaucracy and Politics in Contemporary Egypt*, London: Ithaca Press.
- Atkeson, A. and Ohanian, L.E. (2001) "Are Phillips curves useful for forecasting inflation?," *Federal Reserve Bank Minneapolis Quarterly* (Winter):2–11.
- Backhouse, R. (1991) *Applied UK Macroeconomics*, Oxford: Basil Blackwell.
- Baer, G. (1962) *A History of Landownership in Modern Egypt, 1800–1950*, London: Oxford University Press.

- Bahaa, E., Ziad, A., and Mohieldin, M. (1998) "On Prudential Regulation in Egypt," in M. El-Erian and M. Mohieldin (eds) *Financial Development in Emerging Markets: The Egyptian Experience*, Cairo: Egyptian Center for Economic Studies.
- Baker, R.W. (1978) *Egypt's Uncertain Revolution under Nasser and Sadat*, Cambridge, Mass.: Harvard University Press.
- Balassa, B. (1965) "Trade liberalization and 'revealed' comparative advantage," *The Manchester School of Economic and Social Studies* 33(2):99-123.
- Balassa, B. and Associates (1971) *The Structure of Protection in Developing Countries*, Baltimore, Md.: Johns Hopkins University Press.
- Baldwin, R.E. and Seghezza, E. (1996) "Testing for trade-induced investment growth," Discussion Paper 1331, London: Centre for Economic Policy Research.
- Ball, L. and Mankiw, N.G. (2002) "The NAIRU in theory and practice," NBER Working Paper 8940, New York: National Bureau of Economic Research.
- Barker, D. and Holdsworth, D. (1993) "The causes of bank failures in the 1980s," Research Paper 9325, Federal Reserve Bank of New York.
- Barro, R.J. (1995) "Inflation and economic growth," *Bank of England Quarterly Bulletin* 35(2):166-76.
- Bartsch, U. (1997) *Interpreting Household Budget Surveys: Estimates for Poverty and Income Distribution in Egypt*, Cairo: Economic Research Forum.
- Benson, A. (1998) *Exports and Imports in Middle East Economies*, London: Institute of Global Economics.
- Bentley, J., in association with Yehia Kamel, Abul Ela, and Sakr (1994) *Egyptian Legal and Judicial Sector Assessment*, Cairo: USAID.
- Bernanke, B.S., Laubach, T., Posen, A.S., and Mishkin, F.S. (1999) *Inflation Targeting: Lessons from the International Experience*, Princeton, NJ: Princeton University Press.
- Bernier, B. and Simon, Y. (2001) *Initiation à la macroéconomie*, 8th edn, Paris: Dunod.
- Beveridge, W.H. (1944) *Full Employment in a Free Society*, Woking, UK: Unwin.
- Bhagwati, J. (1967) "The Tying of Aid." UNCTAD Secretariat, TD/7/Suppl. 4, United Nations; reprinted in J. Bhagwati and R.S. Eckhaus (eds) *Foreign Aid*, London: Penguin Books, 1970.
- Bhattacharyya, A.K. (1998) "Introduction and Overview," in *Combating Poverty*, Seoul, Korea: UNDP.
- Bisat, A., El-Erian, M.A., and Helbling, T. (1997) *Growth, Investment, and Saving in the Arab Economies*, Washington, DC: IMF.
- Blecker, R.A. (2000) *The Diminishing Returns to Export-Led Growth*, New York: Council on Foreign Relations.
- Blinder, A.S. and Solow, R.M. (1974) "Analytical Foundations of Fiscal Policy," in *The Economics of Public Finance*, Washington, DC: Brookings Institution.
- Bosworth, B., Collins, S., and Chen, Y.-C. (1995) "Accounting for differences in economic growth," *Brookings Discussion Papers in International Economics*, 115, Washington, DC: Brookings Institution.
- Bouis, H. and Ahmed, A. (1999) *The Egyptian Food Subsidy System: Impacts on the Poor and an Evaluation of Alternatives for Policy Reforms*, Washington, DC: International Food Policy Research Institute.
- Bouis, H., Ahmed, A.U., and Hamza, A.S. (1999) *Patterns of Food Consumption and Nutrition in Egypt*, Washington, DC: International Food Policy Research Institute.
- Bowman, A.K. and Rogan, E. (1999) *Agriculture in Egypt*. Oxford: Oxford University Press.

- Brada, J.C. and Estrin, S. (1990) "Advances in the theory and practice of indicative planning," *Journal of Comparative Economics* 14(Dec):523–30.
- Bruno, M. (1995) "Does inflation really lower growth?," *Finance and Development* 32(Sep):35–8.
- Bruton, H.J. (1983) "Egypt's development in the seventies," *Economic Development and Cultural Change* 31(Jul):679–704.
- Burgess, R. and Stern, N. (1993) "Taxation and development," *Journal of Economic Literature* 31(2):762–830.
- Burnside, C. and Dollar, D. (2000) "Aid, policies, and growth," *American Economic Review* 90(4):847–68.
- Cadwell, C. (1999) "Legal Reform: the Path for Egypt," in *Growth Beyond Stabilization: Conference Proceedings*, Cairo: Egyptian Center for Economic Studies.
- Calvo, G.A. and Reinhart, C.M. (2002) "Fear of floating," *Quarterly Journal of Economics* 117(2):379–408.
- CAPMAS (Central Agency for Public Mobilization and Statistics) (1996) *National Accounts, Egypt: Input–Output Table*, Cairo.
- CAPMAS (1998) *Survey of Vocational Training Centres*, Cairo: Social Fund for Development.
- CAPMAS (1999) *Statistical Yearbooks, 1992–98*, Cairo.
- CAPMAS (2002) *Household Income and Expenditure Survey 2000*, Cairo: CAPMAS.
- Cardiff, P. (1997) "Poverty and Inequality in Egypt," in K. Pfeifer (ed.) *Research in Middle East Economics*, Vol. 2, Greenwich, Conn.: JAI Press.
- Chelliah, R.J. (1971) "Trends in taxation in developing countries," *IMF Staff Papers* 18(2):254–331.
- Chugh, R.L. and Uppal, J.S. (1986) *Black Economy in India*, New Delhi: Tata McGraw-Hill.
- Church, K.B., Mitchell, P.R., Smith, P.N., and Wallis, K.F. (1995) "Comparative properties of models of the UK economy," *National Institute Economic Review* 153(Aug):59–72, London: National Institute of Economic and Social Research.
- Coe, D.T., Helpman, E., and Hoffmaister, A.W. (1997) "North–south R&D spillovers," *Economic Journal* 107(440):134–49.
- Cole, R.A. and Gunther, J.W. (1998) "Predicting bank failures: a comparison of on- and off-site monitoring systems," *Journal of Financial Services Research* 13:103–17.
- Commander, S. (1987) *The State and Agricultural Development in Egypt Since 1973*, London: Ithaca Press.
- Cooper, M.N. (1982) *The Transformation of Egypt*, Baltimore, Md.: Johns Hopkins University Press.
- Cooper, R.N. (1971) "Currency Devaluation in Developing Countries," *Essays in International Finance*, 86, Princeton, NJ: Princeton University Press.
- Corbo, V., Fischer, S., and Webb, S. (1992) *Adjustment Lending Revisited: Policies to Restore Growth*, Washington, DC: World Bank.
- Corden, W.M. (1971) *The Theory of Protection*, Oxford: Oxford University Press.
- Cornia, G., Jolly, R., and Stewart, F. (1987, 1988) *Adjustment with a Human Face*, vols 1 and 2, Oxford: Oxford University Press.
- Cottenet, H. (2003) "Booms de Ressources Exogenes et Développement Manufacturier en Égypte: L'illusion du Syndrome Hollandais," Ph.D. diss., Université d'Auvergne Clermont-Ferrand I, France.
- Crémer, H. and Crémer, J. (1994) "L'apport des théories économiques récentes à la planification indicative," *Revue Economique*, 44 (Numéro hors série): 57–73.

- Cromer, Earl of (1908) *Modern Egypt*, London: Macmillan and Co.
- Dailami, M. and Dinh, H.T. (1991) "Interest rate policy in Egypt: its role in stabilization and adjustment," Working Paper No. 655, Washington, DC: World Bank.
- Dakolias, M. (1999) "Court performance around the world: a comparative perspective," World Bank Technical Paper No. 430, Washington, DC: World Bank.
- Daly, M.W. (1998). "The British occupation," in M.W. Daly (ed.) *The Cambridge History of Egypt, Volume Two: Modern Egypt*, Cambridge: Cambridge University Press.
- Danilin, V.I., Meterov, I., Rosefield, S., and Knox Lovell, C.A. (1985) "Measuring enterprise efficiency in the Soviet Union: a stochastic frontier analysis," *Economica* 52(May):57-73.
- Datt, G. and Olmsted, J. (1999) *Agricultural Wages and Food Prices in Egypt: A Governorate-level Analysis for 1976-1993*, Washington, DC: International Food Policy Research Institute.
- Datt, G., Jolliffe, D., and Sharma, M. (1997, 1999) "A Profile of Poverty in Egypt: 1997," Washington, DC: International Food Policy Research Institute.
- Demetriades, P. (1998) "Financial Markets and Economic Development," in M. El-Erian and M. Mohieldin (eds) *Financial Markets in Emerging Markets: The Egyptian Experience*, Cairo: Egyptian Center for Economic Studies.
- Denison, E. (1985) *Trends in American Economic Growth, 1929-82*, Washington, DC: The Brookings Institution.
- Denison, E.F. (1962) *The Sources of Economic Growth in the United States and the Alternatives Before Us*, New York: Committee for Economic Development.
- De Soto, H. (1997) "Dead capital and the poor in Egypt," *Distinguished Lecture Series*, 11, Cairo: Egyptian Center for Economic Studies.
- De Soto, H. (2000) *The Mystery of Capital*, New York: Basic Books.
- Dessouki, A.E.H. (1982) "The Politics of Income Distribution in Egypt," in G. Abdel-Khalek and R. Tignor (eds) *The Political Economy of Income Distribution in Egypt*, New York: Holmes and Meier.
- Dessouki, A.E.H. (1996) "External Factors and Development in Egypt," in D. Tschirgi (ed.) *Development in the Age of Liberalization: Egypt and Mexico*, Cairo: American University in Cairo Press.
- Devarajan, S., Go, D., and Li, H. (1999) "Quantifying the fiscal effects of trade reform: a general equilibrium model estimated for 60 countries," Washington, DC: World Bank.
- Dinh, H.T. and Giugale, M. (1991) "Inflation tax and deficit financing in Egypt," Working Paper No. 668, Washington, DC: World Bank.
- Diwan, I. (1995) *Will Arab Workers Prosper or be Left Out in the Twenty-First Century?*, Cairo: Economic Research Forum.
- Djankov, S. (2000) "The regulation of entry," NBER Working Paper No. 7892, Cambridge, Mass.: National Bureau of Economic Research.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., and Schleifer, A. (2001) "Legal Structure and Judicial Efficiency: The Lex Mundi Project," Washington, DC: World Bank.
- Dollar, D. (1992) "Outward-oriented economies do grow more rapidly: evidence from 95 LDCs, 1976-85," *Economic Development and Cultural Change* 40(Apr.): 523-44.

- Domar, E. (1944) "The burden of the debt and national income," *American Economic Review* 34(4):798–827.
- Donders, J. and Kranendonk, H. (1999) "The accuracy of CPB forecasts," *CPB Report 2*, Netherlands Centraal Planbureau.
- Dorfman, R., Samuelson, P.A., and Solow, R.M. (1958) *Linear Programming and Economic Analysis*, New York: McGraw-Hill.
- Dreze, J. and Sen, A. (1989) *Hunger and Public Action*, Oxford: Clarendon Press.
- Easterly, W. and Schmidt-Hebbel, K. (1994) "Fiscal Adjustment and Macroeconomic Performance: A Synthesis," in W. Easterly, C.A. Rodriguez, and K. Schmidt-Hebbel, *Public Sector Deficits and Macroeconomic Performance*, New York: Oxford University Press.
- Edwards, S. (1989) *Real Exchange Rates, Devaluation and Adjustment: Exchange Rate Policies in Developing Countries*, Cambridge, Mass.: MIT Press.
- Edwards, S. (1993a) "Openness, trade liberalization and growth in developing countries," *Journal of Economic Literature* 31(3):1358–93.
- Edwards, S. (1993b) "Exchange rates as nominal anchors," *Weltwirtschaftliches Archiv/Review of World Economics* 129(1):1–32.
- Edwards, S. (1994) "Real and Monetary Determinants or Real Exchange Rate Behavior; Theory and Evidence from Developing Countries," in J. Williamson (ed.) *Estimating Equilibrium Exchange Rates*, Washington, DC: Institute for International Economics.
- Eilts, H.F. (1985) "Foreword," in W.J. Burns, *Economic Aid and American Policy toward Egypt, 1955–1981*, Albany, NY: State University of New York Press.
- El Edel, M. Reda A. (1982) "Impact of Taxation on Income Distribution: An Exploratory Attempt to Estimate Tax Incidence in Egypt," in G. Abdel-Khalek and R. Tignor (eds) *The Political Economy of Income Distribution in Egypt*, New York: Holmes and Meier.
- El-Erian, M. (1988) "Currency substitution in Egypt and the Yemen Arab Republic," *IMF Staff Papers* 35(1):85–103.
- El-Ghonemy, M.R. (2003) "Development Strategies, 1950–2001," in M.R. El-Ghonemy (ed.) *Egypt in the Twenty-First Century: Challenges for Development*, London: Routledge.
- El-Guwadi, M. (1997) *El wuzra' 1952–1997*, Cairo: Dar el-Shorouq (Arabic).
- El Kholie, O.A. (1973) "Disparities of Egyptian personal income distribution," *L'Egypte Contemporaine* 34(354):33–56.
- El-Leithy, H. and Osman, M.O. (1996) *Profile and Trend of Poverty and Economic Growth in Egypt*, Cairo: Institute of National Planning and UNDP.
- El-Leithy, H., El-Khawaga, O., and Riad, N. (1999) "Poverty Assessment in Egypt: 1991–96," Economic Research Monograph. Cairo: Cairo University.
- Elmendorf, D.W. and Mankiw, N.G. (1999) "Government Debt," in J. Taylor and M. Woodford (eds) *Handbook of Macroeconomics*, Vol. 1C, Amsterdam: Elsevier.
- El-Nasser, G.A. (1954) *The Philosophy of the Revolution*, Cairo: Dar El Maaref.
- El-Refaie, F. (1998) "Financial Intermediation: The Efficiency of the Egyptian Banking System," in M. El-Erian and M. Mohieldin (eds) *Financial Development in Emerging Markets: The Egyptian Experience*, Cairo: Egyptian Center for Economic Studies.
- El-Refaie, F. (2000) "Monetary and exchange rate policies: options for Egypt," Paper presented at the Egyptian Center for Economic Studies' Conference on the Coordination of Monetary and Fiscal Policy in Egypt, Cairo, Nov. 19–20.

- El-Sadat, A. (1974) *The October Working Paper*, Cairo: Arab Republic of Egypt, Ministry of Information.
- El-Sadat, A. (1977) *In Search of Identity*, New York: Harper and Row.
- El-Shazly, A. (1999) "The Egyptian Banking System: A Review," Cairo: World Bank.
- El-Shazly, A. (2000) "The Banking Sector in Egypt: An Overview," Cairo: World Bank.
- El-Shazly, A. (2001) "Incentive-based regulations and bank restructuring in Egypt," Paper presented at the Annual Conference of the Middle East Economic Association, Cairo, January 2001.
- Esfahani, H.S. (1999) "Fiscal Stabilization and Budgetary Institutions in Egypt," Cairo: Economic Research Forum.
- Estrin, S. and Holmes, P. (1983) *French Planning in Theory and Practice*, London: Allen and Unwin.
- Fahmy, K. (1998) "The Era of Muhammad 'Ali Pasha, 1805–1848," in M.W. Daly (ed.) *The Cambridge History of Egypt, Volume Two: Modern Egypt*, Cambridge: Cambridge University Press.
- FAO (UN, Food and Agriculture Organization) (1999) *Comparative Advantage and Competitiveness of Crops, Crop Rotations, and Livestock Products in Egypt*, Cairo: FAO Regional Office.
- Fawzy, S. (1999) "The Business Environment in Egypt," in S. Fawzy and A. Galal (eds) *Partners for Development*, Washington, DC: World Bank.
- Fawzy, S. (2000) "Barriers to Egyptian Exports: Institutional Barriers to Exports," in H. Nassar and A. Aziz (eds) *Egyptian Exports and Challenges of the 21st Century*, Cairo: Center for Economic and Financial Research and Studies, Cairo University.
- Fawzy, S. and Galal, A. (1999) *Partners for Development*, Washington, DC: World Bank.
- Felipe, J. (1999) "Total factor productivity growth in East Asia: a critical survey," *Journal of Development Studies* 35(4):1–41.
- Fergany, N. (1991) "A Characterization of the Employment Problem in Egypt," in H. Handoussa and G. Porter (eds) *Employment and Structural Adjustment: Egypt in the 1990s*, Cairo: Economic Research Forum.
- Fergany, N. (1992) *Poverty and Unemployment Profiles on the Level of Administrative Units*, Cairo: Al Mishkat.
- Fergany, N. (1995) *Recent Trends in Participation in Economic Activity and Open Unemployment in Egypt*, Cairo: Al Mishkat.
- Fergany, N. (1996a) *Review of the Labour Force Sample Survey and Basic Measures of Employment and Unemployment: Egypt 1990–95*, Report prepared for the ILO, Cairo, Egypt.
- Fergany, N. (1996b) *The challenge for the 21st Century for Egypt: Education and Labor* (Arabic), Cairo: Al Mishkat.
- Fergany, N. (1998a) *The Growth of Poverty in Egypt*, Research Notes, Cairo: Al Mishkat.
- Fergany, N. (1998b) *Dynamics of Employment Creation and Destruction: Egypt, 1990–95*, Research Notes, Cairo: Al Mishkat.
- Fergany, N. (1999) *An Assessment of the Unemployment Situation in Egypt*, Research Notes, Cairo: Al Mishkat.
- Fields, G.S. (2001) *Distribution and Development*, Cambridge, Mass.: MIT Press.
- Fischer, S. (1993) "The role of macroeconomic factors in growth," *Journal of Monetary Economics* 32(3):485–512.

- Fischer, S. (1994) "Modern Central Banking," in F. Capie, C. Goodhart, S. Fischer, and N. Schnadt (eds) *The Future of Central Banking: The Tercentenary Symposium of the Bank of England*, Cambridge: Cambridge University Press.
- Fleming, J.M. (1962) "Domestic financial policies under fixed and floating exchange rates," *IMF Staff Papers* 9(3):369–79.
- Foley, D.K. and Michl, T.R. (1999) *Growth and Distribution*, Cambridge, Mass.: Harvard University Press.
- Foster, J., Greer, J., and Thorbecke, E. (1984) "A class of decomposable poverty measures," *Econometrica* 52(3):761–6.
- Frank, C.R. (1970) *Debt and Terms of Aid*, Washington, DC: Overseas Development Council.
- Frank, R. and Bernanke, B. (2001) *Principles of Macroeconomics*, New York: McGraw-Hill Irwin.
- Friedman, M. (1968) "The role of monetary policy," *American Economic Review* 58(1):1–17.
- Fry, M.J. (1995) *Money, Interest, and Banking in Economic Development*, 2nd edn, Baltimore, Md.: Johns Hopkins University Press.
- Fry, M.J. (1997) "The Fiscal Abuse of Central Banks," in M.I. Blejer and T. Ter-Minassian (eds) *Macroeconomic Dimensions of Public Finance*, London: Routledge.
- Fu, T.-T., Huang, C.J., and Knox Lovell, C.A. (1988) *Economic Efficiency and Productivity Growth in the Asia-Pacific Region*, Cheltenham: Edward Elgar.
- Galal, A. (1995) "Which Institutions Constrain Economic Growth in Egypt the Most?," Egyptian Center for Economic Studies (ECES), Working Paper No. 1, Cairo: ECES.
- Galal, A. (1996) "Savings and Privatization," Egyptian Center for Economic Studies (ECES), Working Paper No. 8, Cairo: ECES.
- Galal, A. (2002) "Employment and Unemployment in Egypt," Policy Viewpoint 11 (Jun), Cairo: ECES.
- Galal, A. (2004) "The Economics of Formalization: Potential Winners and Losers from Formalization in Egypt," Egyptian Center for Economic Studies (ECES), Working Paper No. 95, Cairo: ECES.
- Galbraith, J.K. (1992) *The Culture of Contentment*, New York: Houghton Mifflin.
- Gautier, F. (1997) "Labor markets in the Middle East," Working Paper for the World Bank, Washington, DC.
- Ghoneim, A. (2002) "Institutional Reforms to Promote Exports: Egypt and the EU," in N. El-Mikawy and H. Handoussa (eds) *Institutional Reform and Economic Development in Egypt*, Cairo: Economic Research Forum.
- Giugale, M. and Mubarak, H. (1996) "The Rationale of Private Sector Development in Egypt," in M. Giugale and H. Mubara (eds) *Private Sector Development in Egypt*, Cairo: American University in Cairo.
- Government of Egypt/World Bank (2000) *Plan of Action for Export Promotion*, Report of the Joint Task Force of the Government of Egypt and the World Bank, Cairo: World Bank.
- Grubel, H.G. and Johnson, H.G. (1971) *Effective Trade Protection*, Geneva: GATT and Graduate Institute of International Studies.
- Haberler, G. (1958) "Introduction to 'Problems in International Economics,'" *Review of Economics and Statistics* 40(Supplement):3–9.
- Haddad, L. (2003) "Chronic and transitory poverty: evidence from Egypt, 1997–99," *World Development* 31(1):71–85.

- Haddad, L. and Ahmed, A. (1999) *Poverty Dynamics in Egypt: 1997–1999*. Washington, DC: International Food Policy Research Institute.
- Hahn, F. and Matthews, R.C.O. (1965) "The Theory of Economic Growth: A Survey," in *American Economic Association and Royal Economic Society, Surveys in Economic Theory*, Vol. II, London: Macmillan.
- Hall, R.E. and Jones, C.I. (1999) "Why do some countries produce so much more output per worker than others?," *Quarterly Journal of Economics* 114(1):83–116.
- Handoussa, H. (1990) "Egypt's Investment Strategy, Policies, and Performance since the Infitah," in S. El Naggar (ed.) *Investment Policies in the Arab Countries*, Washington, DC: IMF.
- Handoussa, H. (1991a) "A Characterisation of the Employment Problem in Egypt," in H. Handoussa and G. Potter (eds) *Employment and Structural Adjustment*, Cairo: American University in Cairo Press.
- Handoussa, H. (1991b) "Reform Policies for Egypt's Manufacturing Sector," in H. Handoussa and G. Potter (eds) *Employment and Structural Adjustment*, Cairo: American University in Cairo Press.
- Handoussa, H. (1991c) "The Impact of Foreign Aid on Egypt's Economic Development, 1952–86," in U. Lele and I. Nabi (eds) *Transitions in Development*, San Francisco: ICS Press.
- Handoussa, H. (2002) "A Balance Sheet of Reform in Two Decades," in N. El-Mikawy and H. Handoussa (eds) *Institutional Reform and Economic Development in Egypt*, Cairo: Economic Research Forum.
- Handoussa, H. and El Oraby, N. (2004) "Civil service wages and reform: the case of Egypt," Egyptian Center for Economic Studies (ECES), Working Paper No. 98, Cairo: ECES.
- Handy, H. (2001) "Monetary policy and financial sector reform in Egypt: the record and the challenges ahead," Egyptian Center for Economic Studies (ECES), Working Paper No. 51, Cairo: ECES.
- Hansen, B. (1968) "Planning and Economic Growth in the U.A.R. (Egypt), 1960–65," in P.J. Vatikiotis (ed.) *Egypt Since the Revolution*, London: Allen and Unwin.
- Hansen, B. (1974) "Preliminary Report on an Attempt to Estimate National Product and Income for Egypt, ca. 1880–1913," Berkeley, Calif.: University of Berkeley, Institute of International Studies.
- Hansen, B. (1975) "Arab socialism in Egypt," *World Development* 3(4):201–11.
- Hansen, B. (1991) *Egypt and Turkey: The Political Economy of Poverty, Equity, and Growth*, New York: Oxford University Press.
- Hansen, B. and Marzouk, G. (1965) *Development and Economic Policy in the UAR (Egypt)*, Amsterdam: North-Holland.
- Hansen, B. and Mead, D. (1965) "The National Income of the UAR (Egypt), 1939–62," in S. Goldberg and P. Deane (eds) *Studies in Short-Term National Accounts and Long-Term Economic Growth*, Income and Wealth, Series XI, London: Bowes and Bowes.
- Hansen, B. and Nashashibi, K. (1975) *Foreign Trade Regimes and Economic Development: Egypt*, New York: National Bureau of Economic Research.
- Hansen, B. and Radwan, S. (1982) *Employment Opportunities and Equity in Egypt*, Geneva: International Labour Office.
- Haq, M. ul (1967) "Tied Credits: A Quantitative Analysis," in J.H. Adler (ed.) *Capital Movements and Economic Development*, New York: Macmillan.

- Haq, M. ul (1976) *The Poverty Curtain: Choices for the Third World*, New York: Columbia University Press.
- Haq, M. ul (1995) *Reflections on Human Development*, New York: Oxford University Press.
- Haque, N. ul (1990) "Currency Substitution in Egypt," Washington, DC: International Monetary Fund.
- Haque, N. ul and Montiel, P. (1987) "Ricardian Equivalence, Liquidity Constraints and the Yaari–Blanchard Effect: Tests for Developing Countries," Development Research Department, Washington, DC: World Bank.
- Harberger, A. (1957) "Some evidence on the international price mechanism," *Journal of Political Economy* 65(6):506–21.
- Harberger, A. (1977) "Perspectives on Capital and Technology in Less Developed Countries," in M.J. Artis and A.R. Nobay (eds) *Contemporary Economic Analysis*, London: Croome Helm.
- Harcourt, G.C. (1972) *Some Cambridge Controversies in the Theory of Capital*, Cambridge: Cambridge University Press.
- Harrigan, J. and Mosley, P. (1991) "Evaluating the impact of World Bank structural adjustment lending 1980–87," *Journal of Development Studies* 27(3):63–94.
- Harrison, A. (1996) "Openness and growth: a time-series, cross-country analysis for developing countries," *Journal of Development Economics* 48(2):419–47.
- Harrod, R.F. (1948) *Towards a Dynamic Economics*, London: Macmillan.
- Hassan, H. (1996) "A PSD-Friendly Tax System," in M. Giugale and H. Mubarak (eds) *Private Sector Development in Egypt*, Cairo: American University in Cairo.
- Hassan, M. (2003) "Can monetary policy play an effective role in Egypt?," Egyptian Center for Economic Studies (ECES), Working Paper No. 84, Cairo: ECES.
- Helmy, T. (2004) "Empowering the people," *Al-Ahram Weekly*, September 3.
- Hicks, J.R. (1932; 2nd edn, 1963) *The Theory of Wages*, London: Macmillan.
- Hinkle, L.E. and Nsengiyumva, F. (1999) "External Exchange Rates: Purchasing Power Parity, the Mundell–Fleming Model, and Competitiveness in Traded Goods," in L.E. Hinkle and P.J. Montiel (eds) *Exchange Rate Misalignment*, New York: Oxford University Press.
- Hirtle, B.J. and Lopez, J.A. (1999) "Supervisory information and the frequency of bank examinations," Federal Reserve Bank of New York, *Economic Policy Review* (5):1–20.
- Hobbes, T. [1651] (1962) *Leviathan*, New York: Collier Books.
- Hoekman, B. (1996) *Trade and Investment Liberalization: Issues and Options for Egypt*, Washington, DC: World Bank.
- Hoekman, B. and El-Din, H.K. (2000) *Trade Policy Developments in the Middle East and North Africa*, Washington, DC: World Bank.
- Hoekman, B., Kee, H.L., and Olarreaga, M. (2001) "Markups under domestic and foreign entry," Background paper for the *World Development Report 2001*, Washington, DC: World Bank.
- Hoggarth, G., Reis, R., and Saporta, V. (2002) "Costs of banking system instability: some empirical evidence," *Journal of Banking and Finance* (26):825–55.
- Holt, R. and Roe, T. (1993) "The Political Economy of Reform: Egypt in the 1980s," in R.H. Bates and A.O. Krueger (eds) *Political and Economic Interactions in Economic Policy Reform*, Oxford: Blackwell.
- Hopkin, W. and Godley, W. (1965) "An analysis of tax changes," *National Institute Economic Review* 32(May):33–42.

- Huband, M. (1999) *Egypt Leading the Way*, London: Euromoney Books.
- Ibrahim, S.E. (1982) "Social Mobility and Income Distribution in Egypt, 1952–1977," in G. Abdel-Khalek and R. Tignor (eds) *The Political Economy of Income Distribution in Egypt*, New York: Holmes and Meier.
- Ikram, K. (1980) *Egypt: Economic Management in a Period of Transition*, Baltimore, Md. and London: Johns Hopkins University Press.
- Ikram, K. (1981) "Meeting the social contract in Egypt," *Finance and Development* 18(3):30–33.
- IMF (International Monetary Fund) (1982) *Annual Report on Exchange Arrangements and Exchange Restrictions*, Washington, DC: IMF.
- IMF (1983) *Arab Republic of Egypt: Recent Economic Developments*, Washington, DC: IMF.
- IMF (1998a) *Egypt: Beyond Stabilization, Toward a Dynamic Economy*, Washington, DC: IMF.
- IMF (1998b) "Arab Republic of Egypt: An Agenda for Structural Reform," Washington, DC: IMF, Middle Eastern Department.
- IMF (2003) *World Economic Outlook*, Washington, DC: IMF.
- INP (Institute of National Planning) (1996) *Egypt: Human Development Report 1996*, Cairo: INP.
- INP (2002) *Egypt: Human Development Report 2002*, Cairo: INP.
- ILO (International Labor Organization) (1996) *World Employment Report, 1996/97: National Policies in a Global Context*, Geneva: ILO.
- ILO (1998) *1998 Yearbook of Labor Statistics*, Geneva: ILO.
- Issawi, C.A. (1963) *Egypt in Revolution*, London: Oxford University Press.
- Issawi, C.A. (1990) "Economic Evolution Since 1800," in I.M. Oweiss (ed.) *The Political Economy of Contemporary Egypt*, Washington, DC: Georgetown University, Center for Contemporary Arab Studies.
- Johnson, H.G. (1971) *Aspects of the Theory of Tariffs*, London: Allen and Unwin.
- Jorgenson, D.W. and Griliches, Z. (1967) "The explanation of productivity change," *Review of Economic Studies* 34(3):249–83.
- Joshi, V. and Little, I.M.D. (1994) *India: Macroeconomics and Political Economy, 1964–1991*, Washington, DC: World Bank.
- Karshenas, M. (1994) "Structural adjustment and employment in the Middle East and North Africa," Working Paper, Cairo: Economic Research Forum.
- Kaufman, D., Kraay, A. and Zoido-Lobaton, P. (2002) "Governance matters II," Policy Research Working Paper No. 2772, Washington, DC: World Bank.
- Keynes, J.M. (1923) [1971] *A Tract on Monetary Reform*, London: Macmillan, for the Royal Economic Society [*The Collected Writings of John Maynard Keynes*, Vol. IV].
- Khattab, M. (1999) "Constraints to privatization: the Egyptian experience," Egyptian Center for Economic Studies (ECES), Working Paper No. 38, Cairo: ECES.
- Kheir El Din, H. (2000) "Egypt's Exports under Liberalization: Performance and Constraints (1980–1998)," in H. Nassar and A. Aziz (eds) *Egyptian Exports and Challenges of the 21st Century*, Cairo: Center for Economic and Financial Research and Studies, Cairo University.
- Kheir El Din, H. and El Shawarby, S. (2002) "Trade and foreign exchange regime in Egypt," Paper presented at the Conference on Institutional and Policy Changes Facing the Egyptian Economy, Cairo University (Center for Economic and Financial Research and Studies) and USAID, May 26–27, 2002, Cairo.

- Kheir El Din, H. and Moursi, T.A. (2002) "Sources of economic growth and technical progress in Egypt: an aggregate perspective," Paper presented to the Economic Research Forum of the Arab Countries, Iran and Turkey, Cairo: Economic Research Forum.
- Kheir El Din, H., Moursi, T., and El-Megharbel, N. (1997) "Macroeconomic and Sectoral Effects of Trade Liberalization Policies: A General Equilibrium Approach," in H. Kheir El Din (ed.) *Implications of the Uruguay Round on the Arab Countries*, Cairo: Dar Al-Mostaqbal Al-Arabi.
- Kim, J.-I., and Lau, L. (1994) "The sources of economic growth of the East Asian newly industrialized countries," *Journal of the Japanese and International Economies* 8(3):235–71.
- Klein, L.R., Ball, R.J., Hazlewood, A., and Vandome, P. (1961) *An Econometric Model of the United Kingdom*, Oxford: Basil Blackwell.
- Korayem, K. (1992) "Poverty in Egypt: literature review (1985–1991)," Paper submitted to the Third World Forum and UNICEF, Cairo.
- Korayem, K. (1994) *Poverty and Income Distribution in Egypt*, Cairo: Third World Forum.
- Korayem, K. (1996) "Structural adjustment, stabilization policies and the poor in Egypt," *Cairo Papers in Social Science* 18(4)Winter.
- Korayem, K. (1997) "Egypt's Economic Reform and Structural Adjustment (ERSAP)," Egyptian Center for Economic Studies (ECES), Working Paper No. 19, Cairo: ECES.
- Kouamé, A.T. (2000) "Egypt: Export Competitiveness Analysis," Washington, DC: World Bank, MENA Region.
- Krugman, P. (1997) "What ever happened to the Asian miracle?," *Fortune* 13(4):26–7.
- Landes, D.M. (1958) *Bankers and Pashas*, Cambridge, Mass.: Harvard University Press.
- Lane, E.W. (1836) *The Manners and Customs of the Modern Egyptians*, London: J.M. Dent; 1923 (5th edn, 1860) ed. E.S. Poole.
- Lanjouw, P. and Ravallion, M. (1995) "Poverty and household size," *Economic Journal* 105(433):1415–34.
- Lanjouw, P. (1996) "How Should We Assess Poverty Using Data from Different Surveys?," Washington, DC: World Bank.
- Laurens, B. and de la Piedra, E.G. (1998) "Coordination of monetary and fiscal policies," Working Paper, Washington, DC: IMF.
- Lavigne, M. (1999) *The Economics of Transition*, 2nd edn, New York: St. Martin's Press.
- Leamer, E.E. and Stern, R.M. (1970) *Quantitative International Economics*, Boston: Allyn and Bacon.
- Leddin, A.J. and Walsh, B.M. (1992) *The Macroeconomy of Ireland*, 2nd edn, Dublin: Gill and Macmillan.
- Leibenstein, H. (1966) "Allocative efficiency versus 'x-efficiency,'" *American Economic Review* 56(3):392–415.
- Lerner, A.P. (1944) *The Economics of Control*, London: Macmillan.
- Lichtheim, M. (1973, 1976, 1980) *Ancient Egyptian Literature*, Berkeley: University of California.
- Little, T. (1965) *High Dam at Aswan*, New York: John Day.
- Loayza, N. and Soto, R. (2002) *Inflation Targeting: Design, Performance, Challenges*, Santiago, Chile: Central Bank of Chile.

- Löfgren, H. (1993) "Economic policy in Egypt: a breakdown in reform resistance?", *International Journal of Middle Eastern Studies* 25(3):407–21.
- Mabro, R. (1974) *The Egyptian Economy, 1952–72*, Oxford: Clarendon Press.
- Mabro, R. and Radwan, S. (1976) *The Industrialization of Egypt, 1939–73*, Oxford: Clarendon Press.
- Madani, D. and Olarreaga, M. (2002) "Politically optimal tariffs: an application to Egypt," World Bank Policy Research Working Paper, Washington, DC: World Bank.
- Maddison, A. (1970) *Economic Progress and Policy in Developing Countries*, London: Allen and Unwin.
- Mahbub ul Haq Human Development Centre (1999) *Human Development in South Asia, 1999: The Crisis of Governance*, Karachi: Oxford University Press.
- Mansfield, P. (1965) *Nasser's Egypt*, London: Penguin Books.
- Marlowe, J. (1974) *Spoiling the Egyptians*, London: André Deutsche.
- Marsh, I.W. and Tokarick, S.P. (1994) "Competitiveness indicators: a theoretical and empirical assessment," IMF Working Paper No. WP/94/29, Washington, DC: IMF.
- Marshall, A. (1924) *Money, Credit and Commerce*, London: Macmillan.
- Marsot, A. L. al-Sayyid (1984) *Egypt in the Reign of Muhammad Ali*, Cambridge: Cambridge University Press.
- Masera, R. (1974) "The J-curve: UK experience after the 1967 devaluation," *Metroeconomica* 26(Jan.–Dec.):40–62.
- Mason, E.S. (1984) "The Chenery Analysis and Some Other Considerations," in M. Syrquin, L. Taylor, and L.E. Westphal (eds) *Economic Structure and Performance: Essays in Honor of Hollis B. Chenery*, New York: Academic Press.
- Mason, E.S. and Asher, R.E. (1973) *The World Bank Since Bretton Woods*, Washington, DC: Brookings Institution.
- Masson, P.R., Savastano, M.A., and Sharma, S.F. (1997) "The scope for inflation targeting in developing countries," Working Paper No. 97/130, Washington, DC: IMF.
- Matthews, R.C.O., Feinstein, C.H., and Odling-Smee, J.C. (1982) *British Economic Growth, 1856–1973*, Stanford: Stanford University Press.
- Mauro, P. (1995) "Corruption and growth," *Quarterly Journal of Economics* 110(3):681–712.
- McCombie, J.S.L. and Thirlwall, A.P. (1994) *Economic Growth and the Balance-of-Payments Constraint*, London: Macmillan.
- Mead, D. (1967) *Growth and Structural Change in the Egyptian Economy*, Homewood, Ill.: Richard D. Irwin.
- Meade, J. (1970) *The Theory of Indicative Planning*, Manchester: Manchester University Press.
- Meggison, W.L. and Netter, J.M. (1999) "From state to market: a survey of empirical studies on privatization," Paper presented at Global Equity Markets Conference, Paris, Dec. 10–11, 1998.
- Messick, R.E. (1999) "Judicial reform and economic development: a survey of the issues," *The World Bank Research Observer* 14(1):117–36.
- Ministry of Economy (1981) *A Review of Developments in the Egyptian Economy*, Cairo: Ministry of Economy.
- Ministry of Economy and International Cooperation (1996) *Egypt: Economic Profile*, Cairo: Ministry of Economy and International Cooperation.

- Ministry of Economy and Foreign Trade (2001a) "The Status of M/SME Financing in Egypt," Cairo.
- Ministry of Economy and Foreign Trade (2001b) *Investing in Egypt*, Cairo.
- Ministry of Planning (1977a) *The Five-Year Plan: 1978–82*, Vol. 1: *The General Strategy for Economic and Social Development*, Cairo: Ministry of Planning.
- Ministry of Planning (1977b) *The Five-Year Plan: 1978–82*, Vol. 3: *Planning the Open Door Policy*, Cairo: Ministry of Planning.
- Ministry of Planning (1991) *Statistical Study on the Evolution of Major Variables in the Egyptian Economy during the Period 1959/60–1986/87* (Arabic), Cairo: Ministry of Planning.
- Ministry of Planning (1996, and Suppl. 1997) *Total Balance for Resources and Uses 1986/87–1994/95* (Arabic), Cairo: Ministry of Planning.
- Ministry of Planning/World Bank (2002) *Poverty Reduction in Egypt: Diagnosis and Strategy*, Washington, DC: World Bank.
- Ministry of Planning/World Bank (2004) *Arab Republic of Egypt: A Poverty Reduction Strategy for Egypt*, Washington, DC: World Bank.
- Mishkin, F.S. (2000) "Inflation targeting in emerging countries," Working Paper No. 7618, Cambridge, Mass.: National Bureau of Economic Research.
- Mishkin, F.S. (2001) "From monetary targeting to inflation targeting: lessons from industrialized countries," Working Paper No. 2684, Financial Sector Strategy and Policy Department, Washington, DC: World Bank.
- Mishkin, F.S. and Savastano, M.A. (2000) "Monetary policy strategies for Latin America," Working Paper No. 7617, Cambridge, Mass.: National Bureau of Economic Research.
- Mishkin, F.S. and Schmidt-Hebbel, K. (2001) "One decade of inflation targeting in the world: What do we know, and what do we need to know?" Working Paper No. 8397, Cambridge, Mass.: National Bureau of Economic Research.
- Mohammed, N. (2000) "The Sources of Growth in Egypt," Cairo: World Bank.
- Mohammed, N. (2001) "Sources of economic growth in Egypt: past experience, experience of other countries and the way ahead," Paper prepared for the Cairo University Conference on Growth Strategies for Late Comers, with Special Reference to the Arab Region, Cairo, May 12–14, 2001.
- Mohieldin, M. (1995) "Causes, measures, and impact of state intervention in the financial sector: the Egyptian experience," Paper presented at a conference on The Changing Role of the State in Economic Development and Growth, Rabat, Morocco, January.
- Mohieldin, M. (1998) "Financial development in Egypt," Paper prepared for the World Bank Resident Mission in Cairo.
- Möller, A. (1980) *Proposals for the Solution of the Most Important Structural, Economic and Financial Problems of the Arab Republic of Egypt*, Occasional Paper No. 63, Berlin: German Development Institute.
- Mongardini, J. (1998) "Estimating Egypt's equilibrium real exchange rate," IMF Working Paper, Washington, DC: IMF.
- Moursi, T., El-Mossallamy, M., and El-Fatairy, R. (2004) "Inter-temporal and inter-spatial discrepancy in agricultural productivity and income between Upper and Lower Egypt," Background Paper prepared for MOP/World Bank.
- Mundell, R.A. (1963) "Capital mobility and stabilization policy under fixed and flexible exchange rates," *Canadian Journal of Economics and Political Science* 29(4):475–85.

- Musgrave, R.A. (1959) *The Theory of Public Finance*, New York: McGraw-Hill.
- Nassar, H. (2002) "Summary of Existing Knowledge on Micro and Small Enterprises," Cairo: German Technical Cooperation Organization (GTZ)
- Nassar, H. and Aziz, A. (2000) *Egyptian Exports and Challenges of the 21st Century*, Cairo: Center for Economic and Financial Research and Studies, Cairo University.
- Nassar, H. and El Leithy, H. (2003) "Social risk management under economic transition: formal, informal, and market based arrangements," Paper delivered at the Conference on Rising to the Challenge: International Crisis and Economic Management in Egypt, Cairo: Cairo University Center for Economic and Financial Research.
- Nathan Associates (1996) *The Quality Control System in Egypt*, Cairo: USAID.
- Nathan Associates (1997) *Financial Reform for Small Business Development in Egypt*, Cairo: USAID.
- Nathan Associates (1998) *Enhancing Egypt's Exports*, Cairo: USAID.
- Nathan Associates (1999) *The Elasticities Approach to Egypt's Balance of Payments and Equilibrium Exchange Rate*, Cairo: USAID.
- Neisser, H. and Modigliani, F. (1953) *National Incomes and International Trade*, Urbana: University of Illinois Press.
- Nishimizu, M. and Page, J. (1982) "Total factor productivity growth, technological progress, and technical efficiency: dimensions of productivity change in Yugoslavia, 1965–78," *Economic Journal* 92(368):920–36.
- North, D.C. (1981) *Structure and Change in Economic History*, New York: Norton.
- North, D.C. (1990) *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North, D.C. (1991) "Institutions," *Journal of Economic Perspectives* 5(1):97–112.
- Nutting, A. (1972) *Nasser*, London: Constable.
- O'Brien, P. (1966) *The Revolution in Egypt's Economic System*, London: Oxford University Press.
- Ohlin, G. (1966) *Foreign Aid Policies Reconsidered*, Paris: OECD Development Centre.
- Orcutt, G.H. (1950) "Measurement of price elasticities in international trade," *Review of Economics and Statistics* 32(2):117–32.
- Ott, A.F. (1993) "Privatization in Egypt: Reassessing the Role and Size of the Public Sector," in A.F. Ott and K. Hartley (eds) *Privatization and Economic Efficiency*, Aldershot: Edward Elgar.
- Oweiss, I.M. (1990) *The Political Economy of Contemporary Egypt*, Washington, DC: Georgetown University, Center for Contemporary Arab Studies.
- Oweiss, I.M. (1994) *The Underground Economy with Special Reference to the Case of Egypt*, Cairo: National Bank of Egypt.
- Owen, E.R.J. (1969) *Cotton and the Egyptian Economy, 1820–1914: A Study in Trade and Development*, London: Oxford University Press.
- Owen, E.R.J. and Pamuk, S. (1998) *A History of Middle East Economies in the Twentieth Century*. London: I.B. Tauris.
- Pack, H.M. (2001) "Technological Change and Growth in East Asia: Macro versus Micro Perspectives," in J.E. Stiglitz and S. Yusuf (eds) *Rethinking the East Asian Miracle*, Washington, DC: World Bank and Oxford University Press.
- Page, J.M. (1996) "A Middle Eastern Miracle?," Egyptian Center for Economic Studies (ECES), Distinguished Lecture Series 4, Cairo: ECES.

- Palmer, M., Leila, A. and Yassin, El S. (1988) *The Egyptian Bureaucracy*, New York: Syracuse University.
- Pearson, D.W. (1997) "Trade Prospects for Egypt," London: Institute for Middle East Studies.
- Pesaran, H. and Smith, R. (1995) "The Natural Rate Hypothesis and its Testable Implications," in R. Cross (ed.) *The Natural Rate of Unemployment: Reflections on 25 Years of the Hypothesis*, Cambridge: Cambridge University Press.
- Phelps, E.S. (1967) "Phillips curves, expectations of inflation, and optimal unemployment over time," *Economica* NS 34(135):254–81.
- Phillips, A.W. (1958) "The relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861–1957," *Economica* 25(Nov.):283–99.
- Pincus, J. (1965) *Economic Aid and International Cost Sharing*, Baltimore, Md.: Johns Hopkins University Press.
- Pisani-Ferry, J. (2000) *Plein Emploi*, Report of the Conseil D'Analyse Economique, Paris: La Documentation Française.
- Portes, A. (1996) "The Informal Economy: Perspectives from Latin America," in S. Pozo (ed.) *Exploring the Underground Economy*, Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research.
- Prais, S.J. (1962) "Econometric research in international trade: a review," *Kyklos* 15(3):560–79.
- PRIDE (Project in Development and the Environment) (1994) *Comparing Health Risks in Cairo*, Cairo: USAID.
- Radwan, S. (1974) *Capital Formation in Egyptian Industry and Agriculture, 1882–1967*, London: Ithaca Press.
- Radwan, S. (1997) *Job Creation and Poverty Alleviation in Egypt: Strategy and Programmes*, Geneva: ILO.
- Radwan, S. (1998) "Towards full employment: Egypt into the 21st century," Egyptian Center for Economic Studies (ECES), Distinguished Lecture Series 10, Cairo: ECES.
- Radwan, S. (2002) "Employment and unemployment in Egypt: conventional problems, unconventional remedies," Egyptian Center for Economic Studies (ECES), Working Paper No. 70, Cairo: ECES.
- Radwan, S. and Lee, E. (1977) *Job Creation and Poverty Alleviation in Egypt: Strategy and Programmes*, Geneva: ILO.
- Ravallion, M. (1992) "Poverty comparisons: a guide to concepts and methods," LSMS Working Paper No. 88, Washington, DC: World Bank.
- Ravallion, M. (1994) *Poverty Comparisons*, New York: Harwood Academic.
- Ray, D. (1998) *Development Economics*, Princeton, NJ: Princeton University Press.
- Refaat, A. (2000) "Egypt: An Assessment of Recent Trade Policy Developments," in B. Hoekman and H. Kheir El-Din (eds) *Trade Policy Developments in the Middle East and North Africa*, Washington, DC: World Bank.
- Rhee, Y.W., Ross-Larsen, B., and Pursell, G. (1984) *Korea's Competitive Edge*, Baltimore, Md. and London: Johns Hopkins University Press.
- Richards, A. (1984) "Ten years of *Infitah*: class, rent, and policy stasis in Egypt," *Journal of Development Studies* 20(4):323–38.
- Richards, A. (1991) "The political economy of dilatory reform: Egypt in the 1980s," *World Development* 19(12):1721–30.
- Richards, A. (1993) "Food, Jobs, and Water: Participation and Governance for a

- Sustainable Agriculture in Egypt,” in M.A. Faris and M.H. Khan (eds) *Sustainable Agriculture in Egypt*, Boulder, Col. and London: Lynne Rienner.
- Rivlin, H.B. (1961) *The Agricultural Policy of Muhammad Ali in Egypt*, Cambridge, Mass.: Harvard University Press.
- Rivlin, P. (1985) *The Dynamics of Economic Policymaking in Egypt*, New York: Frederick A. Praeger.
- Rizk, S.K. (1991) “The Structure and Operation of the Informal Sector in Egypt,” in H. Handoussa and G. Potter (eds) *Employment and Structural Adjustment*, Cairo: American University in Cairo Press.
- Robinson, J. (1937) *Essays in the Theory of Employment*, Oxford: Blackwell.
- Robinson, J. (1953) “The production function and the theory of capital,” *Review of Economic Studies* 21(2). (Reprinted in J. Robinson (1960) *Collected Economic Papers*, Vol. 2, Oxford: Basil Blackwell.)
- Robinson, J. (1956) *The Accumulation of Capital*, London: Macmillan.
- Robinson, J. (1971) “The measure of capital: the end of the controversy,” *Economic Journal* 81(323):597–602.
- Rodrik, D. (1997) “TPFG controversies, institutions and economic performance in East Asia,” National Bureau of Economic Research [NBER], Working Paper No. 5914, Cambridge, Mass.: NBER.
- Roe, A.R. (1998) “The Egyptian Banking System: Liberalization, Competition and Privatization,” in M. El-Erian and M. Mohieldin (eds) *Financial Development in Emerging Markets: The Egyptian Experience*, Cairo: Egyptian Center for Economic Studies.
- Roussillon, A. (1998) “Republican Egypt: revolution and beyond,” in M.W. Daly (ed.) *The Cambridge History of Egypt*, Vol. 2: *Modern Egypt*, Cambridge: Cambridge University Press.
- Russell, J. (1997) *Trade Factors in Middle East Economies*, London: Institute for Global Economics.
- Rutherford, M. (1994) *Institutions in Economics: The Old and the New Institutionalism*, Cambridge: Cambridge University Press.
- Sachs, J. (1996) “Achieving rapid growth: the road ahead for Egypt,” Egyptian Center for Economic Studies (ECES), Distinguished Lecture Series 3, Cairo: ECES.
- Sachs, J. and Warner, A. (1995) “Economic reforms and the process of global integration,” *Brookings Papers on Economic Activity* 1:1–118.
- Sadowski, Y.M. (1991) *Political Vegetables*, Washington, DC: Brookings Institution.
- Samuelson, P.A. and Solow, R.M. (1960) “Analytical aspects of anti-inflation policy,” *American Economic Review, Papers and Proceedings* 50(2):177–94.
- Sarraf, M. (2004) “Assessing the costs of environmental degradation in the Middle East and North Africa Region,” Environment Strategy Notes No. 9, Washington, DC: World Bank.
- Schdlowsky, D.M. (1967) “From import substitution to export promotion for semi-grown-up industries: a policy proposal,” *Journal of Development Studies* 3(4): 405–13.
- Schmidt, P. (1985) “Frontier production functions,” *Econometric Reviews* 4(2): 156–69.
- Schneider, F. and Enste, D. (2000) “Shadow Economies Around the World: Size, Causes, and Consequences,” Working Paper No. WP/00/26, Washington, DC: IMF.

- Scioli, G. (1976) "Egypt Public Finances: A Historical View," Paper prepared for the World Bank (MENA Region), Washington, DC.
- Scobie, G.M. (1981) *Government Policy and Food Imports: The Case of Wheat in Egypt*, Washington, DC: International Food Policy Research Institute.
- Sen, A. (1976) "Poverty: an ordinal approach to measurement," *Econometrica* 44(2):219–32.
- Sen, A. (1981) *Poverty and Famines*, Oxford: Clarendon Press.
- Sen, A. (1984) *Resources, Values and Development*, Cambridge, Mass.: Harvard University Press.
- Sen, A. (1985) *Commodities and Capabilities*, Amsterdam: North-Holland.
- Sen, A. (1992) *Inequality Reexamined*, Oxford: Clarendon Press.
- Sen, A. (1995) "Wrongs and rights in development," *Prospect* Oct: 6–10.
- Sen, A. (1997) "From income inequality to economic inequality," *Southern Economic Journal* 64(2):384–401.
- Sen, A. (1999) *Development as Freedom*, New York: Alfred A. Knopf.
- Shihata, I. (1996) "Legal and Regulatory Framework for Private Sector Development in Egypt," in M. Giugale and H. Mubarak (eds) *Private Sector Development in Egypt*, Cairo: American University in Cairo Press.
- Schmidt, W.E. (1964) "The economics of charity," *Journal of Political Economy* 72(4):387–95.
- Social Policy and Development Centre, Pakistan (2001) *Social Development in Pakistan: Towards Poverty Reduction*, Karachi: Oxford University Press.
- Solow, R.M. (1956) "A contribution to the theory of economic growth," *Quarterly Journal of Economics* 70(1):65–94.
- Solow, R.M. (1957) "Technical change and the aggregate production function," *Review of Economics and Statistics* 39(3):312–20.
- Staiger, D., Stock, J.H., and Watson, M.W. (1997) "The NAIRU, unemployment and monetary policy," *Journal of Economic Perspectives* (Winter):33–49.
- Stanford Research Institute (1995) *Achieving Egyptian Export Growth*, Cairo: USAID.
- Stern, R.M. (1973) *The Balance of Payments*, Chicago, Ill.: Aldine.
- Subramanian, A. (1997) "The Egyptian stabilization experience," Egyptian Center for Economic Studies (ECES), Working Paper No. 18, Cairo: ECES.
- Surrey, M. (1971) *The Analysis and Forecasting of the British Economy*, Cambridge: Cambridge University Press.
- Svensson, L.E.O. (1997) "Inflation forecast targeting: implementing and monitoring inflation targets," *European Economic Review* 41 (Jun.):1111–46.
- Svensson, L.E.O. (1999) "Price level targeting vs. inflation targeting: A free lunch?" *Journal of Money, Credit and Banking* 31 (Aug.):277–95.
- Tait, A., Gratz, W.L.M., and Eichengreen, B.J. (1979) "International comparisons of taxation for selected developing countries, 1972–76," *IMF Staff Papers* 26(1):123–56.
- Theil, H. (1966) *Applied Economic Forecasting*, Amsterdam: North-Holland Publishing Company.
- Thirlwall, A.P. (1974) "The Keynesian multiplier with interest rate, redistribution and real balance effects," *Oxford Bulletin of Economics and Statistics* 36(4):235–46.
- Thirlwall, A.P. (2003) *Growth and Development: With Special Reference to Developing Countries*, 7th edn, New York: PalgraveMacmillan.

- Thirlwall, A.P. and Gibson, H. (1992) *Balance of Payments Theory and the United Kingdom Experience*, 4th edn, London: Macmillan.
- Tinbergen, J. (1952) *On the Theory of Economic Policy*, Amsterdam: North-Holland.
- Tohamy, S. and Swinscoe, A. (2000) "The economic impact of tourism in Egypt," Egypt Center for Economic Studies (ECES), Working Paper No. 40, Cairo: ECES.
- Toledano, E.R. (1998) "The 'long nineteenth century,'" in M.W. Daly (ed.) *The Cambridge History of Egypt*, Vol. 2: *Modern Egypt*, Cambridge: Cambridge University Press.
- Transparency International (2001) *Global Corruption Report 2001*, Berlin: Transparency International.
- Tripp, R.T. (1970) *The International Thesaurus of Quotations*, New York: Penguin Books.
- Tsegaye, A. (1981) "The specification of the foreign trade multiplier for a developing country," *Oxford Bulletin of Economics and Statistics* 43(3):287–300.
- United Arab Republic (n.d.) *The Charter*, Cairo: Information Department.
- UNDP (United Nations Development Program) (1996) *Egypt: Human Development Report 1996*, Cairo: Institute of National Planning.
- UNDP (1997) *Human Development Report 1997*, New York: Oxford.
- UNDP (2000) *Human Development Report 2000*, New York: Oxford.
- UNDP (2002) *Egypt: Human Development Report 2002*, Cairo: Institute of National Planning.
- UNDP/Arab Fund for Economic and Social Development (2002) *Arab Human Development Report, 2002*, New York: United Nations Development Programme.
- United Nations Food and Agriculture Organization (1999) *Comparative Advantage and Competitiveness of Crops, Crop Rotations and Livestock Products in Egypt*, Cairo: UN-FAO.
- van Welzenis, G. (1999) "The Accuracy of International CPB Forecasts," *CPB Report 2*, The Hague, The Netherlands: Netherlands Centraal Planbureau.
- Vatikiotis, P.J. (1961) *The Egyptian Army in Politics*, Bloomington, Ind.: Indiana University Press.
- Vatikiotis, P.J. (1968) *Egypt since the Revolution*, London: Allen and Unwin.
- Virmani, A. (1991) "Demand and supply factors in India's foreign trade," *Economic and Political Weekly* (Bombay, India) 26(6):309–14.
- Vittas, D. (1998) "The role of non-bank financial intermediaries," Policy Research Working Paper No. 1892, Development Research Group, Washington, DC: World Bank.
- Wahba, M.M. (1994) *The Role of the State in the Egyptian Economy, 1945–81*, Reading: Ithaca Press.
- Wahba, J. and Mokhtar, M. (1999) "Informalization of labour in Egypt," Paper prepared for a Conference Labour Market and Human Resource Development in Egypt, Cairo, October 1999.
- Waite, C.A., Eldridge, D.P., Hill, C.T., Balderston, T., and Green Zeilinger, L. (1998) *The Modernization of Egypt's National Accounts*, Miami, Fl.: IMCC for USAID under contract PCE-0405-Q-00–5016–00.
- Waterbury, J. (1979) *Hydropolitics of the Nile Valley*, Syracuse, NY: Syracuse University Press.
- Waterbury, J. (1983) *The Egypt of Nasser and Sadat*, Princeton, NJ: Princeton University Press.

- Weinbaum, M.G. (1986) *Egypt and the Politics of U.S. Economic Aid*, Boulder, Col.: Westview.
- Weiss, D. (1993) "Institutional obstacles to reform policies: a case study of Egypt," *Economics* 47:176–98.
- Weiss, D. and Wurzel, U. (1998) *The Economics and Politics of Transition to an Open Market Economy: Egypt*, Paris: OECD Development Centre.
- Westley, J. (1999) "Change in the Egyptian Economy, 1977–1997," in M.C. Kennedy (ed.) *Twenty Years of Development in Egypt (1977–1997)*, Cairo Papers in Social Sciences, Cairo: American University in Cairo.
- Williamson, J. (1982) "A survey of the literature on the optimal peg," *Journal of Development Economics* 11(1):39–62.
- Williamson, J. (1994) *Estimating Equilibrium Exchange Rates*, Washington, DC: Institute for International Economics.
- Winters, A. (1991) *International Economics*, 4th edn, London: HarperCollins.
- World Bank (1966) *Arab Republic of Egypt: Economic Situation and Prospects*, Washington, DC: World Bank.
- World Bank (1969) *Arab Republic of Egypt: Economic Report*, Washington, DC: World Bank.
- World Bank (1975) *Yugoslavia: Development with Decentralization*, Baltimore, Md.: Johns Hopkins University Press.
- World Bank (1978) *Arab Republic of Egypt: Economic Management in a Period of Transition*, Washington, DC: World Bank.
- World Bank (1983) *Egypt: Issues of Trade Strategy and Investment Planning*, Washington, DC: World Bank.
- World Bank (1987) *Egypt: Review of the Finances of the Decentralized Public Sector* (2 vols). Washington, DC: World Bank.
- World Bank (1989) *World Development Report 1989: Financial Systems and Development*, New York: Oxford University Press.
- World Bank (1990a) *World Development Report: Poverty*, New York: Oxford University Press.
- World Bank (1990b) *Adjustment Lending: Ten Years of Experience*, Washington, DC: World Bank.
- World Bank (1990c) *Arab Republic of Egypt: Country Economic Memorandum, Economic Readjustment with Growth*, Washington, DC: World Bank.
- World Bank (1991) *Egypt: Alleviating Poverty during Structural Adjustment*, Washington, DC: World Bank.
- World Bank (1992) *Arab Republic of Egypt: Private Sector Regulatory Environment Study*, Washington, DC: World Bank.
- World Bank (1993a) *Egypt: Financial Policies for Adjustment and Growth*, Washington, DC: World Bank.
- World Bank (1993b) *The East Asian Miracle*, Washington, DC: World Bank.
- World Bank (1994) *Private Sector Development in Egypt*, Cairo: World Bank.
- World Bank (1995a) *Arab Republic of Egypt: Economic Policies for Private Sector Development*, Washington, DC: World Bank.
- World Bank (1995b) *Viet Nam: Poverty Assessment and Strategy*, Washington, DC: World Bank.
- World Bank (1996) *Tanzania: The Challenge of Reforms*, Washington, DC: World Bank.
- World Bank (1997) *Arab Republic of Egypt: Egypt – Issues in Sustaining Economic Growth*, Washington, DC: World Bank.

- World Bank (1998a) *Egypt in the Global Economy*, Washington, DC: World Bank.
- World Bank (1998b) *Assessing Aid: What Works, What Doesn't, and Why*, New York: Oxford University Press.
- World Bank (1999) *World Development Report 1999/2000: Entering the 21st Century*, New York: Oxford University Press.
- World Bank (2001) *World Development Report 2000/2001: Attacking Poverty*, New York: Oxford University Press.
- World Bank (2001) *Egypt: Social and Structural Review*, Washington, DC: World Bank.
- World Bank (2002) *Cost Assessment of Environmental Degradation in Egypt*, Washington, DC: World Bank.
- Yarrow, G. (1986) "Privatization in theory and practice," *Economic Policy* 1(2):323–64.
- Yeats, A. (1995) "Export prospects of Middle Eastern countries: a post-Uruguay round analysis," Policy Research Working Paper No. 1571. Washington, DC: World Bank.
- Young, A. (1992) "A tale of two cities: factor accumulation and technical change in Hong-Kong and Singapore," *Macroeconomics Annual*, Cambridge, Mass.: National Bureau of Economic Research/MIT Press, pp. 13–24.
- Young, A. (1995) "The tyranny of numbers: confronting the statistical realities of the East Asian growth experience," *Quarterly Journal of Economics* 110(Aug.):641–80.
- Zaki, M.Y. (1995) "Forecasting the money multiplier and the control of money supply in Egypt," *Journal of Development Studies* 32(1):97–111.
- Zaki, M.Y. (2001) "IMF-supported stabilization programs and their critics: evidence from the recent experience of Egypt," *World Development* 29(11):1867–83.
- Zanello, A. and Desruelle, D. (1997) "A primer on the IMF's information notice system," IMF Working Paper No. WP/97/71, Washington, DC: IMF.
- Zaytoun, M. (1991) "Earnings and the Cost of Living: An Analysis of Recent Developments in the Egyptian Economy," in H. Handoussa and G. Potter (eds) *Employment and Structural Adjustment*, Cairo: American University in Cairo Press.

Name index

- Abdallah, Ismail Sabri 19
Abdel-Faddil, M. 3
Abdel-Khalek, G. 65, 71, 135, 247
Abu Ali, Sultan 127, 185
Acharya, S. 111
Adams, R.H. 67, 108, 270
Ahmed, A. 247, 262, 264, 268–9
Ahmed, S. 163, 167, 168
Alba, P. 178, 279
Ali, Muhammad 1
Ali, S. 67
Al-Shawarby, S. 143, 323
Amin, G. 5, 6, 323
Anand, S. 275
Anis, M.A. 86, 108
Aristotle 315
Artus, P. 316
Asher, R.E. 4
Assaad, R. 110, 115, 210, 213–15, 219,
221–3, 227, 231–5, 238, 241, 243, 244,
293
Atkeson, A. 99
Ayubi, N. 293, 295
- Backhouse, R. 278
Baker, R.W. 1, 9
Ball, L. 100
Bartsch, U. 251
Bentley, J. 298, 300
Bernanke, B.S. 195, 196
Beveridge, Lord 277
Bhagwati, J. 36
Bisat, A. 100, 105
Blinder, A.S. 316
Bouis, H. 262
Boutros-Ghali, Youssef 61
Brada, J.C. 312
- Calvo, G.A. 73
Cardiff, P. 247, 250, 251, 253, 260, 274
Challiah, R. 163
- Church, K.B. 316
Cooper, M. 22, 31, 52
Cooper, R.N. 54
Corbo, V. 38
Cornia, G. 38
Cottenet, H. 25
Crémer, H. 312
Crémer, J. 312
- Dakolias, M. 299
Danilin, V.I. 107
Datt, G. 247, 253, 258–60, 263, 266, 267
de la Piedra, E.G. 193
De Soto, H. 288–9
Denison, E. 102
Dessouki, A.H. 2, 51
Dialami, M. 170
Dinh, H.T. 168, 170
Djankov, S. 294
Domar, E. 65
Dorfman, R. 45
Dubey, V. 31
- Easterly, W. 69
Ebeid, Atef 61, 79, 297
Edwards, S. 73
Eilts, H. 39
El-Bishry, Zafer 38
El-Dersh, Ahmed 39
El-Edel, M. Reda A. 167
El-Erian, M. 184
El-Gamal 100, 105
El-Ganzoury, Kemal 61, 78
El-Ghonemy, M.R. 292
El-Imam, M. 36
El-Kaissouni, A.M. 19, 31, 34
El-Leithy, H. 213, 247, 248, 250–3, 255,
259, 261, 265–6, 269, 274, 278
Elmendorf, D.W. 178
El-Oraby, N. 295
El-Razaz, Mohammed Ahmed 61

- El-Sayeh, Hamed 31, 51
 El-Shazly, A. 183, 187
 Este, D. 110
 Estrin, S. 312
- Fawzy, S. 290
 Fergany, N. 110, 114, 210, 213, 217,
 219, 222–3, 227–8, 231–2, 235, 243,
 251
 Fields, G.S. 275, 276
 Fischer, S. 38
 Friedman, M. 98
 Fry, M. 69
 Fu, T. 107
- Galal, A. 246, 290, 291, 296
 Ghoneim, A. 292
 Gibson, H. 137, 140, 317
 Giugale, M. 168, 170, 300
 Godley, W. 316
 Griliches, Z. 102
- Haberler, G. 137
 Haddad, L. 247, 264, 268–9
 Hahn, F. 103
 Hall, R.E. 106, 107
 Hamed, Saleh 32, 61
 Handoussa, H. 24, 36, 44, 215, 236, 243,
 295
 Handy, H. 194
 Hansen, B. 5, 6, 8, 10, 12, 53, 86, 87, 109,
 125, 132, 142, 167
 Haq, Mahbub ul 36, 315
 Haque, Nadeem ul 179, 184
 Harberger, A. 115, 137
 Harrigan, J. 38
 Harrod, R. 103
 Hassan, M. 197
 Hegazy, Abdel Aziz 19, 20, 21–2
 Heikal, M. 1
 Helmy, T. 288
 Hicks, J.R. 103
 Hobbes, T. 300
 Hoekman, B. 287
 Hoggarth, G. 189
 Holmes, P. 312
 Holt, R. 53
 Hopkin, W. 316
 Huband, M. 200
- Ibrahim, S.E. 247
 Ikram, K. 24, 86, 109, 121, 125, 144, 147,
 159, 198, 247
 Ismail, Abou 28, 30
 Issawi, C.A. 7
- Jolly, R. 38
 Jones, C.I. 106, 107
 Jorgenson, D.W. 102
 Joshi, V. 137–8
- Karsenhas, M. 217, 243
 Kaufman, D. 298
 Keynes, J.M. 168
 Kheir El-Din, Hanaa 105, 143, 285
 Klein, L.R. 137
 Korayem, K. 135, 247
 Kouamé, A.T. 285
 Krugman, P. 104
- Langouw, P. 274
 Laurens, B. 193
 Leddin, A.J. 174
 Lee, E. 247, 257
 Little, I.M.D. 137–8
 Loayza, N. 195, 196
 Lotfi, Ali 51
- Mabro, R. 9, 10, 109, 125
 McCombie, J.S.L. 115
 McNamara, Robert 31, 51–2
 Madani, D. 142
 Maddison, A. 106
 Mankiw, N.G. 100, 179
 Marzouk, G. 6, 8, 125
 Masera, R. 140
 Mason, E.S. 4, 52
 Masson, P.R. 196
 Matthews, R.C.O. 103
 Mauro, P. 297
 Mead, D. 2, 86, 87, 109
 Meade, J. 312
 Megginson, W.L. 81
 Meguid, Abdel Razzaq Abdel 53
 Mishkin, F.S. 195, 196
 Modigliani, F. 137
 Mohammed, N. 101, 105, 278, 279
 Mohieldin, M. 184
 Mongardini, J. 134
 Montiel, P. 179
 Morsi, Fuad 19
 Mosley, P. 38
 Moursi, T. 105
 Mubarak, Hamed 300
 Mubarak, President Hosni 37–8, 61
- Nashashibi, K. 12, 125, 142
 Nassar, H. 278
 Nasser, President Gamal Abdel 19, 47, 53
 Nathan Associates 125, 138–9, 143, 289
 Neisser, H. 137
 Netter, J.M. 81

- Nishimizu, M. 107
 North, D.C. 287–8
 Nutting, A. 10

 O'Brien, P. 5, 6, 7
 Ohanian, L.E. 99
 Olarreaga, M. 142
 Orcutt, G. 136–7
 Osman, M. 247, 251
 Ott, A. 77
 Oweiss, I.M. 110
 Owen, E.R.J. 18, 26

 Page, J. 107, 270
 Palmer, M. 292, 295
 Pamuk, S. 18, 26
 Pearson, D.W. 138
 Pesaran, H. 99
 Phelps, E.S. 98
 Phillips, A.W. 97
 Pisani-Ferry, J. 99, 277
 Prais, S.J. 137

 Radwan, S. 125, 210, 214, 217, 237, 243,
 245–6, 247, 257
 Ravallion, M. 274
 Reinhart, C.M. 73
 Riad, N. 335
 Richards, A. 51, 52, 59, 281
 Richards, I.A. 18
 Rizk, S.K. 110
 Robinson, J. 102
 Rodrik, D. 296
 Roe, A.R. 184, 187
 Roe, T. 53
 Roussillon, A. 1
 Rutherford, M. 288

 Sachs, J. 284
 Sadat, President Anwar 9, 13, 17, 20, 21,
 22–3, 30, 32, 34, 51
 Sadowski, Y.M. 37
 Samuelson, P.A. 45, 97
 Sarraf, M. 308
 Savastano, M.A. 195
 Schmidt, P. 107

 Schmidt-Hebbel, K. 69, 196
 Schneider, F. 110
 Sciolli, G. 158
 Sen, A.K. 253, 273, 315
 Shafei, Zaki 28
 Sidqi, Aziz 19
 Smith, R. 99
 Solow, R. 45, 97, 102, 316
 Soto, R. 195, 196
 Stewart, F. 38
 Streeten, P. 315
 Subramanian, A. 68, 134
 Surrey, M.C. 316
 Svensson, L.E.O. 196
 Swinscoe, A. 127

 Tait, A.163
 Taylor, L. 30
 Thirlwall, A.P. 115, 137, 140, 316, 317, 324
 Tignor, R. 247
 Tinbergen, J. 76
 Tohamy, S. 127
 Tsegaye, A. 316

 Vatikiotis, P.J. 1
 Virmani, A. 138
 Vittas, D. 203, 206

 Wahba, M. 6, 12
 Waite, C.A. 109, 110
 Walsh, B.M. 174
 Warner, A. 284
 Waterbury 4, 9, 10, 296, 308
 Webb, S. 38
 Weinbaum, M. G. 22, 35, 37, 39, 42, 294,
 295
 Weiss, D. 52, 54
 Westley, J. 11
 Williamson, J. 72, 140
 Winters, A. 137
 218, 247, 278, 290, 299
 Wurzel, U. 52

 Zaki, Hassan Abbas 19
 Zaki, M.Y. 67, 170, 190
 Zaytoun, M. 245

Subject index

- absolute poverty lines 274–5
- absorptive capacity, loans 39
- adaptive expectations 99
- administration: costs 157, 172; procedures 294
- adult equivalence scales 274
- age-specific: labor participation 218, 222; unemployment 228–30
- agriculture sector: employment 96, 217, 235–6, 241; exports 124; growth 88–9; imports 151; income 171; inefficiencies 12; investment 16–17; land 85, 89, 262–3, 267; loans to 185; market prices 86; protection 142–3; reform 3, 9; state influence 8
- air pollution 308
- Alexandria Businessmen’s Association 289
- Alexandria stock exchange 197, 200
- American Chamber of Commerce, Egypt 187
- annual investment programs 8
- Arab countries, investment 20–1
- Arab Human Development Report* (2002) 298
- ‘Arab Socialism’ 7, 8, 92, 157
- Arab–Israeli dispute 4
- artificial trading 199, 200–2
- Aswan High Dam 3–4, 27
- authorized capital, banks 186

- balance of payments: developments 117–20; issues 125–54; pressures 16
- balance of trade 120–3; deficits 316–17
- bank credit facilities 16–17
- Bank for International Settlements 82
- Bank Misr 6
- banking sector 180–3; reform 5, 6–7, 18, 62; safety and prudential regulations 188–90; segmentation 185
- Basle Committee 189
- best-practice 107–8
- bilateral aid 37, 39

- bond market 202–3
- bread riots (1977) 27, 31–2, 33, 60
- budget (1977) 31–3
- budget deficits 12–13, 15, 28, 152, 158–9, 161–2, 168–9; consolidation 58–9; effects 178–9; sustainability 65
- budgetary resources, vulnerability of 177–8
- budgets, structural rigidities 47
- Build-Own-Operate-Transfer (BOOT) projects 67
- bureaucracy *see* civil service
- business: environment 287–303; services sector 237
- Business International 297

- Cairo: stock exchange 197, 200, 289; unemployment 227
- capability deprivation 253–5, 273
- Capability Poverty Measure 254, 273
- capital: formation 5; inputs 71, 101–3, 105–6; market 197–203, 208; return on 75, 77; stock 115–16, 314; transfers 21, 58–9
- Capital Market Authority (CMA) 180, 199–200, 202
- capital-intensive: industries 128; production 215, 217
- cash transfers 307
- Central Bank of Egypt 49, 59, 65, 70–1, 112, 167, 180, 181, 182, 187, 188, 190–1; foreign exchange dealings 46–7, 131–2; role 193–7
- central government 156
- chronic poverty 268–9
- civil service 292; corruption 297–8; efficiency 296–7; elite units 297; employment 215–16; productivity 295; remuneration/incentives 294–5; size 293–4; structure 294
- class structure 52

- clothing sector 128–9
 Cobb–Douglas production function 104, 105, 279, 314
 commercial: disputes 298–300; sector 237
 commercial banks 49, 82, 159, 181–3, 186, 187, 191; foreign exchange dealings 46–7, 131–2; risk monitoring 189
 Commodity Import Program 39
 community facilities, access to 263, 267
 competition, protection from 200–1
 competitiveness, exports 48, 128–30, 285
 concessional loans 39–40, 43–4
 construction sector 216, 217, 237
 Consumer Price Index 14, 59, 168–9
 consumption: data 109; determinants of 92–4; expansion 22–3; patterns 257–8, 261–2, 268–9
 contingent liabilities 177–8
 contractual savings institutions 203–4
 corporate bonds 202
 Corruption Perceptions Index 297
 cost controls 8–9
 Cotton Authority 6–7
 cotton sector 17, 118, 123–4
 credit: access 208, 289; growth 191–2; large firms 197; rationing 184
 current account balances 117–18, 174
 customs duties 163–4, 165–6; rebate/drawback scheme 286

 data 108–15
 ‘dead’ capital 287–8
 debt: costs 174–6; crisis (1987) 57–8, 151–2; equity ratios 58; forgiveness 61, 68, 148, 150, 153–4; GDP ratio 134, 174–7; management 144–54, 193–4; relief 68–9; rescheduling 57–8, 59–63, 67–8, 119, 134, 145–50, 152–3; servicing 57–8, 119, 158, 172–3, 174
 Debt Conversion Plan (1943) 144
 decomposable poverty measure 275–6
 defence expenditures 12, 157, 158
 demand 63, 90, 100, 135–41, 281
 demographic: characteristics 85, 86, 277, 312–13; pressure, employment 233–4
 dependency 257–8, 264, 266
 deposit insurance scheme 187
 development: aims 315; effect of fiscal deficits 66; strategy 281, 283–4; Upper Egypt 306–7
 direct foreign investment 41
 discouraged unemployment 231–3
 disposable income 93
 distributive services 139
 dollarization 60, 70–1, 73, 170, 184–5
 domestic: absorption, exports 140; finance 161; savings 90, 92, 93, 101, 218, 283, 313
 domestic resource costs (DRC) 77
 ‘Dutch disease’ phenomenon 25

 East Asian economies 104
 East Asian financial crisis (1997) 75, 91, 140, 217
 economic: authorities 62, 64, 77, 79–80; data 108–15; decision making 52; effects of foreign aid 42–3; framework 7; goals 40; inefficiency 12–13; reforms 61–3, 153
 economic growth: demand components 90; effects of poverty changes 269–70; and employment 94–7, 214–18; and investment 100–1; sectoral composition 271; slowdown 13–17; stabilization program 63–76; and total factory productivity 101–8
 economic management/planning 5–6, 27–8, 310–12; framework 49–54; tools 48–9
 Economic Organization 5
 Economic Reform and Structural Adjustment Program (ERSAP) 63–5, 182, 184, 188, 193–4
 economic structure: requirements of 49–54; rigidities in 24–5
 education: access 254; effect on outputs 106–7; expansion of 10–11; for growth 302–3; and poverty 266, 267–8, 269; strategy 304–6; system 296; and unemployment 230–1
 educational characteristics 258–60
 educators, growth of 293
 effective exchange rate (EER) 72, 74
 efficiency of bureaucracy 296–7
 Egyptian Central Petroleum Company (EGPC) 156, 159, 163, 164, 167
Egyptian Mail 296
 Egyptian National Railways 112
 Egyptianization policy 3, 5, 6–7
 elitism 52
 employment: characteristics 260; cuts 81; data 113–14, 210; and economic growth 94–7, 214–18; effects on poverty 267–8; elasticity 278; goals 279; growth 234–46; policies 215–16; public sector 81, 171, 293–4; status 266–7
 employment guarantee program (EGP) 14, 18, 214, 215, 216, 234, 243–5, 293, 294
 endogenous growth models 104
 engineering sector 291
 enterprise finance 208–9

- entrepreneurs 75
 environmental issues 281–2, 307–8
 equilibrium real exchange rate (ERER) 133–4
 equity: distribution of wealth 10; market 200; regional patterns of 272
 Europe, pension funds 203
 European Union: associate membership 284; trade with 129, 177
 exogenous shocks, responses to 66
 expectations-augmented Phillips Curve 98–9
 expenditure: cuts 67; issues 161–3, 171–4; patterns 261–2
 expenditure-based poverty measurements 248–53
 explicit subsidies 58
 export-led development 283–4
 export-promoting schemes 286
 exports 119, 120–3; barriers 286–7; competitiveness 128–30; demand 138–9; development 284–6; growth 125–6, 313–14; incentives 55, 129–30, 135, 285–6; merchandise 123–5; non-traditional 45–6; services 118
 external: aid 26, 118, 145, 152; debt, management of 144–54; debt-based growth 54–6; finance 161; revenues 215

 Federation of Egyptian Industries 2
 female: education 205; employment 114–15, 216, 218, 219, 221, 222, 223, 235, 238, 239, 241, 244, 245, 260; illiteracy 254; underemployment 231–3; unemployment 224, 226, 227, 228, 234, 266–7
 finance, access to 302
 financial sector: employment 237; non-bank 203–4; policy 183–6; reform of 62
 fiscal: accounts data 112; developments 157–63; imbalance, correction of 64; policy 48, 193–4; sustainability 174–9; system, changes to 67; trends 47–8
 Five Year Plans 5, 6, 8, 22, 50, 144, 311
 food: imports 151; poverty lines 274; sectors 128; security 281
 foreign: aid, economic effects 42–3; currency accounts 46, 59, 184–5; debt 11–12; savings 283, 284, 313
 foreign exchange: accounts 125–6, 170–1; availability 24–5; denominated deposits 181; dual rate system 64; earnings 126–7, 313, 317; pegging 71–4, 76; rates 29, 45–7, 49, 55–6, 62–3, 130–41, 195; reserves 11, 71, 73–4; security 281
 formalization of businesses 290

 Foster–Greer–Thorbecke index 275
 France, employment 277–8
 free trade 1–2; agreements 177
Full Employment in a Free Society 277

 gender bias, employment 239, 245, 246
 General Authority for Social Insurance (GASI) 204–5
 General Authority for Supply Commodities (GASX) 14, 79, 156
 General Sales Tax 143, 179, 286
 geographic characteristics 85, 86
 Global Income Tax 179
 government: borrowing 15–17, 27–34; control 6–13; intervention 3–6; securities 191
 Government Organization for Export and Import Control 143
 gradualism 50–1
 graduate: employment 230–1, 243–5; labor costs 216; poverty 258; quality 296–7; skills 303; unemployment 234, 245–6
 graft 298
 ‘gray economy’ *see* informal economy
 gross domestic product (GDP): long-term trends 85–8; potential 278–82; structural changes 88–9
 growth accounting approach 104–5
 Gulf Organization for the Development of Egypt (GODE) 16, 26, 119, 145
 Gulf war 60, 61, 68, 139, 150, 152

 Harrod-neutral technical progress 103–4
 Hawkins–Simon conditions 45
 health: expenditures 11; issues 308; services 254
 Hicks-neutral technical progress 103–4
 higher education 303
 high-exporting countries 139–40
 Hodrick–Prescott filter 279
 horizontal equity, taxation 166, 168
 household: composition 257–8, 266; consumption 261–2, 268–9; poverty lines 273–4; savings 180–2; size 265–6, 272–3
 Household Budget Survey (1982) 257
 household budget surveys 274
 Household Income and Expenditure Surveys (HIES) 248, 257, 261, 270–1
 housing sector 86
 Human Development Index (HDI) 254–5
 Human Poverty Index (HPI) 254–5, 274

 illiberal finance 183–4
 illiteracy 254, 258–9, 272, 304–5

- IMF *see* International Monetary Fund (IMF)
- implicit subsidies 58
- imports 120–3; demand 22, 138; duties 177; policies 11–12, 45–6, 119; prices 16
- import-substituting growth 1, 45, 150–1
- impossible trinity principle 76
- incentives: civil servants 294–5; distortions 44–5; exports 55, 129–30, 135, 285–6; stock exchange listing 199; tariffs 141
- income: characteristics 260–1; as determinate of consumption 93; distribution 111
- income-based poverty measurements 248–53
- incremental capital:output ratios (ICOR) 41, 48
- India, informal economy 111
- indicative planning 312
- indirect taxes 163
- individual-based poverty lines 273–4
- industrialization policies 12
- infatih* 17–23 24, 25, 26, 49–50, 107, 144, 188, 198, 298
- inflation 14, 15–17, 161, 162–3; data 112–13; targeting 195–7; tax 65, 69, 168–81; and unemployment 97–100
- informal assets/credit market 289
- informal sector: data 110–11; employment 217, 239–41; enterprises 289–90; investment 86
- infrastructure: constraints 313; Upper Egypt 306
- Institutional: constraints 285–6, 313; structure 287–303
- Insurance Federation of Egypt 207
- insurance sector 203, 206–8
- interest rates 58–9, 180–1, 184, 187, 205, 206; data on 113; liberalization of 65
- intermediate inputs, cost of 141
- internal equilibrium, exchange rates 134
- International Accounting Standards (IAS) 182
- international financial institutions (IFIs) 26–7, 37; negotiations with 51–2, 59–63
- international markets, access to 281
- International Monetary Fund (IMF) 33, 38, 52; agreement with 263–5; analytical support 26–8; economic reform package 29, 68, 153 negotiations with 61–3
- interventionism 3–6
- inventory accumulation 91
- investment: allocations 44–6; Arab countries 20–1; banks 181–3, 186; and economic growth 100–1; expenditures 158, 172; financing 144; and growth 90–2; insurance companies 207–8; private sector 82, 84; programs 8; rates 282; requirements 40–1; role of NIB 206
- investment:GDP ratio 279–80, 282–3
- invisible earnings 118, 126–7
- involuntary part-time work (IPT) 232
- Japan, loans 38
- job: creation 95–6, 277–8, 280–1; security 233
- job-specific skills 303
- joint-venture banks 62, 181, 182, 185, 186
- judicial system 298–301
- Keynesian open-economy model 316
- Korea, economic growth 52–3
- labor: data 113–14; demand 246, 278; inputs 101–3, 105–6; laws 10, 241; market 210–13, 302–3
- labor force: growth 218–23; numbers 13–14; reductions 301
- Labor Force Sample Survey (LFSS) 114, 210
- labor-intensive production 128, 236, 241, 246
- Lake Nasser 34
- land: reclamation 3, 85, 89; registry 288
- land reform law (1952) 9
- Law 203 (1991) 80–1, 84
- Law 43 (1974) 21
- legal status of businesses 290–1
- lending, banks 181, 182, 184–5
- Leontief input-output system 45
- leverage 208, 209
- LIBOR (London Inter-Bank Offered Rate) 65, 180
- life insurance 207
- loans: conditions 27–34, 37–40; portfolio, banks 187–8; volume 194
- loan-to-deposit ratio 191–2
- local content requirements, exports 286
- local government 156; productive enterprises 79–80
- long-run price elasticities 136
- long-term finance, availability of 302
- Lower Delta, unemployment 227
- Lower Egypt: poverty 264, 268, 271–2; unemployment 228, 234
- male: employment 218, 221, 223, 235, 239, 241, 245, 260; under-employment 231–3; unemployment 224, 226, 227, 231, 234, 266–7

- manufacturing sector: 'allocation of talents' mechanism 25; capacity underutilization 17; employment 215, 217, 236–7; exports 284; growth 88; inefficiencies 12; nationalization 10; productivity of capital 48; protection 45–6, 142–3, 300–1
 market prices 86–7
 market-based economy, creation of 64
 market-enforced monetary reform 170
 Marshall–Lerner condition for devaluations 135–6, 140
 maturity transformation 185–6
 medium and larger enterprises (MLEs) 289, 290–1
 merchandise exports 120, 123–5, 128–9
 Middle East: political situation 90–1; trade with 129
 migration 239; *see also* rural-to-urban migration
 military aid 118
 minimum wages 15
 Möller report (1977) 34, 297
 monetary: policy 48–9, 69–72, 190–3; system, changes to 67; targeting 195–6
 'moonlighting', civil servants 295
 MOP/World Bank 278, 294, 304–6, 307
 multiplier effects, monetary policy 192–4

 National Bank 6
National Charter 7–8, 157
 National Congress of the Popular Powers (1962) 7
 national income 108–9
 National Investment Bank (NIB) 113, 156–7, 185, 203, 204, 205–6
 National Organization for Insurance and Pensions (NOIP) 204, 205
 National Planning Committee 5
 nationalization 3, 4, 5–13, 198, 206–7
 new institutional economics 287–8
 New Zealand, inflation targeting 196
 Nicomachean Ethics 315
 Nile Delta/Valley 34, 85
 Nile water 308–10
 nominal effective exchange rate (NEER) 130, 131–3
 nominal interest rates 75, 184, 197
 non-accelerating inflation rate of unemployment (NAIRU) 98–9, 100
 non-agricultural sector, employment 237–8, 281
 non-bank financial intermediaries 203–4
 non-concessional loans 40–4
 non-oil exports 118, 135, 140
 non-pecuniary benefits 245

 non-tariff barriers 143–4
 North Africa, trade with 129

 oil sector: exports 25–6, 54–5, 118, 124; growth 88–9; prices 127, 151–2; revenues 162, 164
 'open door' policy *see* *Infitah*
 openness of economies 284–5
 Organization of Petroleum Exporting Countries (OPEC) 127
 outsourcing 307
 'own' exchange market 46

 Pakistan, informal economy 111
Papyrus Lansing 292
 Paris Club 57, 61, 67–8, 134, 148, 150, 152–4, 159
 partial equilibrium, exchange rates 140
 participation: economic planning 312; labor market 218–23
 Permanent Council for the Development of National Production 3
 perpetual inventory technique 115–16
 personal taxation 164–5, 166, 167, 168
 Petroleum Company 79
 Phillips Curve 97–100
 policy: adjustments 59–60; instruments 76; interventions, poverty 265; issues, external aid 34–9; packages 313; public sector 173–6; *see also* *Infitah*
 policymaking framework 49–54
 pollution 307–8
 Population Census (PC) 114, 210
 population trends 218–23, 312–13
 port: charges 287; cities 306
 poverty: alleviation strategies 304–7; changes 269–70; determinants and sources 265–8; measurement of 273–6; perceptions of 263–4; profiles 257–73; social safety nets 307; trends 248–56, 270–3
 price: controls 8–9; distortions 44–5; elasticities 123, 136–8; structure 49
 price-led demand 140
 price-sensitive exports 287
 primary: balances/deficits 174–5; education 259–60, 266
 Principal Bank for Development and Agricultural Credit (PBDAC) 112, 185
 private: consumption 92–4, 109; investment 100–1; investors 198–9; pension funds 203
 private–public wage gap 245
 private sector: data 109; employment 238–42; investment 67, 74–5, 78–9, 282; labor costs 216; liquidity 59;

- predominance of 2–3; segmentation of 289
- privatisation 62, 76–84, 181–2
- production costs 286–7
- productive assets, ownership of 262–3, 267
- productivity 101–8, 295, 314
- program assistance 35–6
- project: assistance 35–6; selection 45
- Project in Development and the Environment (PRIDE) 308
- property rights 287–9
- prudential regulations, banking systems 188–90
- public: debt, components of 178; enterprises 48, 79–80; investment 67, 74–5, 92, 101, 157, 282; saving 93–4
- Public Enterprise Office 80
- public sector 155–7; banks 182, 185, 186–8, 190; economic activities 79–80; employment 96, 171, 237–8, 241, 243–5, 293–4, 297; privileged position of 64; role under *Infitah* 17–18; taxes from 164, 167
- publicly issues companies 198–203
- quality control system 143–4
- rational expectations 99–100
- real effective exchange rate (REER) 74, 130–1, 132–41
- real interest rates 75, 93, 170, 184, 187
- real wages 15–16
- redistribution effects of poverty changes 269–70
- redundancies, public sector 81
- regional: data 110; government 156; growth 306; poverty/equity 255–6, 271–2; unemployment 227–8
- regulatory: frameworks 291–2; system 298–301
- relative poverty lines 275
- remittances 17–18, 46, 118, 126–7, 152, 260–1
- remuneration, civil servants 294–5
- rent-seeking 25
- reserves, banks 189, 194–5
- Resident Mission Real Activity Index 111–12
- resources, access to 51
- revealed comparative advantage (RCA) index 128
- revenue issues 66–7, 163–71
- Revolutionary Command Council 1
- Ricardian equivalence 93–4, 178–9
- root mean squared error (RMSE) 99, 310
- rural: employment 221–2, 223, 235; poverty 248–53, 254, 257, 258–9, 260–1, 262–4, 266–8, 269, 270–3; underemployment 231–3; unemployment 224, 226, 227, 231, 233–4, 246
- rural-to-urban migration 214, 235
- safety, banking systems 188–90
- sales tax 67
- savings 282–3, 313
- secondary education 267–8
- sectoral: composition of growth 271; employment growth 235–42
- securities market 197–8
- security issues 139
- seigniorage 69
- self-employment 260
- self-liquidating loans 186
- Semi-Participatory Poverty Assessment, UNDP 263
- sequestration 7, 10
- service authorities 79–80
- services sector: data 109; employment 96, 216, 237; exports 118, 139; growth 88–9
- short-run price elasticities 136
- Singapore, economy 108
- single earner families 260
- skilled labor market 302–3
- small and medium-sized enterprises (SMEs) 208–9, 289, 290–1
- social: compacts 53; goals 40; indicators 24; infrastructure 107; safety nets 307
- Social Fund for Development (SFD) 64, 81, 113, 156–7
- social insurance: funds 113, 204–5; system 203
- social security funds 156–7
- soil degradation 308
- Solow residual 104
- Soviet Union, relations with 20
- Special Drawing Rights (SDR) 71, 73
- specialized banks 181–3, 187
- staffing, banks 186
- stagflation 97
- Stanford Research Institute 286
- Stock Brokers Association 113
- structural reforms 61–3, 76–84
- subcontracting 290
- subjective poverty lines 275
- subsidies 14–15, 28, 29–30, 32, 34, 58, 67, 157–8, 159, 162, 167, 171–2, 261–2, 307
- subsistence activities 222
- Sudd swamp 310
- Suez Canal: nationalization of 4–5; war 3

- Suez Canal Authority (SCA) 79, 156, 159, 163, 164, 166–7; tolls 63, 127
 supplementary import levy 143
 supplier credit 151
 supply elasticities 124, 136
- tariff regime 141–4
 taxation 15, 163–5, 179, 286, 291–2;
 banking system 186–7; incentives 199,
 200–2; sales tax 6; structure 166–8;
 system 301–2
 technical: products 37; progress 102–4,
 107–8; training 302–3
 technology acquisition 20, 44
 textiles sector 128–9, 291
 Theil's 'U-statistic' 310
 tied aid, costs of 36–7
 Toshka project 34
 total factor productivity (TFP) 77, 101–8
 Tourism Development Authority 112
 tourism sector: decline 75–6; employment
 23, 217; growth 88–9; receipts 127, 139,
 152
 trade: elasticities 135–41; growth 88–9;
 liberalization 22–3; system 46–7
 TradeCAN (Trade Competitiveness
 Analysis of Nations) 129
 trade-related lines of credit 144–5
 trade-weighted tariffs 141–2
 trading partners 129
 transaction costs 286–7
 transitory poverty 268–9
 transport costs 306
 transport-related services 139
 Treasury Bills 192, 202
- UK: aid 4; employment 277; pensions
 funds 203
 ultra poverty lines 274
 underemployment 213, 217, 231–3; and
 demographic pressure 233–4
 UNDP 247, 250, 251, 253, 261, 263
 unemployment 94–5, 213, 214–15,
 216–17; characteristics 96–7, 245–6;
 discouraged 231–3; graduates 244; and
 inflation 97–100; structure 227–34;
 trends 223–6
 Upper Egypt: development 304, 305,
 306–7; poverty 255–6, 258, 259, 264,
 265, 268, 269, 270, 271–2;
 unemployment 227–8, 234
 upper poverty lines 274
 urban: employment 221–2, 223, 235;
 poverty 248–53, 257, 258–9, 260–1,
 263–4, 266–8, 269, 270–1, 272–3;
 underemployment 231–3;
 unemployment 224, 225–6, 227, 231,
 233–4
 US: aid 4, 35, 36–7, 118, 153; employment
 277; pressure on IFIs 51–2; trade 119
 USAID 26, 39, 42–3
- value-added 44–5
 vertical equity, taxation 166, 168
 vested interests, policy makers 53–4
 visible trade 120–3
 vocational training 302–3
- wage 15–16; rigidities 215; setting
 mechanisms 244–5
 water demand 182, 308–10
 welfare: indicators 273; measure 315
 welfare-oriented policies 9–10
 well-being, material criterion of 263
 West, trade with 20
 Western powers, relationships with 51–2
 Western sources of finance 3–4, 11, 13
 wholesale price index 59
 World Bank 3–4, 15, 17, 29–31, 33–4, 38,
 42, 44, 45, 48, 51, 58, 92, 125, 143–4,
 177, 179, 184–9, 204–5, 208, 218, 247,
 278, 290, 299; agreement with 263–5;
 analytical support 26–7; negotiations
 with 61–3