

ROUTLEDGE STUDIES IN THE MODERN WORLD
ECONOMY

Crises of Global Economies and the Future of Capitalism

Reviving Marxian crisis theory

Edited by
Kiichiro Yagi, Nobuharu Yokokawa,
Shinjiro Hagiwara and
Gary A. Dymksi



Crises of Global Economies and the Future of Capitalism

Recent events in the global financial markets and macroeconomies have served as a strong reminder for the need for a coherent theory of capitalist crisis and analysis. This book helps to fill the gap with well grounded alternative articulations of the forces which move today's economic dynamics, how they interact and how ideas of foundational figures in economic theory can be used to make sense of the current predicament. The book presents a comprehensive collection of reflections on the origins, dynamics, and implications of the interlinked crises of the U.S. and global economies.

The book is a thoughtful collaboration between Japanese heterodox economists of the Japan Society of Political Economy (JSPE) and non-Japanese scholars. It provides a unique immersion in different, sophisticated approaches to political economy and to the crisis. The book illustrates how an understanding of Marx's crisis theory can serve as a powerful framework for analyzing the contemporary subprime world crisis. The book explains the subprime loan crisis as a crisis in a specific phase of the capitalist world system and concludes that it is a structural one which destroys the existing capital accumulation regime. It pays attention to structural changes and to how these changes beget profound and controversial consequences.

The result is a must-read – one which truly contributes to the resurgence of radical analyses of the political economy, free from the market optimism of main-stream economics.

Kiichiro Yagi is Vice President and Professor in Economics at Setsunan University, Japan. He was educated in the University of Tokyo and Nagoya University. He received his PhD from Kyoto University. He is Chief Representative of the JSPE.

Nobuharu Yokokawa is Professor of Economics at Musashi University, Tokyo, Japan. He was educated at Shiga University (BA), the University of Tokyo (MSc) and Cambridge University (PhD). He is chairman of the JSPE Committee for International Communication and Exchange.

Shinjiro Hagiwara is Professor of Economics at Yokohama National University, Japan. He was educated at Fukushima University and at the University of Tokyo. His publications include *US Multinationals in the World Economy* (Ohtsuki, 2005, in Japanese) and *The Rise and Demise of the Keynesian Coalition* (Yuhikaku, 1996, in Japanese).

Gary A. Dymski is Chair in Applied Economics at the Leeds University Business School, University of Leeds, and is on leave as Professor of Economics at the University of California, Riverside. He received his BA in urban studies from the University of Pennsylvania, graduating Phi Beta Kappa in 1975. He received a doctorate in economics from the University of Massachusetts, Amherst in 1987. He is an academic adviser of the JSPE.

Routledge studies in the modern world economy

1 Interest Rates and Budget Deficits

A study of the advanced economies

Kanhaya L. Gupta and Bakhtiar Moazzami

2 World Trade after the Uruguay Round

Prospects and policy options for the twenty-first century

Edited by Harald Sander and Andrés Inotai

3 The Flow Analysis of Labour Markets

Edited by Ronald Schettkat

4 Inflation and Unemployment

Contributions to a new macroeconomic approach

Edited by Alvaro Cencini and Mauro Baranzini

5 Macroeconomic Dimensions of Public Finance

Essays in honour of Vito Tanzi

Edited by Mario I. Blejer and Teresa M. Ter-Minassian

6 Fiscal Policy and Economic Reforms

Essays in honour of Vito Tanzi

Edited by Mario I. Blejer and Teresa M. Ter-Minassian

7 Competition Policy in the Global Economy

Modalities for co-operation

Edited by Leonard Waverman, William S. Comanor and Akira Goto

8 Working in the Macro Economy

A study of the US labor market

Martin F. J. Prachowny

9 How Does Privatization Work?

Edited by Anthony Bennett

10 The Economics and Politics of International Trade

Freedom and trade: volume II

Edited by Gary Cook

11 The Legal and Moral Aspects of International Trade

Freedom and trade: volume III

Edited by Asif Qureshi, Hillel Steiner and Geraint Parry

12 Capital Markets and Corporate Governance in Japan, Germany and the United States

Organizational response to market inefficiencies

Helmut M. Dietl

- 13 Competition and Trade Policies**
Coherence or conflict
Edited by Einar Hope
- 14 Rice**
The primary commodity
A. J. H. Latham
- 15 Trade, Theory and Econometrics**
Essays in honour of
John S. Chipman
*Edited by James C. Moore,
Raymond Riezman,
James R. Melvin*
- 16 Who benefits from Privatisation?**
*Edited by Moazzem Hossain and
Justin Malbon*
- 17 Towards a Fair Global Labour Market**
Avoiding the new slave trade
*Ozay Mehmet, Errol Mendes and
Robert Sinding*
- 18 Models of Futures Markets**
Edited by Barry Goss
- 19 Venture Capital Investment**
An agency analysis of UK
practice
Gavin C. Reid
- 20 Macroeconomic Forecasting**
A sociological appraisal
Robert Evans
- 21 Multimedia and Regional Economic Restructuring**
*Edited by Hans-Joachim
Braczyk, Gerhard Fuchs and
Hans-Georg Wolf*
- 22 The New Industrial Geography**
Regions, regulation and
institutions
*Edited by Trevor J. Barnes and
Meric S. Gertler*
- 23 The Employment Impact of Innovation**
Evidence and policy
*Edited by Marco Vivarelli and
Mario Pianta*
- 24 International Health Care Reform**
A legal, economic and political
analysis
Colleen Flood
- 25 Competition Policy Analysis**
Edited by Einar Hope
- 26 Culture and Enterprise**
The development, representation
and morality of business
*Don Lavoie and
Emily Chamlee-Wright*
- 27 Global Financial Crises and Reforms**
Cases and caveats
B.N. Ghosh
- 28 Geography of Production and Economic Integration**
Miroslav N. Jovanović
- 29 Technology, Trade and Growth in OECD Countries**
Does specialisation matter?
Valentina Meliciani
- 30 Post-Industrial Labour Markets**
Profiles of North America and
Scandinavia
*Edited by Thomas P. Boje and
Bengt Furaker*

- 31 Capital Flows without Crisis**
Reconciling capital mobility and economic stability
Edited by Dipak Dasgupta, Marc Uzan and Dominic Wilson
- 32 International Trade and National Welfare**
Murray C. Kemp
- 33 Global Trading Systems at Crossroads**
A post-Seattle perspective
Dilip K. Das
- 34 The Economics and Management of Technological Diversification**
Edited by John Cantwell, Alfonso Gambardella and Ove Granstrand
- 35 Before and Beyond EMU**
Historical lessons and future prospects
Edited by Patrick Crowley
- 36 Fiscal Decentralization**
Ehtisham Ahmad and Vito Tanzi
- 37 Regionalisation of Globalised Innovation**
Locations for advanced industrial development and disparities in participation
Edited by Ulrich Hilpert
- 38 Gold and the Modern World Economy**
Edited by MoonJoong Tcha
- 39 Global Economic Institutions**
Willem Molle
- 40 Global Governance and Financial Crises**
Edited by Meghnad Desai and Yahia Said
- 41 Linking Local and Global Economies**
The ties that bind
Edited by Carlo Pietrobelli and Arni Sverrisson
- 42 Tax Systems and Tax Reforms in Europe**
Edited by Luigi Bernardi and Paola Profeta
- 43 Trade Liberalization and APEC**
Edited by Jiro Okamoto
- 44 Fiscal Deficits in the Pacific Region**
Edited by Akira Kohsaka
- 45 Financial Globalization and the Emerging Market Economies**
Dilip K. Das
- 46 International Labor Mobility**
Unemployment and increasing returns to scale
Bharati Basu
- 47 Good Governance in the Era of Global Neoliberalism**
Conflict and depolitization in Latin America, Eastern Europe, Asia and Africa
Edited by Jolle Demmers, Alex E. Fernández Jilberto and Barbara Hogenboom
- 48 The International Trade System**
Alice Landau

- 49 International Perspectives on Temporary Work and Workers**
Edited by John Burgess and Julia Connell
- 50 Working Time and Workers' Preferences in Industrialized Countries**
Finding the balance
Edited by Jon C. Messenger
- 51 Tax Systems and Tax Reforms in New EU Members**
Edited by Luigi Bernardi, Mark Chandler and Luca Gandullia
- 52 Globalization and the Nation State**
The impact of the IMF and the World Bank
Edited by Gustav Ranis, James Vreeland and Stephen Kosak
- 53 Macroeconomic Policies and Poverty Reduction**
Edited by Ashoka Mody and Catherine Pattillo
- 54 Regional Monetary Policy**
Carlos J. Rodriguez-Fuentez
- 55 Trade and Migration in the Modern World**
Carl Mosk
- 56 Globalisation and the Labour Market**
Trade, technology and less-skilled workers in Europe and the United States
Edited by Robert Anderton, Paul Brenton and John Whalley
- 57 Financial Crises**
Socio-economic causes and institutional context
Brenda Spotton Visano
- 58 Globalization and Self Determination**
Is the nation-state under siege?
Edited by David R. Cameron, Gustav Ranis and Annalisa Zinn
- 59 Developing Countries and the Doha Development Round of the WTO**
Edited by Pitou van Dijck and Gerrit Faber
- 60 Immigrant Enterprise in Europe and the USA**
Prodromos Panayiotopoulos
- 61 Solving the Riddle of Globalization and Development**
Edited by Manuel Agosin, David Bloom, George Chapelier and Jagdish Saigal
- 62 Foreign Direct Investment and the World Economy**
Ashoka Mody
- 63 The World Economy**
A global analysis
Horst Siebert
- 64 Production Organizations in Japanese Economic Development**
Edited by Tetsuji Okazaki
- 65 The Economics of Language**
International analyses
Edited by Barry R. Chiswick and Paul W. Miller

- 66 Street Entrepreneurs**
People, place and politics in local and global perspective
Edited by John Cross and Alfonso Morales
- 67 Global Challenges and Local Responses**
The East Asian experience
Edited by Jang-Sup Shin
- 68 Globalization and Regional Integration**
The origins, development and impact of the single European aviation market
Alan Dobson
- 69 Russia Moves into the Global Economy**
Breaking out
John M. Letiche
- 70 The European Economy in an American Mirror**
Barry Eichengreen, Michael Landesmann and Dieter Stiefel
- 71 Working Time Around the World**
Trends in working hours, laws, and policies in a global comparative perspective
Jon C. Messenger, Sangheon Lee and Deidre McCann
- 72 International Water Treaties**
Negotiation and cooperation along transboundary rivers
Shlomi Dinar
- 73 Economic Integration in the Americas**
Edited by Joseph A. McKinney and H. Stephen Gardner
- 74 Expanding Frontiers of Global Trade Rules**
The political economy dynamics of the international trading system
Nitya Nanda
- 75 The Macroeconomics of Global Imbalances**
European and Asian perspectives
Edited by Marc Uzan
- 76 China and Asia**
Economic and financial interactions
Edited by Yin-Wong Cheung and Kar-Yiu Wong
- 77 Regional Inequality in China**
Trends, explanations and policy responses
Edited by Shenggen Fan, Ravi Kanbur and Xiaobo Zhang
- 78 Governing Rapid Growth in China**
Equity and institutions
Edited by Ravi Kanbur and Xiaobo Zhang
- 79 The Indonesian Labour Market**
Shafiq Dhanani, Iyanatul Islam and Anis Chowdhury
- 80 Cost-Benefit Analysis in Multi-level Government in Europe and the USA**
The case of EU cohesion policy and of US federal investment policies
Alessandro Ferrara

- 81 The Economic Geography of Air Transportation**
Space, time, and the freedom of the sky
John Bowen
- 82 Cartelization, Antitrust and Globalization in the US and Europe**
Mark LeClair
- 83 The Political Economy of Integration**
Jeffrey Cason
- 84 Critical Issues in Air Transport Economics and Business**
Rosario Macario and Eddy Van de Voorde
- 85 Financial Liberalisation and Economic Performance**
Luiz Fernando de Paula
- 86 A General Theory of Institutional Change**
Shiping Tang
- 87 The Dynamics of Asian Financial Integration**
Edited by Michael Devereux, Philip Lane, Park Cyn-young and Wei Shang-jin
- 88 Innovative Fiscal Policy and Economic Development in Transition Economies**
Aleksandr Gevorkyan
- 89 Foreign Direct Investments in Asia**
Edited by Chalongphob Sussangkarn, Yung Chul Park and Sung Jin Kang
- 90 Time Zones, Communications Networks, and International Trade**
Toru Kikuchi
- 91 Miraculous Growth and Stagnation in Post-War Japan**
Edited by Koichi Hamada, Keiji Otsuka, Gustav Ranis, and Ken Togo
- 92 Multilateralism and Regionalism in Global Economic Governance**
Trade, investment and finance
Edited by Junji Nakagawa
- 93 Economic Growth and Income Inequality in China, India and Singapore**
Trends and policy implications
Pundarik Mukhopadhaya, G. Shantakumar and Bhanoji Rao
- 94 Foreign Direct Investment in China**
Spillover effects on domestic enterprises
Deng Ziliang
- 95 Enterprise Forms and Economic Efficiency**
Capitalist, cooperative and government firms
Kazuhiko Mikami
- 96 Diversity and Transformations of Asian Capitalism**
Edited by Boyer, Uemura and Isogai
- 97 Knowledge Transfer in the Automobile Industry**
Global–local production networks
Dessy Irawati

- 98 Exchange Rates and Foreign Direct Investment in Emerging Asia**
Selected issues and policy options
Ramkishan S. Rajan
- 99 Singapore, the Energy Economy**
From the first refinery to the end of cheap oil, 1960–2010
Ng Weng Hoong
- 100 China–India Economics**
Challenges, competition and collaboration
Amitendu Palit
- 101 Case Studies on Chinese Enterprises**
Edited by Donglin Xia
- 102 Argentina’s Economic Growth and Recovery**
Michael Cohen
- 103 The Korean Labour Market After the 1997 Economic Crisis**
Edited by Joonmo Cho, Richard B. Freeman, Jaeho Keum and Sunwoong Kim
- 104 China and India**
The quest for energy resources in the 21st century
Zhao Hong
- 105 Beyond the Global Crisis**
Structural adjustments and regional integration in Europe and Latin America
Edited by Lionello Punzo, Carmen Aparecida Feio and Martin Putschet Anyui
- 106 The Global Economic Crisis in Latin America**
Impacts and responses
Edited by Michael Cohen
- 107 The Processes and Practices of Fair Trade**
Trust, ethics and governance
Edited by Brigitte Granville and Janet Dine
- 108 Regional Development through Ecological Business**
Unique cases in Japanese rural regions
Makoto Hirano
- 109 Aging and Economic Growth Potentials in the Pacific Region**
Edited by Akira Kohsaka
- 110 Crises of Global Economies and the Future of Capitalism**
Reviving Marxian crisis theory
Edited by Kiichiro Yagi, Nobuharu Yokokawa, Shinjiro Hagiwara and Gary A. Dymski

Crises of Global Economies and the Future of Capitalism

Reviving Marxian crisis theory

**Edited by Kiichiro Yagi,
Nobuharu Yokokawa, Shinjiro Hagiwara
and Gary A. Dymksi**

First published 2013
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2013 selection and editorial matter, Kiichiro Yagi, Nobuharu Yokokawa, Shinjiro Hagiwara and Gary A. Dymski; individual chapters, the contributors

The right of Kiichiro Yagi, Nobuharu Yokokawa, Shinjiro Hagiwara and Gary A. Dymski to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988

All rights reserved. No part of this book may be reprinted or reproduced or utilised 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.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

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

Crises of Global Economies and the Future of Capitalism : reviving Marxian crisis theory / Edited by Kiichiro Yagi, Nobuharu Yokokawa, Shinjiro Hagiwara and Gary A. Dymski.

pages cm. – (Routledge Studies in the Modern World Economy ; 110)

Includes bibliographical references and index.

1. Global Financial Crisis, 2008–2009. 2. Economic policy. 3. Marxian economics. 4. Globalization—Economic aspects. I. Yagi, Kiichiro, 1947–, editor of compilation.

HB3722.C73345 2013

335.4'12—dc23

2012027483

ISBN: 978-0-415-68733-1 (hbk)

ISBN: 978-0-203-07295-0 (ebk)

Typeset in Times New Roman
by Werset Ltd, Boldon, Tyne and Wear

Contents

<i>List of figures</i>	xiv
<i>List of tables</i>	xvii
<i>Notes on contributors</i>	xviii
<i>Preface</i>	xxii
Introduction	1
NOBUHARU YOKOKAWA AND GARY A. DYMSKI	
PART I	
Mechanisms of the 2008 crisis and their consequences	9
1 From the subprime to the great earthquake crisis in Japan	11
MAKOTO ITOH	
2 The global financial crisis: the instability of U.S.-centered global capitalism	26
TETSUJI KAWAMURA	
3 Financialization and capitalist accumulation: a structural account of the crisis of 2007–09	55
COSTAS LAPAVITSAS	
4 The global financial crisis as a world great depression: an analysis using Marxian economics	75
MASAYOSHI TATEBE	
5 The demise of the Keynesian regime, financial crisis, and Marx's theory	91
SHINJIRO HAGIWARA	

6	The 2008 economic crisis from the perspective of changes in prices movements	108
	AKIRA MATSUMOTO	
PART II		
	Regimes of capitalism	125
7	Cyclical crisis, structural crisis, systemic crisis, and future of capitalism	127
	NOBUHARU YOKOKAWA	
8	Financial innovations, growth and crisis: the subprime collapse in perspective	151
	ROBERT BOYER	
9	The crisis of 2008 and the dynamics of capitalism in time and space	174
	TOSHIO YAMADA	
10	Neoliberalism and its crisis	191
	GÉRARD DUMÉNIL AND DOMINIQUE LÉVY	
11	Fiat money and how to combat debt deflation	208
	THOMAS SEKINE	
PART III		
	Global reconfiguration of capitalism	227
12	Can the U.S. economy escape the law of gravity? A Minsky–Kalecki approach to the crisis of neoliberalism	229
	GARY A. DYMSKI	
13	The political economy of global imbalances and the global financial crisis	254
	KANG-KOOK LEE	
14	East Asia’s integration and structural shift: the shift from newly industrializing economies to potentially bigger market economies under the global economy	272
	HITOSHI HIRAKAWA	

15 Financialization, structural change, and employment in the U.S. and Japan	288
JAMES HEINTZ	
16 Overconsumption, household debt, and dollar-privilege: the causes of the U.S. subprime crisis	305
AKI ANEHA	
<i>Index</i>	320

Figures

2.1	Residential mortgage loans and their composition, 2001–07	27
2.2	Prices of U.S. mortgage-related securities	29
2.3	Venture capital investment: quarterly, 1995–2004	32
2.4	S&P/Case-Shiller home price indices: monthly, 1987–2011	33
2.5	Mortgage refinance, cash-out and home equity loan volumes, 1995–2007	34
2.6	Mortgage debt outstanding by type of property and holder, 1979 to 2006	36
2.7	Financialization of the U.S. economy: dollar value of trading in the U.S. financial markets	38
2.8	The U.S.-centered global growth nexus	42–43
3.1	Mortgage lending, U.S., percentage of GDP	57
3.2	Bank assets as percentage of GDP	58
3.3	Commercial bank equity as percentage of assets	58
3.4	Leverage of non-bank corporations	59
3.5	Aggregate investment as percentage of GDP	60
3.6	Public debt as percentage of GDP	60
3.7	Household debt as percentage of GDP	61
3.8	Consumption as percentage of GDP	62
6.1	Price fluctuation, 1971–2008	112
6.2	Increasing rate of industrial production index in the advanced country relative to previous year	113
6.3	Net private non-residential fixed investment as percentage of GDP	114
6.4	Five-year moving average of manufacturing and financial sectors as percentage of domestic profits	116
6.5	Ratio of wage and salary to GDP, U.S.	117
6.6	Labor share of income in Japan	117
7.1	Dynamic industries and VAL	131
7.2	Basic Minsky cycle	132
7.3	Super Minsky cycle	133

7.A1	Formal model of accumulation structure in bureaucratic capitalism	147
8.1	The cycle from major innovation to crash	157
8.2	The collapse of long term capital management: an ad hoc solution brokered by the Fed, with no review of public control	162
8.3	The fall of Enron: increase in accountability of senior managers, without reform of accounting practices or supervision of new derivatives	164
8.4	An innovation that was a priori dangerous but in line with policy of widening access to home ownership	165
8.5	The subprime crisis results from conjunction of financial innovations since the 1980s: widespread underestimation and transfer of risk	167
8.6	Chronicle of a crisis foretold: the subprime episode	168
9.1	World history of growth and crisis	176
9.2	Fordist type of capitalism	177
9.3	Finance-led type of capitalism	179
9.4	Diversity of advanced capitalist countries	183
9.5	Seven types of economic models in the contemporary world	187
10.1	NYSE indices, corrected for inflation	196
10.2	Neoliberalism under U.S. hegemony	198
10.3	Net debts: U.S. households and government considered jointly, and U.S. economy toward rest of world	200
11.1	Comparison of managed currency system and gold standard system	219
12.1A	Quarterly U.S. real GDP growth in longer postwar expansions, trough to peak (truncated at 25 quarters)	235
12.1b	Quarterly U.S. real GDP change in longer postwar contractions, peak to trough	236
12.2A	Quarterly U.S. price-deflator growth in longer postwar expansions, trough to peak (truncated at 25 quarters)	237
12.2B	Quarterly U.S. price-deflator growth in longer postwar contractions, peak to trough	238
12.3	Mandatory and discretionary U.S. Federal-Government expenditures (excluding military sector), 1962–2010	238
12.4A	Quarterly U.S. unemployment rate (adults 24–54 years old) in longer postwar expansions, trough to peak (truncated at 25 quarters)	239
12.4B	Quarterly U.S. unemployment rate (adults 24–54 years old) in longer postwar contractions, peak to trough	240
12.5	Quarterly U.S. labor-force participation rates in longer postwar expansions, trough to peak (truncated at 25 quarters)	241

xvi *Figures*

12.6A	Quarterly U.S. average duration of unemployment in longer postwar expansions, trough to peak (truncated at 25 quarters)	242
12.6B	Quarterly U.S. average duration of unemployment in longer postwar contractions, peak to trough	243
12.7	Sources of U.S. GDP growth, by decade, 1950–2010	244
13.1	Current account deficit/GDP in U.S.	257
13.2	Investment and saving in U.S.	258
13.3	Global dimension of global imbalances	258
13.4	Changes in U.S. securities outstanding, 2003 and 2007 by country group	262
13.5	Recent changes in current account deficit of U.S.	265
14.1	Intraregional export ratio by region, 1970–2009	274
14.2	Composition of each country or group in total GDP of East Asia + India, 1980–2015	275
14.3	GDP catch-up ratio of country or group with respect to Japan, 1980–2012	276
14.4	Per capita GDP catch-up ratio of East Asia and India with respect to Japan, 1980–2015	276
14.5	Transition of spatial relationships of capital, labor, and markets: conceptual chart	283
15.1	Rate of growth of real gross fixed capital investment, Japan, 1966–2010	299
15.2	Rate of growth of real gross fixed capital investment, United States, 1966–2010	300
16.1	Percent homeowner with mortgage	306
16.2	Output per hour, real hourly wage and real hourly compensation	310
16.3	Monthly necessary payment and disposable income in narrow sense (Japan)	312
16.4	Annual necessary payment and disposable income in narrow sense	313

Tables

1.1	IMF world economic outlook, 2007–12	18
2.1	Sub-prime home mortgage loans and their securitization, 2001–04	28
2.2	Base case estimates of writedowns on U.S. loans	46
6.1	Average fluctuation rate of price	121
7.1	Periodization of capitalist world systems	128
8.1	Financial innovations: sources of growth or of crisis	154
8.2	Comparison of four crises in the United States and the crisis in Japan: the decisive role of banks	160–161
8.3	Financial innovations are one of the components of the process of growth	169
8.4	Most innovations are regulated collectively	170
8.5	Reducing gravity of financial crises, instead of simply surmounting them	171
9.1	Economic growth models in major countries	185
9.2	Differentiated world economic space in historical changes	188
14.1	Intraregional export ratio of IT-related goods (total, parts, and final goods) by East Asian main country/region 2000, 2007	278
14.2	Comparison of NIEs and BRICs: population, trade ratio, share of manufactured goods and share of export of services	282

Contributors

Editors

Gary A. Dymski is Chair in Applied Economics at the Leeds University Business School, University of Leeds, and is on leave as Professor of Economics at the University of California, Riverside. He received his BA in urban studies from the University of Pennsylvania, graduating Phi Beta Kappa in 1975. He received a doctorate in economics from the University of Massachusetts, Amherst in 1987. He has published books, articles, chapters, and studies on banking, financial fragility, urban development, credit-market discrimination, the Latin American and Asian financial crises, exploitation, housing finance, the subprime lending crisis, financial regulation, the Eurozone crisis, and economic policy. He is an academic adviser of the JSPE.

Shinjiro Hagiwara is Professor of Economics at Yokohama National University, Japan. He was educated at Fukushima University and at the University of Tokyo. His publications include *US Multinationals in the World Economy* (Ohtsuki, 2005, in Japanese) and *The Rise and Demise of the Keynesian Coalition* (Yuhikaku, 1996, in Japanese). He is a member of the executive board of the JSPE.

Kiichiro Yagi is Vice President and Professor in Economics at Setsunan University, Japan. He was educated in the University of Tokyo and Nagoya University. He received his PhD from Kyoto University. He taught political economy and history of economics at Kyoto University for a quarter of century. Since the mid 1990s he has made efforts to integrate the ideas of evolutionary and institutional economics with classical political economy including Marxian economics. He is Chief Representative of the JSPE.

Nobuharu Yokokawa is Professor of Economics at Musashi University, Tokyo Japan. He was educated at Shiga University (BA), the University of Tokyo (MSc), and Cambridge University (PhD). His publications include *Value, Employment and Crisis* (Shakai Hyouron Sya, in Japanese). He co-edited *Capitalism in Evolution* (Edward Elgar), *Industrialization of China and India and its Impact on World Economy* (Routledge, forthcoming). Since 2007 he has been editor of the Uno Theory Newsletter. He is chairman of the JSPE Committee for International Communication and Exchange

Contributors

Aki Aneha is Professor of Economics at Komazawa University. Her research focuses on the illusion of “a so-called affluent consumer society,” including the theoretical analysis of consumer debt, on the service sector and consumption in the information society, and on the relationship between the service sector, social capital and consumer credit in the U.S.

Robert Boyer is a Fellow at the Institut des Amériques, Paris. He has developed an historical and comparative analysis of the institutional transformations of capitalism, under the label of Régulation theory. In this analysis, which spans the period from Fordism to the finance-led regime, crises are recurring, but their forms change from one historical period to another. Among his publications are *Régulation Theory: The State of the Art* (with Yves Saillard), Routledge, 2001; *The Future of Growth*, Edward Elgar, 2004; and “Les financiers détruiront-ils le capitalisme?” *Economica*, 2011. He is one of the editors of *Revue de la Régulation*, <http://regulation.revues.org>.

Gérard Duménil is Economist and former Research Director at the Centre National de la Recherche Scientifique. He is the author of *Le concept de loi économique dans “Le Capital”* (foreword by Louis Althusser), Maspero, 1978 ; “Marx et Keynes face à la crise,” *Economica*, 1977; and, with the philosopher Jacques Bidet, he co-authored *Altermarxisme, un autre marxisme pour un autre monde*, Presses Universitaires de France, 2007.

James Heintz is Research Professor at the Political Economy Research Institute of the University of Massachusetts, Amherst. He has published in the areas of employment and labor markets, macroeconomic alternatives, the distributive effects of monetary policy, and development strategies in sub-Saharan African countries.

Hitoshi Hirakawa is Professor, Economic Research Center, Graduate School of Economics, Nagoya University. He received his MA from Meiji University and PhD from Kyoto University. His recent publications include *Co-design for a New East Asia after the Crisis* (co-edited with Y.-H. Kim), Springer Verlag, 2004; *Newly Industrializing Countries after the Crisis* (Chapter 16), B.R. Pub, Delhi, 2006.

Makoto Itoh is Emeritus Professor, University of Tokyo, Japan. He was Professor of Economics at the University of Tokyo, Kokugakuin University, and Kokushikan University. He taught widely at many universities internationally. His *Collected Works* in six volumes in Japanese have just been completed. His books in English include *Value and Crisis* (1980), *The Basic Theory of Capitalism* (1988), *The World Economic Crisis and Japanese Capitalism* (1990), *Political Economy for Socialism* (1995), *Political Economy of Money and Finance* (with C. Lapavistas, 1999), and *The Japanese Economy Reconsidered* (2000).

Tetsuji Kawamura is Professor of Economics and former Dean of the Graduate School of Economics at Hosei University, Tokyo. He is head of a research project involving the transformation of global political and socio-economic systems due to the impact of globalization, and is a contributing author to numerous books exploring issues involving globalization. He has written and edited many volumes. His edited volume in English book, *Hybrid Factories in the United States: The Japanese-Style Management and Production System under the Global Economy*, was published by Oxford University Press in 2011.

Costas Lapavistas is Professor of Economics at the School of Oriental and African Studies. His main research fields are the political economy of money and finance, the history of economic thought, and the economy of Japan. His most recent work has focused on the Eurozone crisis, monetary unions, and world money. He has published widely in several languages; his latest book is *Crisis in the Eurozone* (Verso, 2012).

Kang-Kook Lee is Professor of College of Economics at Ritsumeikan University in Japan. He received his PhD at the University of Massachusetts, Amherst; his doctoral thesis explored capital account liberalization and economic growth. He specializes in international finance, development economics, and East Asia. His recent research interests include the effects of financial globalization on growth and inequality, financial crises and restructuring, and the East Asian economy.

Dominique Lévy is Research Director at the *Centre National de la Recherche Scientifique* (CNRS), in France. His publications with Gérard Duménil include *La dynamique du capital: Un siècle d'économie américaine*, 1996; *Au-delà du capitalisme*, 1998; and *Crise et sortie de crise: Ordres et désordres néolibéraux*, 2000. A translated version of this latter volume is available from Harvard University Press, under the title *Capital Resurgent: Roots of the Neoliberal Revolution*. These authors' latest joint book, also published by Harvard University Press, is *The Crisis of Neoliberalism*, 2011.

Akira Matsumoto is Professor at Ritsumeikan University, Japan. He received his doctorate in economics from Kokugakuin University, Tokyo, in 2002. He specializes in political economy, and money and credit theory. He has published articles on these subjects in the United States and Japan.

Thomas Sekine is formerly Professor of Economics, York University, Canada. He received his BA degree in economics from Hitotsubashi University in Japan, his MA from McGill University in Canada, and his PhD from the London School of Economics in the UK. He taught at Simon Fraser University, York University (1966–94) and Aichi-Gakuin University (1994–2004). Now retired, he continues to work on the critique of bourgeois economics from the Noist point of view

Masayoshi Tatebe is Professor of Money and Banking at Chuo University. He was educated at Osaka City University and Chuo University. His publications

include *Managed Currency and Contemporary Economy* (Shin Hyoron, 1980, in Japanese) and *Contemporary Issues in the Theory of Money and Finance* (Ohtsuki, 1997, in Japanese).

Toshio Yamada is Emeritus Professor at Nagoya University, having previously served as Professor of Economics at Osaka City University and Nagoya University, Japan. His works in English include *Japanese Capitalism in Crisis* (co-edited with R. Boyer), Routledge, 2000; “How has the Japanese Mode of *Régulation* Changed?” (co-authored with Y. Hirano), in R. Boyer *et al.* (eds) *Diversity and Transformations of Asian Capitalisms*, Routledge, 2012.

Preface

This book has its origins in discussions by members of the Japan Society of Political Economy (JSPE). Since its foundation in 1959, JSPE has played a central role in the academic study of political economy in Japan. It has grown into a wide-ranging association for critical studies in political economy, including theory, history, and policies, with approximately 900 members. The JSPE encompasses several competing streams of Marxian economics as its core groups, though it is open to other non-Marxian streams of political economy. We are proud that the JSPE has guaranteed pluralism and promoted discussions among diverse positions. We hold an assembly meeting once a year, with a deliberately chosen main theme, and publish the *Political Economy Quarterly* (*Kikan Keizai Riron*) in Japanese as a “public medium for critical study in political economy.”

Facing the global financial and economic crisis, JSPE has focused its interest on the analysis of this crisis. Thus, the main theme of the 56th annual meeting in Fukuoka, October 2008, was “The Sub-prime Shock and the Future of Global Capitalism,” and that of the 57th annual meeting in Tokyo, November 2009, was “2008 World Crisis and the Future of Capitalism.” The discussion of the causes and effects of the crisis was held not only at the plenary sessions but also in parallel sessions and in sessions of invited overseas scholars. Further, members of the Society continued their discussions in branch meetings and in their own circles. Thus, when we started editorial work for publishing the results of our work in an English anthology, it was rather easy for us to line up contributors from among JSPE members and from our overseas friends. As the present chief representative of the board, I sincerely thank the contributors and editors that worked on a project most fitted to one of the JSPE’s missions: international academic cooperation with political economists around the world. I’d add further, criticism is also welcome!

Kiichiro Yagi

December 23, 2011

Chief Representative of the Board, Japan Society of Political Economy

Introduction

Nobuharu Yokokawa and Gary A. Dymski

Events in global financial markets and macroeconomies in the past four years have been a strong reminder that most contemporary analysis of these events is ad hoc and not guided by a coherent theory of capitalist crisis as a guide to understanding unfolding events. This book helps to close this gap by presenting essays about the precarious state of the global economy by economists for whom crisis is a logical consequence of capitalist growth. This “crisis theory” perspective has shaped the thinking of the Japanese Society of Political Economy (JSPE) since its founding, and has been especially prominent in the presentations by JSPE members and foreign guests at annual JSPE conferences since the turn of the century. Gathered together here are chapters based on conference presentations made from 2001 to the present. Before presenting a brief chapter-by-chapter overview of these contributions, this introductory section examines what makes this book distinctive by answering three questions: Why another book on the current crisis, when there are so many others? Why a book based on presentations in Japan and scholarship by Japanese authors? And what does this book have to say about the crisis that hasn’t been said elsewhere?

Why “another” book on the current crisis?

This book presents a comprehensive set of reflections on the origins, dynamics, and implications of the interlinked crises of the U.S. and global economies. These reflections are all rooted in economic crisis theory: that is, the idea that roadblocks to micro-market mechanisms and breakdowns in macroeconomic growth are part of the core dynamic of capitalist economies. Books describing the current crisis of capitalism have grown explosively in number and approach over the past several years. But these books fall into several categories that leave some explanatory ground uncovered.

First, many books describe the current crisis of capitalism from the viewpoint of a market insider. These books are appropriate for those who want to know how a market insider thinks, acts, and reacts in a financial crisis; but these accounts do not connect in any systematic way (and often not at all) with political economic theories that try to explain market dynamics.

2 *Introduction*

In a second approach, some books view crisis as resulting from regulatory flaws and myopia. For example, for analysts relying on a neoliberal vision of market equilibrium as a yardstick for economic outcomes, events such as the subprime crisis can be traced to regulatory flaws or government interference in markets. Some Keynesians also focus on mistakes in government intervention in markets; but for them, the problem is typically too little intervention, not too much as in the neoliberal perspective. Some historical approaches see landmark events such as asset bubbles (and their bursting) or currency crises as instances of behaviors that affect humans recurrently because of their fallibility and myopia. While writers emphasizing these perspectives are sometimes critical of neoclassical theory, they very rarely investigate the possibility that there exist multiple reference points that lead to the terrain beyond the neoclassical. Books describing the institutional mechanics and background of the 2008–09 financial crisis rarely engage deeply with the core questions of how the economy breaks down.

A third approach has been constructed on the basis of analyses rooted in Keynesian and post-Keynesian, Marxian and neo-Marxian, Régulation, and historical and evolutionary views. These views provide the elements needed to envision crises as systematic outcomes of capitalist dynamics. Events in global financial markets and macroeconomies in the past four years have been a strong reminder, if one was needed, of the need for a coherent theory of capitalist crisis as a guide to understanding unfolding events. These reinforce the need for well grounded alternative articulations of the forces that move economic dynamics today, of how they interact, and of how the ideas of foundational figures in economic theory – Marx, Keynes, Kalecki, and others – can be used to make sense of things today. And Minsky’s financial instability hypothesis is especially important, because it generates an alternative vision of how financial markets work, one which begins from skepticism of neoclassical theory and then goes to an alternative theoretical framework built on some of Keynes’ ideas.

The power of these thinkers’ ideas, when applied to the problems of today, is evident; but this does not mean that all debate ceases once those ideas begin to ground our thinking. For one thing, as noted above, neoclassical ideas can be readily used to explain any financial crisis, even the most severe. Debates among economists from different viewpoints will continue, as ever, in a thick exchange of cross-cutting views on this and other topics. For another thing, while neo-Marxian views of the crisis are compelling and generally well known, they are not sufficient in themselves to constitute an adequate explanation. Constructing a coherent theory of capitalist crisis as a guide to understanding unfolding events requires sorting out “pure” economic dynamics from historically conjectural circumstances, and distinguishing among institutional and regulatory mechanisms that facilitate and that block growth. These requirements are exactly what are provided in this book.

Why a book based on presentations in Japan and scholarship by Japanese scholars – and specifically by JSPE members?

Japan has been an important laboratory for developing and debating ideas about capitalism and its dynamics. Japan has given rise to several distinct strands of Marxian political economy. Foremost among them is the Uno School, which is well represented in this volume. The Japanese political economist Kozo Uno developed an approach to understanding capitalism (and appropriating Marx's ideas) that contains three levels of analysis: the general theory of capitalism; the stages of capitalist developments; and detailed studies of particular countries and time-periods. This differentiation permits analysts to conceptualize and debate, separately, the economic dynamics of unadulterated capitalism, the behavioral modifications that arise because of the imposition of some defining rules that pertain to one or more capitalist economies for a period of time (that is, because of the creation or destruction of "regimes" of capitalist accumulation), and the specific institutional characteristics of given markets at particular points in time. Further, many political economists in Japan have chosen to work with diverse approaches to political economy – the French Régulation school, the Cambridge Keynesian models, institutionalism and historical schools, and so on.

The Japan Society of Political Economy has been the largest organization of heterodox economists in Japan since its founding in 1959; its annual meetings have provided important occasions for debate among diverse points of view. Beginning in October 2001, the JSPE began inviting non-Japanese economists to make presentations and engage in debates at these annual meetings. This book represents an encounter between Japanese and non-Japanese scholars, focused on the common problem of how to understand the current economic situation. The contributors represented here have all participated in the JSPE annual meeting.

In the open spirit of Japanese political economy, these scholars draw on diverse intellectual traditions. A reader interested in understanding heterodox approaches to the current crisis will find here a representative sampling drawing on a large range of intellectual influences. These essays do not reach one conclusion, but instead provide different angles of vision regarding the global crisis. This book makes some of this dissident thinking, by Japanese and non-Japanese political economists alike, available in one volume. As such, this volume provides a unique immersion in different approaches to political economy and to the crisis, at a level that is sophisticated and yet approachable. No other book on the market now has this combination; nor is another likely which has such a theoretically adventurous set of contributions.

What does this book have to say about the crisis that other books have not said?

This book shows that an understanding of Marx's crisis theory can serve as a powerful framework for analyzing the contemporary subprime world crisis.

4 *Introduction*

Marx's crisis theory was well developed by the Japanese tradition, which paid special attention to his concepts of the accumulation of real capital and money capital. The dual character of the credit system has been especially well studied in this tradition: that is, it furthers the accumulation of capital in prosperity, and causes over-accumulation and a consequent bust as the boom period unravels. Further, the role of finance has changed through history. Its power increased in imperialism when finance capital dominated industrial capital, was reduced under Keynesian policies in the postwar welfare state, and has increased again with financialization in the neoliberal period. Only Marxian theory covers all these historical changes and provides a foundation for theoretical explanation.

This book explains the subprime loan crisis as a crisis in a specific phase of the capitalist world system. Its contributions distinguish cyclical crises, which reinforce the existing capital accumulation regime, from structural crisis, which destroys the existing capital accumulation regime and gives rise to a new regime. Structural crisis is further distinguished into two types: profit-squeeze structural crises, which occur after a long-lasting period of successful capital accumulation (as seen in the crisis of the 1970s), and under-consumption structural crises such as the Great Depression.

This book pays special attention to structural changes such as those involving labor exploitation, the industrialization of East Asia, and international imbalances. These changes show the limits of the neoliberal accumulation regime, and have profound and controversial consequences. They permitted the rise of the neo-liberal accumulation regime after the 1980s, which destroyed the link between wages and productivity growth. This, in turn, shifted the engine of demand growth from wages in the golden age to asset price inflation and borrowing. This raises the unresolved questions of whether this shift is the primary impetus behind the subprime crisis, and whether the forces it has unleashed are powerful enough to cause the destruction of the present-day capitalist world system.

The contents of this book

The first part of the book considers the mechanism of the crisis of 2008 and its consequences. The six chapters argue that an understanding of Marx's crisis theory can serve as a powerful and useful framework in the analysis of this contemporary subprime world crisis. Financialization is the common concept of these chapters.

Makoto Itoh (Chapter 1) argues that the understanding of Marx's monetary and crisis theory in the Japanese Uno-school can powerfully serve as a framework in the analysis of the contemporary subprime world crisis. He focuses on financial exploitation of workers, which he calls the financialization of labor-power, as a basic cause of the subprime crisis. The U.S. subprime crisis spread across the world since the global financial market was mobilized to pour idle money into U.S. speculative housing loans. He argues that the Japanese economy was deeply shaken by the subprime loan crisis, since the Japanese economic

recovery in 2002–07 mostly depended on the increase in exports, which was strongly damaged by the crisis. The great earthquake, the resultant giant Tsunami, and nuclear disaster deepened the structural crises in Japanese economy. He analyzes them in view of fundamental problems in the capitalist market economy together with their contemporary features.

Tetsuji Kawamura (Chapter 2) argues that the postwar corporate structure of the United States revealed its own limits in the late 1960s and that its restructuring and transformation created a new nexus of capital accumulation system. The emergence of this nexus represents an integrated consequence of the globalization of American corporate activity, finance, and information and of the neoliberal transformation of government functions touched off by Reaganomics. He examines American economic cycles in terms of the emergence of this new nexus of capital accumulation system. He emphasizes the collapse of the institutionally flawed mechanisms that linked the U.S. and global financial systems, and argues that the financial engineering that created securitization gave way to casinoization and has revealed the transitional nature of the current U.S.-centered global regime.

Costas Lapavistas (Chapter 3) focuses on some of the structural dimensions of financialization as key causes of the crisis of 2007–09. He points out three main features of financialization: first, less reliance of large corporations on banks; second, banks shifting their activities toward mediating in open markets and transacting with individuals; third, increasing implication of individuals in the operations of finance. He argues that financialization represents the transformation of capitalist production and finance which is systemic and that these structural factors ultimately account for the crisis of 2007–09.

Masayoshi Tatebe (Chapter 4) defines surplus capital as money capital not used for productive investment because of the low expected profit rate and concern about the financial market pursuing financial gain. He argues that surplus capital has been generated since the 1990s and developed into “casino-type financial capital,” which has controlled the destiny of the real economy and led to a crisis.

Shinjiro Hagiwara (Chapter 5) argues that Keynesian economic policies in the postwar period contained financial crises and stabilized the capitalist economy. He points out that following the breakdown of the Keynesian regime the political and economic power of “the great financiers and stock market jobbers” is increasing. He argues Marxian approaches to financial crisis can explain the increasing crises experienced as the neoliberal period dawned since these conditions are similar to those discussed in Marx’s *Capital*.

Akira Matsumoto (Chapter 6) investigates why the 2008 crisis looked like a classical economic crisis under the gold standard system, with rapid contractions of economies, falling prices, increasing unemployment, decreasing production, and a slowdown of consumption, although the managed currency system had been adopted. He argues that excessive money capital, born from deficits in the U.S. balance of payments, became a condition for credit creation, producing a bubble economy. Price hikes over products’ parity values in a bubble economy

6 Introduction

were adjusted forcibly during the financial-market collapse, leading to the bankruptcy of many financial institutions.

The second part of the book considers regimes of capitalism. Five chapters investigate the historical development of capitalism to define neoliberalism as a specific phase of capitalism. They share the concept of a structural crisis which destroys the existing capital accumulation regime and gives rise to a new regime.

Nobuharu Yokokawa (Chapter 7) attempts to build a new framework for the political economy of capitalism which consists of the basic theory of capitalism, the intermediate theory of specific types of capitalist world systems, and empirical analysis, integrating Kozo Uno's three-level analysis of capitalism, Keynesian economics, and historical and institutional economics. He introduces a dynamic theory of comparative advantage in order to analyze the historical development of leading industry and evolution of the capitalist world system. He distinguishes cyclical crisis that reinforces the self-regulating character of capital accumulation in the established stage of capitalist world system, structural crisis that changes leading industries and the capital accumulation regime, and systemic crisis that changes a hegemon of the capitalist world system. He investigates the postwar capitalist world system and concludes the 2008 crisis is a systemic crisis.

Robert Boyer's analysis (Chapter 8) uses the methodology and concepts of Régulation theory in order to characterize the crisis begun in 2008 as systemic (the failure of a financial organization), structural (the end of the complementarity between the five institutional forms at the origin of the American finance-led accumulation regime), and global (the consequence of large and long-lasting external trade and capital flows imbalances). He emphasizes the unprecedented consumer credit-led accumulation regime in the unfolding dynamics. Within this regime, the true extent of financial risk has been more and more masked; so the breakdown of this system has led to the freezing of credit, not the restoration of normal cyclical behavior. Consequently the global system has been thrown into a major structural crisis whose outcome is radically uncertain.

Toshio Yamada (Chapter 9) explains the crisis in the context of the Régulation approach; the 2008 crisis is "a structural crisis of the finance-led growth regime." He argues that to situate the 2008 crisis properly in the historical context, we have to investigate the history of capitalist economy in last 200 years by using several concepts of the Régulation theory: growth regime, *régulation* mode, and especially structural crisis. He argues that structural crises are not at all exceptional for capitalism, and that capitalism has transformed itself through those great structural crises, giving rise to new configurations in time and space.

Gérard Duménil and Dominique Lévy (Chapter 10) address the overall periodization of capitalism, in which neoliberalism defines a specific phase. They argue that the roots of the crisis must be sought in the features of the new phase of capitalism that arose in the early 1980s, that is, neoliberal globalization. The disequilibria of the U.S. economy and the unwieldy financial-global structure of the neoliberal years ultimately have led to a crisis that will end in the decline of

U.S. hegemony. In the discussion of scenarios for the future, they pay particular attention to emerging countries, especially China.

Thomas Sekine (Chapter 11), building on ideas expounded by Kozo Uno, argues that the global capitalist system has been shifting systematically away from purely capitalist principles since the early twentieth century to a post-capitalist economic order. He argues that although Uno was not in a position to spell out the nature of this *transitional phase*, he quite clearly indicated that a “managed currency system” marked the departure from the regime of capitalism. Sekine rehabilitates Uno’s insight, tracing the main features of the post-1914 evolution of the world economy. He concludes that pumping fiat money into circulation to overcome deflationary spiral and debt deflation after the 2008 crisis may well be the first decisive step in transition towards “another historical society.”

The third part of the book looks at the global reconfiguration of capitalism. Five chapters emphasize that global imbalance, such as macroeconomic imbalance and power imbalance, have changed both international and domestic economic structure. They pay special attention to labor exploitation and the impact of East Asian industrialization on the world economy.

Gary Dymksi (Chapter 12) shows how Kalecki and Minsky present complementary ideas about the twin problems of labor extraction and financial fragility that have arisen and worsened as the neoliberal era has lengthened. He shows that their ideas about how U.S. business cycles have evolved are accurate for the postwar period up until the 1980s. He argues that beyond that, their ideas about macroeconomic dynamics, which implicitly focus on a *national economy* perspective, must be adjusted to take into account the impact of two sustained global imbalances: a global macroeconomic imbalance, and a global power imbalance. This global imbalance was the root cause of the change in the character and timing of U.S. cyclical fluctuations. When confidence in the “safe harbor” character of U.S. financial and asset markets was shaken by the 2008 crisis, a new period of U.S. macroeconomic stagnation started.

Kang-Kook Lee (Chapter 13) investigates the role of global imbalances in the build-up to the crisis, and the transformation of these imbalances after the crisis. He investigates neoliberalism in both the U.S. and East Asia as an underlying cause that worsened global imbalances. He emphasizes the importance of concerted efforts in the U.S. and East Asia to bring about a rebalancing of the global economy, and to change the growth strategy in East Asia as well as in the U.S.

Hitoshi Hirakawa (Chapter 14) examines the shifting role of East Asian industrialization and its impact on the world economy. He distinguishes three stages of economic development. Traditionally, the workers of developing regions move to advanced regions in search of employment. In the second stage firms move to developing regions in search of low-cost labor and export produced goods to advanced countries. In the third stage firms move toward developing regions in search of markets such as BRICs which he names “potentially bigger market economies.”

James Heintz (Chapter 15) examines how processes of financialization and globalization in capitalist economies affect the structure of employment, using

8 *Introduction*

Japan and the U.S. as specific examples. A central thesis of the chapter is that common factors emerging during the neoliberal era of globalization have affected labor demand and labor supply and the structure of employment in a range of countries. There are numerous outcomes of these interactions, including higher levels of open unemployment, growth of informal employment, downward pressure on the returns to labor, and a redistribution of risk from capital to labor; but specific employment outcomes are dependent on domestic institutions and structural realities.

Aki Aneha (Chapter 16) examines the root of the subprime problem from the perspective of household budget and consumer spending. She shows the habit of spending beyond one's means is due more to stagnant wages, employment instability, and inadequate social support under neoliberalism, than to extravagance. She argues that the root of the subprime problem lies in overproduction and that consumption-boosting measures based on expanding credit were indispensable in increasing demand and deferring crisis and depression. She emphasizes that the U.S. dollar seigniorage has allowed depression to be deferred and limitations such as falling real wages to be overcome.

The chapters presented in this book provide continuing and essential analyses of the global crisis as it has gathered force and assaulted working people in ever more nations. The thinking of Japanese and non-Japanese collaborators makes clear that the 2008 economic crisis was an inevitable result of the forces at work in the present phase of global capitalism. We hope this book contributes to the resurgence of radical analyses of the political economy, free from the market optimism of mainstream economics.

Part I

**Mechanisms of the 2008
crisis and their
consequences**

1 From the subprime to the great earthquake crisis in Japan

Makoto Itoh

The historical character of the subprime crisis¹

The historical character of any economic crisis is always determined by the nature of the preceding economic boom. The worldwide economic boom preceding the subprime crisis was led mainly by the U.S. economic recovery and growth from 2002 onward. As about 40 percent of U.S. economic growth in this period is estimated to have depended on the housing sector, the housing boom and the associated financial expansion to mobilize idle global funds into U.S. consumer credit obviously formed the major source of prosperity.²

The housing boom in the U.S. started anew in 1996, along with the New Economy (Information Technology, or IT) boom, and lasted for ten years. After the burst of the New Economy bubble in 2001, the housing boom became the main driving engine for the U.S. economic recovery. It was widely promoted by housing finance.

U.S. housing loans are divided into prime and subprime; the latter is typically loans to people of lower income with low creditworthiness. More concretely, subprime loans are made to people with a record of delayed repayment on past loans, or an estimated FICO credit score of under 660 (in a credit scoring system initiated by Fair Isaac Co., with a maximum score of 900), or even debt repayments comprising more than 50 percent of their income.

In the past people classed as subprime were mostly excluded from housing loans. But after 2001 there was a rapid growth of housing loans, and especially of subprime loans in the U.S. The growth of lending promoted, and was also facilitated by, steadily rising house prices, until by 2006 their level was on average double that of 1996. Total outstanding U.S. housing loans reached \$13 trillion (almost equivalent to GDP) at the end of 2006. The proportion of subprime loans increased continuously to 20 percent of the flow – and 13 percent of the entire stock (\$1.7 trillion in real terms) – of housing loans.³

Since the typical size of subprime loans is around \$200,000, they have been obtained by roughly 8.5 million households (comprising more than 25 million people).⁴ Assuming that the average size of housing loans is about \$300,000, the total stock of U.S. housing loans at the end of 2006 was taken up by roughly 43.3 million households, or about 43 percent of the U.S. population. Thus, an

unprecedentedly large proportion of the population was involved in housing credit in this period.

In retrospect, during the long historical process of capitalist development, the financial system formerly functioned in the main as a set of social mechanisms for mobilizing idle money that could serve the accumulation purposes of capitalist enterprises. However, in the twentieth century, saving by working people, including pension funds and insurance payments, has been increasingly incorporated into the social mechanisms of the financial system. Similar considerations apply to consumer credit. Credit for consumption has been traditionally provided by pawnshops and loan sharks (a carry-over from the pre-capitalist era) as well as by consumer credit companies.

These mechanisms of consumer credit have been relatively small and marginal to the modern banking and financial systems. However, as large non-financial business enterprises became increasingly reliant on self-finance, formal financial institutions have had fewer opportunities to lend to non-financial enterprises. Thus, major banks and other financial institutions began to expand consumer credit, and especially housing loans, to working people, gradually advancing toward lower income layers. In this sense, the commodity of labor-power has become increasingly financialized. This tendency can be called financialization of labor-power.⁵ It was clearly present already in the course of the Japanese bubble in the late 1980s, but has been enormously exacerbated during the recent U.S. housing boom. Banks and related real estate agencies have aggressively tempted workers to borrow by dangling the prospect of capital gains in the course of the U.S. housing boom.

For instance, a hybrid type of housing loan which allows much lower teaser rates of interest for the initial 2–5 years was broadly recommended by suggesting a possibility of capital gain through a rise in the price of the purchased house during these teaser rate years, as well as an expectation of resetting the housing loan favorably again based on the elevated market price of housing. Home equity loans also made housing loans more attractive, by enabling borrowers to utilize appreciation in the market value of their houses, captured in a mortgage instrument, as an additional basis for their (consumer) card loans. Financial institutions mobilized IT to flexibly design and sell these kinds of housing loans. Historically, actions that had led to the democratization of the financial system as a result of the civil rights movement, such as the Community Reinvestment Act (1977) and Alternative Mortgage Transaction Parity Act (1982), and that had induced banks and other financial enterprises to lend more to local areas without discrimination against poor people and their residential district, ironically served to promote sales of housing loans more and more broadly – including loans to subprime borrowers – subsequently causing so many tragic foreclosures.

In contrast to the Japanese bubble economy in the late 1990s, wherein speculative trading of real estate and shares was financed domestically, depending on the traditionally high rate of household saving of about 15 percent of annual GDP, the huge amount of housing finance in this U.S. boom had to be supplied

globally from abroad, since the U.S. saving rate was as low as 2 percent in this period. To suit this necessity, a new system of housing finance was formed. This system was structurally doubled. In the first layer, original lenders, typically mortgage companies, lend housing loans to individual households. In the second they immediately resell mortgage housing loans to other financial companies such as Special Purpose Vehicles (SPV) owned by big investment banks. SPVs then combined large number of mortgage loans into mortgage-backed securities (MBS) to sell to various other financial institutions in the world market. Furthermore, Collateralized Debt Obligations (CDOs) were created by combining MBS with other Asset Backed Securities (ABSs), such as those based on automobile loans; further, various kinds of financial insurance policies in the form of securities were also sold globally. This multiple-layered loan securitization functioned as a financial mechanism to mobilize the global financial market for the U.S. housing boom.

This system was called “originate-to-distribute,” against the older practice of “originate-to-hold” in housing finance, which was common to Japanese banks and the U.S. Saving & Loan Associations (S&Ls) until the 1980s. The older “originate-to-hold” loan type was a sort of indirect finance, for originators of mortgage loans used to hold them until due by utilizing deposit funds they received. In the new “originate-to-distribute” loan type, originators do not receive deposits, but instead rely on direct finance based upon loan securitization, which could be set up outside of banking regulations. It is broadly believed that the new type of housing finance is more efficient and rational than the older type as a mechanism for mobilizing global financial resource for use by promising users via the capital market. While the older type of indirect banking credit often relies on personal relationships, with tendencies leading toward crony capitalism, the new system of securitizing loans is assumed to be more transparent and rational. It is also assumed that the risks contained in individual housing loans – including subprime loans – could be dispersed and reduced by binding them into MBSs and CDOs.

So long as house prices continued to rise, this theory and these assumptions seemed sound. However house prices could not move upward forever; they actually peaked toward the end of 2006 and then began to fall. Then, mortgage debtors could no longer realize the expected capital gain by their houses purchased, nor reset mortgage debts advantageously on the basis of increased house prices; instead they suffered from a sharp rise in repayment after 2–5 years of initial “teaser” rates of interest. For example, the amount of monthly return payment for a typical 2/28 hybrid type of housing loan of \$200,000 (fixed teaser rate of interest for the initial two years, and floating interest rates for the remaining 28 years) would increase from \$1,531 in the initial two years to \$2,152 in the fourth year (even without any change in the market rate of interest) and possibly to \$2,370 in the fifth year (when the market interest rate rises by 2 percent).⁶ Such a rise in return payment was called repayment shock. The number of foreclosures thereby increased rapidly in the U.S. in 2007 as house prices declined, reaching more than two million by the end of 2008. For the debtors thrown out

of their houses, as vividly presented in the initial scene of Michael Moore's movie "Capitalism," past payments on loans as well as expenditures on house durables had been totally lost. These losses spread from low income borrowers in the subprime category to others. Even for borrowers who escaped foreclosure, the market value of their houses often declined to below the remaining mortgage debt, which remained to be repaid for long years to come, in addition to the capital loss. Housing finance thus really worked by stealing from tens of millions of mortgage debtors.

As difficulties of repayment spread from subprime housing loans, the prices of MBSs and CDOs had to deteriorate. The subprime financial crisis started when two hedge funds attached to Bear Sterns investment bank failed due to losses in subprime mortgage-backed securities in June 2007. The financial crisis deepened globally, especially following the failure of Lehman Brothers in September 2008 (the Lehman shock), as American MBSs and related securities such as CDOs, as well as financial insurance policy securities, had to be sold with falling prices in the world market. In some European countries, such as the UK and Spain, a similar housing bubble burst in the process of the subprime financial crisis. Most European banks and many other financial institutions were hit seriously as they had purchased a large portion of the American MBS and the related securities.

The financial crisis destroyed the market value of many forms of real estate and financial securities and caused the destruction of many investment banks and other financial firms. It also forced reductions in real (non-financial) business activities both directly and indirectly, through a decline in investment, employment, and consumer demand, through an increase in unemployment, and through business failures in advanced economies (such as the Big Three – GM, Chrysler, and Ford). The subprime economic crisis was characterized as "a tsunami once in a hundred years" by Alan Greenspan, the former Chairman of the Federal Reserve Board. However, it was not an economic disaster caused by an external shock like a tsunami, but clearly an outcome of the endogenous working of the capitalist market economy itself, unleashed by neoliberal deregulation of social controls.

The neoclassical microeconomics which served as a foundation of neoliberal economic policies since the 1980s was unable theoretically to understand such an enormous irrational economic disaster as a consequence of liberalization of the market economy, as this school believed that the most efficient and rational utilization of economic resources must be realized through free and competitive markets encompassing the financial security market. Thus, a disastrous economic crisis such as the subprime had to be attributed to an external shock like a tsunami from outside the mechanism of the market.

In comparison, post-Keynesians such as Minsky presented a deeper theoretical model of financial instability, including the tendency toward a growing proportion of speculative Ponzi finance in the course of a boom, in accord with the Keynesian tradition of underlining the role of expectations in financial markets.⁷ Minsky's model of financial instability is much superior to the orthodox

neoclassical microeconomics in its insight into the inevitability of repetitive financial bubbles and their outbursts in the age of neoliberalism, as experienced in Japan at the end of the 1980s, in the Asian crisis in 1997, and in the collapse of the U.S. New Economy in 2001, culminating in the subprime crisis.

However, in the tradition of Keynesian theory as an ahistorical and psychological analysis, Minsky's model tends to over-generalize its logic and miss a series of historically crucial problems. First, why must financial crises appear repeatedly as an objective result of the working of the capitalist market economy in relation to the industrial accumulation of capital? Was not financial instability once the result of an over-accumulation of industrial capital in the classic business cycles? Second, why have hypertrophied financial bubbles become so conspicuous since the 1980s, in comparison with the period of high economic growth that lasted until the beginning of 1970s? Third, why has neoliberalism become so dominant as a policy tide in this period as to promote deregulation that included the financial market and its speculative activities? Fourth, why was the financialization of labor-power – the role of consumer credit such as housing loans – incorporated as the central driving mechanism in the recent processes that caused the subprime crisis, contrary to Minsky's model?

In order to solve these problems, Marxian historical and objective approaches are useful. Prior to Keynes, Marx powerfully demonstrated that the credit mechanism plays its objective roles in the changing phases of business cycles.⁸ The positive and rational function of the credit system in the process of prosperity is to socially mobilize the idle money fund so as to distribute it to industrial capitalists, who need it to expand their production. This process continues so long as industrial accumulation goes on without internal difficulty as a whole. When over-accumulation occurs, however, in relation to the limit of the working population, the price adjustment mechanism is widely distorted in the final phase of prosperity, as a result of the inevitable rise of wages due to labor shortage. Speculative trading and stockpiling change the role of the credit system, and increase the proportion of speculative borrowers. As a result, the shortage of supply of idle funds in the face of an increasing demand for credit tightens banking credit, and pushes the rate of interest up even while the profit rate is falling due to a rise in wages. Tightening banking credit with a higher interest rate forces an end to speculative trading and stockpiling as typical initial phenomena of cyclical economic crisis. The financial, commercial, and industrial crises combine to destroy capital values in various forms, and increase unemployment with a reduction of wages. In the phase of depression after the crisis, industrial capital in the form of productive capacity, labor-power, and loanable money capital, tend to be idle together and cannot easily be mobilized under the conditions of depressed consumer and industrial demand. Stagnation has to be overcome toward the end of depression as fixed capitals are generally replaced so as to enable a renovation in relation of production between capitals and workers for positive industrial accumulation.

We can read and complete this sort of theory of typical cyclical economic crises in Marx's *Capital* as an essential part of the basic principles of political

economy, and utilize it as a frame of reference in more concrete analyses of contemporary capitalism.

Actually, industrial accumulation of capital in major advanced countries became excessive toward the beginning of the 1970s in relation to domestic reserves of the working population and to the supply capacity of primary products in the world market. As a result, a labor shortage – with a rapid rise in real wages together with rising prices of primary products – reduced profit rates⁹ and simultaneously promoted the speculative trading and stockpiling of primary products, just as in the last phase of prosperity in Marx's basic theory of business cycles (summarized above). However, the appearance of economic crisis took the form of an inflationary crisis at that time, as the supply of money and credit was (unlike in the classic model of business cycles and crises) not tightened but continuously expanded. These policies were pursued because this period coincided with the period of the breakdown in the Bretton Woods international monetary system and a transition to a floating exchange rate system, still under the strong influence of Keynesian belief in the use of inflationary fiscal and monetary policies to cope with economic crisis. Vicious inflation – including the first oil shock in 1973–74, resulting in rising prices for other primary products and for labor-power – caused a serious disaster in advanced capitalist economies, and kicked off a long downturn that involved a large-scale and prolonged process of industrial depression among those economies.

Just as in the phase of depression after cyclical crisis, this long downturn forced severe competition for survival among capitalists. Brenner, for instance, emphasizes the increased international competitive pressure in the world market as a fundamental cause of a long downturn with a continuous depression in industrial profit rates.¹⁰ He intends to explain why speculative bubbles and their bursting have become intermittently repetitive in the context of continuous difficulty in industrial accumulation, in contrast to Minsky's over-generalized model of financial instability. We should note that behind the increased horizontal international industrial competitive pressure, a large-scale vertical restructuring of the relations of production also took place between capitalists and workers in advanced countries in the prolonged downturn (essentially as in the phase of depression in the classic model of business cycles).

As a reaction to the advantageously elevated socio-economic position of workers, which caused the profitability crisis with vicious inflation at the beginning of the 1970s, capitalists in advanced economies worked to restore favorable relations of production. This involved in part reversing the balance between supply and demand in the context of continuous stagnation in industrial growth. In addition, they repeatedly intensified the pressure on three aspects of working conditions. First, IT facilitated more and more automated factories and offices and enabled capitalist firms to use various kinds of cheaper temporary workers, such as female part-timers. Second, multi-nationalization of capitalist business activities transformed the labor market on a global scale beyond national boundaries, enabling the use of much cheaper workers in developing countries as a powerful source of competitive pressure on workers in advanced countries.

Third, neoliberal economic policies promoted these trends by the deregulation of labor laws and foreign investment, and further weakened trade union organizations through the aggressive privatization of public enterprises in which stronger trade unions had begun to grow.

In the preceding period of high economic growth that lasted until the beginning of the 1970s, there existed in advanced capitalist countries a virtuous circle between active industrial investment, continuously rising real wages which shared the result of productivity growth cooperatively between capitalists and workers, and growth in domestic consumer demand. These features formed the so-called Fordist regime of accumulation, in the terminology of the French Régulation School. This virtuous circle turned into a reversed vicious circle in the long downturn, characterized by reduced industrial investment, depressed real wages (in spite of increasing productivity by means of advances in IT), and a continuously depressed tone in domestic consumer demand in the advanced economies. Against this background, excessive idle monetary capitals, which became difficult to fully utilize in investments in industrial factories and equipment in advanced countries, increase steadily after the 1980s, and were easily mobilized for the financialization of labor-power in the form of consumer credit. This simultaneously caused intermittent speculative bubbles and the bursting of these bubbles, culminating in the subprime world crisis.

In contrast to the Great Crisis after 1929, however, the destructive impact of the subprime crisis was relatively restricted, as the governments cooperated to rescue many banks and other financial and business corporations by injecting a huge amount of public money. Also helping to mitigate the global crisis, in contrast to the world crisis of the 1930s, was that developing Asian countries such as China and India were able to limit the decline in their growth rate (as shown in Table 1.1), at least partly due to a continuous inflow of multinational business investment from advanced countries.

At the same time, the structural impact of the subprime crisis could not easily be resolved, and instead continued to affect the advanced economies. The crisis which occurred in the banks and financial institution seems now to have shifted to a spiraling fiscal crisis of the state in many countries, including Greece, Spain, and Italy in Europe, and the U.S. itself. The risk of the failure of the state to repay state debt has caused a decline in ratings and prices of state bonds and in the exchange rates of the affected countries, thus throwing the danger of loss back to the financial sector again. The turnover of governments in the U.S., and in Japan to the Democratic Party in 2009, did not serve to solve this fiscal crisis of the state, but rather promoted it. The burden of the deepening state fiscal crisis tended to be shifted onto the shoulders of many working people, through employment and wage cuts in the public sector, and through increases in taxes and other forms of surcharge duty on workers' income. Thus the impact of the subprime global crisis is not yet past, but remains in highly unstable monetary and financial market conditions, which include the deepening crisis of states, as well as more severe living conditions for the majority of working people in most advanced capitalist countries.

The serious impact on Japanese capitalism

As we see in Table 1.1, among advanced economies the Japanese economy descended early into negative growth, in 2008, and declined more deeply in 2009, by -6.3 percent. Why was the Japanese economy so vulnerable to the sub-prime world crisis? This problem contains a paradox. When this world crisis originated in the U.S. financial bubble and its bursting in relation to the housing boom, the Japanese financial sector remained relatively stable. Japanese banks and other financial institutions were nervous about speculative risk after the bitter experience of their continuous difficulties in coping with bad loans in the 1990s, which resulted from the bursting of a huge domestic bubble in the late 1980s. Thus the share of Japan in total U.S. MBSs held abroad was just 6 percent, and relatively small in comparison with the 13 percent share of the UK or the Dutch share of 8 percent.

The U.S. and European economies spread the destructive impact of the sub-prime crisis from the financial sector to the non-financial business sectors. The Japanese real economy, by contrast, suffered most among the major advanced economies despite the relative stability in its financial sector. Why?

The reason must lie in the preceding structural weaknesses in the Japanese real economy. According to the *White Paper on the Economy and Public Finance (2008)* (Japanese Cabinet Office, 2008), the contribution to increases in demand for Japanese real GDP growth in the recovery period from the first quarter of 2002 to 2007 were 1.08 times from domestic demand, 1.08 times from consumer demand, 1.29 times from investment in plant and equipment, and 1.81 times from exports. Therefore, the Japanese economic recovery in this boom period overwhelmingly depended upon the increase in exports. While domestic demand remained quite stagnant and weak, Japanese growth was pulled along largely by the U.S. consumer boom together with the rapid economic growth in China and in other Asian economies.

Table 1.1 IMF world economic outlook, 2007–12

	Annual output: growth rate (%)					
	2007	2008	2009	2010	2011	2012
World	5.4	2.8	-0.7	5.2	3.8	3.3
Advanced economies	2.8	0.1	-3.7	3.2	1.6	1.2
USA	1.9	-0.3	-3.5	3.0	1.8	1.8
Euro Area	3.0	0.4	-4.3	1.9	1.6	-0.5
Japan	2.4	-1.2	-6.3	4.4	-0.9	1.7
Emerging and developing economies	8.9	6.0	2.8	7.3	6.2	5.4
Developing Asia	11.5	7.7	7.2	9.5	7.9	7.3
China	14.2	9.6	9.2	10.4	9.2	9.2
India	10.0	6.2	6.8	9.9	7.4	7.3

Source: IMF *World Economic Outlook*, September 2011 (for 2007–09) and January 2012 (for 2010–12).

By increasing exports, Japanese business corporations enjoyed widely distributed rising profits. The total current profit of business corporations as a whole increased by 1.8 times between 2002 and 2007, from 33.2 trillion yen to 60.5 trillion yen.¹¹ Toyota's current profit reached a historic peak of 2.2 trillion yen in both 2006 and 2007.

In contrast, average monthly cash earnings per worker continued to decline from 351,335 yen in 2001 to 333,031 yen in 2007 in the same boom period.¹² Thus, the labor share (the share of labor cost in value added) fell remarkably from 75.1 percent in 2001 to 69.3 percent in 2006. It was natural that this period was called "an economic recovery not actually felt" among Japanese people.

Such contrasting trends in income between capitalist firms and the mass of working people were a result of the neoliberal globalization of Japanese capitalism since the 1980s. In the period of high economic growth until the beginning of the 1970s, the Japanese style of the Fordist regime of accumulation expanded domestic consumer demand through more cooperative social relations between capitalists and workers (or trade union organizations): employment expanded, and real wages increased roughly in proportion to the rise in productivity and profit. After the 1980s, the continuous and repetitive economic crises depressed the Japanese growth trend, neoliberal policies weakened the social power of trade unions through privatization of public enterprises, and the impact of IT enabled capitalist firms to use more and more irregular cheap labor, especially that of women. The global competition with other Asian countries, as well as a multi-nationalization of Japanese business activities that included a tendency toward industrial hollowing out, also worked unfavorably against workers.

As a consequence, Japanese economic recovery since the 1980s had to resort either to a domestic speculative bubble economy to boost domestic demand unstably, as in the late 1980s, or to an increase in exports due to stagnant and weak domestic demand, as in 2002–07. Beside the downward trend in wages and other labor conditions, the weakness in Japanese domestic demand was aggravated also by anxiety among people in general about future economic life due both to a rapid shift toward an aging society with a diminishing younger working population, and to the fiscal crisis of the state. As the proportion of outstanding Japanese government bonds against GDP increased steadily from 28.4 percent in 1980 to 36.8 percent in 1990, to 86.0 percent in 2002, and further to 105.0 percent in 2007 – a ratio that is clearly among the worst for major advanced countries – fears about the future of pension schemes and about increases in the individual burden of medical costs (and of taxes) in an aging society tended to restrict consumer expenditure.

So long as the Japanese economic recovery in 2002–07 mostly depended on the increase in exports under these circumstances, the Japanese economy was inevitably deeply shaken by the decline of exports during the subprime world economic crisis to the U.S., to the EU, and to other Asian countries, even without much damage in its financial sector. So although the direct shock of the crisis surely arose abroad, originating in the U.S. subprime financial crisis, the main reasons why its workings were the worst for the Japanese real economy among

the major advanced economies are to be found in socio-economic weaknesses that exist in Japan.

The majority of Japanese people naturally opted for a change of government from the Liberal Democratic Party (LDP) to Democratic Party (DP) in the August 2009 general election, which followed the change to the Democratic Obama administration in the U.S. at the beginning of the same year. This electoral majority expected the election manifesto of the DP to promise more favorable policies for common people, as well as solutions addressing the fear of depopulation and ecological crisis, such as the child allowance policy and the eco-point system supporting consumer expenditures on ecologically desirable electric appliances and cars.

Actually these policies, combined with other emergency monetary and fiscal policies, worked to a considerable extent. The Japanese economic growth rate recovered from -6.3 percent in 2009 to 4.4 percent in 2010 – a considerable turnaround of 10.7 percent, which however did not yet represent a full recovery from the decline of the previous two years (Table 1.1).

However, the economic recovery in 2010 could not continue at a strong pace. The growth in output was achieved mainly by mobilizing idle capacity and idle workers in corporations and was insufficient in igniting either an expansion of employment or much investment in plant and equipment. As tax revenue did not recover much, the expansion in fiscal policy continuously increased the amount of outstanding government bonds and thus further aggravated the fiscal crisis of the state. The proportion of government bonds against GDP reached 134 percent in 2010. If the public long-term debt of local government is factored in, Japanese total long-term public debt amounted to 862 trillion yen, or 181 percent against GDP at the end of 2010. The aggravated fiscal crisis of the State did not permit the Japanese DP government to extend the time schedule of a series of pump-priming policies, including the eco-point system toward the end of 2010.

As a result, the official Japanese rate of unemployment surged back to 5.1 percent in October 2010. For younger generation workers, 15–24 years old, it reached 9.1 percent. The difficulties of new university and high school graduates in finding proper jobs became a social problem again. Thus, generally lower Japanese economic growth was predicted for 2011. For instance, already in October 2010, the IMF predicted 1.5 percent for Japan in the next year. Not a few Japanese economists even worried about the possibility of a double-dip Japanese recession in 2011.

The structural crises of the great earthquake

The great earthquake and the resulting giant tsunami on March 11, 2011 devastated a large area in the northeastern part of Japan. The magnitude of the earthquake was 9.0. It caused a giant tsunami of 10–20 meters in height, which washed away houses, factories, public buildings, cars, and fishermen's boats along a five-kilometer wide, 500-kilometer long stretch of Japan's northeastern Pacific coast.

According to the Japan Cabinet Office's *White Paper on Economy and Finance*, the total number of resulting deaths and missing persons reached 22,626, while the direct economic damage amounts to 16–25 trillion yen.¹³ This is obviously a natural disaster of a size unprecedented in modern advanced countries.

The disastrous damage to the Fukushima No. 1 nuclear power plant occurred simultaneously. The cooling systems for four nuclear power generators among six in the plant were destroyed by the unexpected height of the tsunami, causing a meltdown in reactors and a serious radiation leak. Inhabitants in a 20–30 kilometer range of the power plant were evacuated so that they could escape radioactive damage. Agricultural and marine products from the surrounding areas are blocked from shipment due to radioactive pollution. The government appealed for electricity-saving of 25 percent in the metropolitan area served by Tokyo Electric Power Company, so as to cope with the severe shortage of electric power supply.

The number of nuclear power generators in Japan is now 54, a total that comes in third globally behind 104 in the U.S. and 59 in France. These generators supplied 29 percent of total Japanese electric power in 2009. In August 2011, only a quarter of the 54 nuclear power generators were working, with the others being either destroyed by the earthquake or stopped for regular inspection. Further, by the beginning of May 2012, all the nuclear power generators stopped for inspection. After the Fukushima nuclear accident, the government has had to be much more concerned with worry about safety among the inhabitants near these plants than the feasibility of reopening them.

The economic damage from the great earthquake and giant tsunami is thus combined also with the serious disaster of the Fukushima nuclear accident. As the disaster-stricken area contained many components factories in automobile, electric appliance and other industries, the shredded supply-chain badly affected Japanese industrial activity as a whole. Added to this is the severe reduction in electric power supply. In the first quarter (January–March) of 2011, investment in plant and equipment has already declined by 0.9 percent, consumer spending by 0.6 percent, and thus Japanese real GDP fell by –0.9 percent, or by –3.7 percent on an annual basis. In the second quarter (April–June), it continued to fall by –0.3 percent, or a –1.3 percent annual rate, which resulted in –0.9 percent decline in annual average in Table 1.1.

The predicted double-dip recession after the subprime crisis thus appeared not only as a reaction to the termination of emergency policies such as the eco-point system, but as a reaction to the more severe impacts of an unexpected natural disaster. The IMF, reflecting the view of the Japanese government, reduced the outlook for the 2011 Japanese annual real growth rate from 1.4 percent in April, to –0.9 percent in January 2012 – a 5.3 percent of deduction from the growth rate in 2010 (Table 1.1).

The structural crises in Japanese economy have thus surely deepened. Another factor contributing to this growth reversal results from the fiscal crisis that has affected states caught in the subprime crisis: the decline in the state

bonds of some European countries, along with similar dangers for the U.S., has weakened the exchange rates of the euro and dollar anew, resulting in a soaring yen. Japanese exporting industries are losing their competitive power and profits as the yen undergoes a huge appreciation to less than 76 yen against the dollar, a historically unprecedented high. This actually led the Japanese annual growth rate for 2011 to a wide decline to -0.9 percent as we have seen, and continues to depress the Japanese economy in 2012.

It is paradoxical to see such an appreciation of the Japanese yen in these years of the subprime and great earthquake crisis, at a time when Japan has the highest proportion of state debt against GDP and the worst fall in GDP among the major advanced economies. This puzzle can be deciphered to a certain extent by observing two factors: the high savings rate of Japanese households, which has enabled Japan to absorb its cumulative state debt domestically; and the competitive strength of exporting industries, which has permitted Japan (thus far) to maintain a continuous trade surplus.

However, combined with the difficulties created by the appreciation of the yen, the double shocks of the subprime and great earthquake crisis have led to steady deterioration in the labor market and in working conditions in Japan. Prime minister Kan legislated for a reduction of corporation tax by 5 percent (by about 1.5 trillion yen) from fiscal year 2011, expecting to encourage an increase in domestic employment, though its enforcement is now postponed due to the deepening fiscal crisis of the state. The expectation also would not easily be realized, as many Japanese corporations are forced to shift their factories and offices to other Asian countries to escape the difficulties posed by a stagnant domestic market, by a damaged supply chain, and by the unfavorable exchange rate.

The state expenditure needed for recovery and reconstruction after the great earthquake and giant tsunami, including compensation support for people suffering from the nuclear disaster and radioactive pollution, is now estimated to amount to about 23 trillion yen in ten years, with its largest part required in the first five years. Consequently, the Japanese government is considering an increase in consumer taxes on the order of 10 trillion yen on a temporary five-year basis. It has become a focal political issue for the present Noda cabinet in June 2012, while there are strong worries among people that such an additional tax burden would further depress weak domestic demand and employment.

Here are a series of serious problems for us to reconsider. Is the Keynesian-oriented belief in the effects of a government fiscal deficit in the case of a need for economic recovery not too optimistic beyond the some limit of state debt? How to judge the limit, if there is one, in the case of Japan, in comparison with the international regulation within EU or the domestic law in the U.S.? Without any clear limit or regulation of state debt now discernible in Japan, is there not a danger for politicians to avoid cuts of public budget or to avoid any increase in tax burden for fear of losing votes and support by bureaucrats? These seem open questions still to be argued, although the Keynesian social democratic policies are generally preferable to the neoliberal austerity policies from the point of view of working people.

In any case, the process of moving from the subprime to the great earthquake crisis in Japan, has given renewed strength to a structurally vicious circle among more severe and unstable working conditions, depressed domestic demand, a shift of business investment to abroad, and a deepening fiscal crisis of the state. And as long as it remains seriously aggravated by the current appreciation of the yen, the Japanese crisis is still much affected by the continuous afterbirth-like disastrous impact of the fiscal crisis of the states in EU countries and the U.S. that resulted from the global subprime crisis.

In comparison with the subprime crisis, which clearly stems from the contradictory self-destruction of a capitalist market economy unleashed from social controls, the great earthquake crisis is apparently a natural economic disaster. However, it also contains certain social problems stemming from market-oriented economic development under capitalism. In so far as a capitalist society naturally tends to give business profit-making the highest priority, we have to doubt anew if its economic order and technological path of development would, on its own, realize a truly safe and secure basis for the general population. Japan was proud of having the most advanced industrial technologies in defensive measures against tsunamis and earthquakes, as well as having reliable security systems in nuclear power stations – all promising businesses with prospects for being salable in the global market.

Confidence in Japanese advancement in industrial technologies for utilizing or controlling great natural disaster events has been much shaken and destroyed by the current natural disaster. Though this natural disaster, unlike the subprime crisis, is directly an exogenous calamity, its destructive effects have been aggravated by elements endogenous to the capitalist economy. For one thing, throughout the historical development of Japanese capitalism, there has been a strong tendency to concentrate more and more business sites, work places, inhabitants and houses into harbors and coastal towns without investing sufficient public money for defensive measures against tsunamis and earthquakes. Especially under the capitalist private ownership of land, it is very difficult to know how to plan to reconstruct a really safe society from a geo-economic point of view.

The Fukushima nuclear accident is more obviously a social man-made calamity. In the mind of the majority of Japanese people, this overlaps with the historical nightmare experience of the atomic bomb disasters in Nagasaki and Hiroshima. Although it is not easy to compare objectively social costs, including radio-active pollution danger, with other energy paths,¹⁴ the majority of Japanese people are now encouraged by anti-nuclear movements in the world and by the de-nuclearization policies adopted in Germany, Italy, Sweden, Belgium, Austria, and Australia, among others.

We are forced to reflect on the whole process from the subprime to the great earthquake crisis in Japan and to rethink together how to fulfill our responsibility for reorienting the social development path to realize a truly safe and stable economic life for people. The idea of basic income, for instance, must serve as a promising reform suggestion for reconstruction if it is applied initially to inhabitants in the afflicted areas or persons evacuated from there.¹⁵ Attempts to expand

cooperative (co-op) associations and unions among workers and consumers in the afflicted local areas as well as among supporters from other areas are being organized as a serious alternative that stands against the tendency to let just the capitalist big businesses work for reconstruction. At the same time, we are probably witnessing a new political possibility for a way out from global governance under U.S. hegemony, involving the lessons learned about the important issue of energy policy from the tragic nuclear crisis in Japan.

Notes

- 1 This section basically summarizes my analyses in Itoh (2009, 2012), which owe much to Costas Lapavistas' cooperation. I am grateful for Brill publishers' permission to reuse the summary of my paper which appeared in C. Lapavistas, (ed.) (2012), *Financialization in Crisis*, Leiden and Boston: Brill.
- 2 Kaneko and De-Wit (2008), p. 9.
- 3 Mizuho Research Institute (2007), pp. 69, 77.
- 4 Japan Cabinet Office, Policy Planning Room (2007), p. 7.
- 5 This notion is similar to Lapavistas (2012), for whom financial expropriation of wage workers generally characterizes the financialization of contemporary capitalism.
- 6 Japan Cabinet Office, Policy Planning Room (2007), pp. 7–8.
- 7 See Minsky (1982) on this theoretical model.
- 8 K. Uno (1953) and his followers in Japan have underlined this aspect of Marx's contributions to the basic principles of political economy. They have also attempted to complete Marx's basic theory of cyclical crises in accord with Marx's notion of over-accumulation of capital in relation to the working population, as summarized below, taking into account that there remained in *Capital* different types of crisis theory in mutually inconsistent and unfinished models. See Itoh (1980, 1988, 1999) more in detail.
- 9 According to A. Glyn (1988), by 1973, prior to the effect of the first oil shock, the aggregate profit rate in seven major capitalist countries fell by 20 percent from the precedent peak. Three-fourths of that fall is explained by the profit squeeze due to rising prices of labor-power and raw materials, while one quarter is attributable to the fall in output/capital ratio.
- 10 See Brenner (2002) among others.
- 11 Japan Ministry of Finance (2008).
- 12 Japan Ministry of Health, Labor, and Welfare (2008).
- 13 Japan Cabinet Office (2011), p. 11.
- 14 For instance C. Busby estimated that the risk of excess cancer among the 3 million people living in the 100 kilometer radius of the Fukushima catastrophe for one year is about 200,000 in the next 50 years, with 100,000 being diagnosed in the next ten years (www.llrc.org/fukushima/subtopic/fukushimariskcalc.pdf). However, according to an email communication from Bob Rowthorn, C. Busby is regarded as a controversial person even among green campaigners, and may have exaggerated the danger. I feel myself not qualified properly to judge the objectivity of this estimation, though it made a strong impression among concerned Japanese people on news web-sites.
- 15 Seeing that the bureaucratic systems of both central and local government are too slow to be able to complete redistribution of the donated funds to inhabitants in afflicted areas within several months, the idea of basic income without a means test seems attractive as a quick and efficient public policy of redistribution. As I have argued elsewhere (Itoh, 2011), the idea of basic income has wider social possibilities beyond the reform idea for a social security system within a capitalistic social democratic tradition.

References

(Titles in square brackets are translated from Japanese).

- Brenner, R. (2002), *The Boom and the Bubble*, London: Verso.
- Glyn, A. (1988), Behind the Productivity Trends, *The Economic Review* (Hitotsubashi University), vol. 39, no. 3, July.
- IMF (2009, 2010, 2011), *Economic Outlook* (June or July).
- Itoh, M. (1980), *Value and Crisis*, London: Pluto, and New York: Monthly Review.
- Itoh, M. (1988), *The Basic Theory of Capitalism*, London: Macmillan, and Totown: Barnes and Noble.
- Itoh, M. with C. Lapavitsas (1999), *Political Economy of Money and Finance*, Houndmills: Macmillan, and New York: St. Martin's.
- Itoh, M. (2009), [*From the Subprime to the World Crisis*], Tokyo: Seidosha.
- Itoh, M. (2011), [The Notion of Basic Income Reconsidered], *Sekai*, March, also in [*Makoto Itoh's Collected Works*, vol. 6], Tokyo: Shakai-hyoronsha.
- Itoh, M. (2012), The Historical Significance and the Social Costs of the Subprime Crisis, in C. Lapavitsas, ed. (2012), *Financialization in Crisis*, Leiden and Boston: Brill.
- Japan Cabinet Office (2008, 2011), [*White Paper on the Economy and Public Finance*].
- Japan Cabinet Office, Policy Planning Room (2007), [The Background and the Influence of the Subprime Housing Loan Problem], [*Tide in the World Economy*] (Fall).
- Japan Ministry of Finance (2008), [*Statistics on Business Corporations*].
- Japan Ministry of Health, Labor and Welfare (2008), [*White Paper on Labor*].
- Kaneko, M. and De-Wit, A. (2008), [*The World Financial Crisis*], Tokyo: Iwanami-shoten.
- Lapavitsas, C. (2012), Financialised Capitalism: Crisis and Financial Expropriation, in C. Lapavitsas, ed. (2012), *Financialization in Crisis*, Leiden and Boston: Brill.
- Lapavitsas, C., ed. (2012), *Financialization in Crisis*, Leiden and Boston: Brill.
- Minsky, H.P. (1982), *Can "It" Happen Again?* New York: M.E. Sharpe.
- Mizuho Research Institute (2007), [*The Subprime Financial Crisis*], Tokyo: Nihonkeizai-shinbunsha.
- Uno, K. (1953), [*The Theory of Economic Crises*], Tokyo: Iwanami-shoten.

2 The global financial crisis

The instability of U.S.-centered global capitalism

Tetsuji Kawamura

Introduction

The global financial crisis, American in origin and triggered by the subprime loan meltdown, has developed into a very serious “once-in-a-century” global financial and economic crisis (Greenspan 2008, amongst others). The severe liquidity crisis and the dysfunction of financial and credit markets, including the interbank market, spawned a loss of confidence and growing fear in credit markets. This led to a rapid across-the-board shrinkage of consumption, production, and employment, including the sharp contraction of the American and global automobile markets. Accompanied by sharply plunging stock prices, the rapid and serious adverse impact of the crisis has spread across the real economy, accelerating a cumulative downward global spiral. As a consequence, the United States and other major industrial nations slipped into negative growth, emerging economies slowed, and the economies of the peripheral countries collapsed. This event gave rise to widespread fears that the 1930s’ Great Depression would soon have a second coming.

The dominant view had it that the global financial crisis came about because speculative credit expansion through the “securitization mechanism” with its “institutional” defects, which fed on the dilation of the financial sector (“financialization”) and globalization of financial services over recent years, crumbled on the subprime loan market collapse and the bursting of the “housing bubble.”¹ There is even a simplistic extreme argument reducing the latest crisis to the “speculative nature of money” and capitalism, an analysis made in utter disregard of the historical development of real capitalism (Iwai 2008, and elsewhere).

However, while its origin was in the United States, the global financial crisis cannot simply be attributed to the growth and collapse of financial bubbles within that nation. Key linkages of the new nexus of global capital accumulation that emerged in, and have centered on, the United States have started to go into reverse on a grand scale, triggered by the paralysis of financial functions. This is shown by the fact that the rapid and mutual acceleration in the contraction of the real economy has developed into a chain reaction not only within the United States but across the world. Alan Greenspan alluded to this in his statement about a “once in a century event.”

Thus, the financial crisis should be understood as a global crisis of American origin caused by key linkages within the new nexus of capital accumulation itself. This chapter addresses the current financial crisis from this perspective, by focusing on the United States, which is the seismic center both of this crisis and of the current historical phase of modern capitalism.²

An outline of the subprime crisis

The subprime problem and the global financial crisis

Subprime loans are a generic term used to describe loans (mortgage loans, payday loans and so on) to individuals with a low credit standing relative to conventional credit bureau FICO (Fair Isaac Corporation) scores and other lending standards. The subprime problem in the latest financial crisis involved mortgage loans. The chronological development of the subprime loan crisis, which triggered the global financial crisis and the ensuing overall financial crisis, is summarized below.

Subprime mortgage loans in the United States began to expand in the early 1990s as part of the prolonged economic boom, increasing from \$3.5 billion in 1994 (4.5 percent of mortgage loans to families of one to four) to \$600 billion in 2006, and accounting for 20 percent of the total (Bernanke 2008). Low interest rates during the recession that occurred between the collapse of the “IT bubble” of the 1990s and the 9/11 terrorist attacks of 2001 touched off a remarkable increase in subprime mortgage lending (see Figure 2.1 and Table 2.1). The securitization

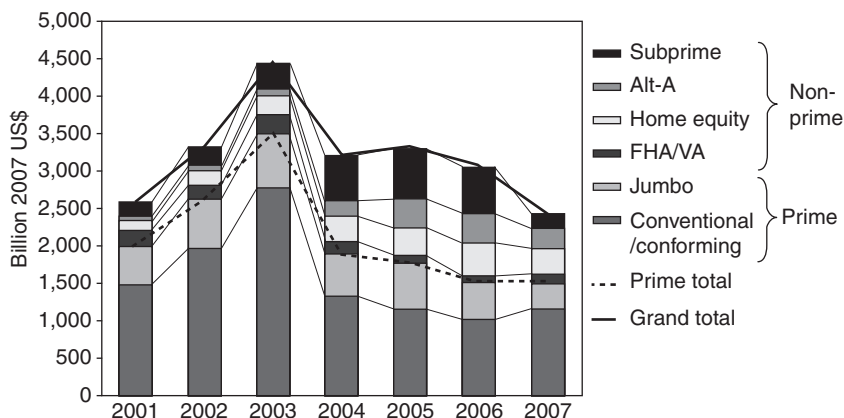


Figure 2.1 Residential mortgage loans and their composition, 2001–07 (source: prepared from *Mortgage Market Statistical Annual 2008*, www.insidemortgagefinance.com; Joint Center for Housing Studies, Harvard University, *State of the Nation’s Housing 2008*, Appendix, Table A-6).

Note
CPI adjusted dollar values.

Table 2.1 Subprime home mortgage loans and their securitization, 2001–04

	<i>Total home mortgage loans (US\$ billion)</i>	<i>Subprime mortgage loans (US\$ billion)</i>	<i>Share of subprime loans (%)</i>	<i>Subprime MBS (US\$ billion)</i>	<i>Ratio of securitization of subprime mortgage loan (%)s</i>
2001	2,215	190	8.6	95	50.4
2002	2,885	231	8.0	121	52.7
2003	3,945	335	8.5	202	60.5
2004	2,920	540	18.5	401	74.3
2005	3,120	625	20.0	507	81.2
2006	2,980	600	20.1	483	80.5

Sources: Inside Mortgage Finance, *The 2007 Mortgage Market Statistical Annual, Top Subprime Mortgage Market Players and Key Data (2006)*. U.S. Joint Economic Committee, “The Subprime Lending Crisis: The Economic Impact on Wealth, Property Values and Tax Revenues, and How We Got Here,” Report and Recommendations by the Majority staff of the Joint Economic Committee, Senator Charles E. Schumer, Chairman and Rep. Carolyn B. Maloney, Vice Chair, October 2007, p. 18.

mechanism, through such instruments as residential mortgage-backed securities (RMBS), asset-backed securities (ABS) and collateralized debt obligations (CDO, a kind of ABS backed by a pool of bonds, loans and other assets), provided an important means of diversifying risks, and attracted massive speculative and other investment funds both at home and from abroad, including hedge funds and investment money from Europe. This stimulated mortgage loans (as described below). In this process, the quality of lending deteriorated markedly, and predatory lending expanded.³

Rising interest rates (which began to increase in the latter half of 2004) and falling house prices after mid-2006 led to loan delinquencies, particularly on hybrid adjustable rate mortgages (ARMs). “Hybrid” ARMs, approved by regulators in 1979, involve interest and principal repayments that typically rise substantially two to three years after they are initiated. The volume of ARMs, especially hybrid ARMs, expanded sharply in 2003–04, accounting for the bulk of mortgage loans in that period.

Consequently, when the bubble began to burst, homes with ARM loans experienced a rapid increase in foreclosures; and from early 2007, prices of RMBS backed by degrading subprime loans began to plummet (see Figure 2.2). These sharp price decreases soon spread to ABS and other securitized instruments, bringing about massive losses to American and then European banks, investment banks, securities firms and hedge funds⁴ – and culminating in the liquidity crisis. Monoline insurance firms that provide guarantees to bond issuers also suffered deep financial troubles, and these spread credit uncertainty to engulf the entire securitized products market. Major financial failures ensued and further aggravated the turmoil, especially the bailout merger in March 2008 of Bear Stearns, the fifth largest securities firm in the United States, following its huge subprime-related losses.

Beyond the specific dynamics of the subprime crisis itself, the United States in the summer of 2008 was caught up in the wider negative spiral of a deteriorating

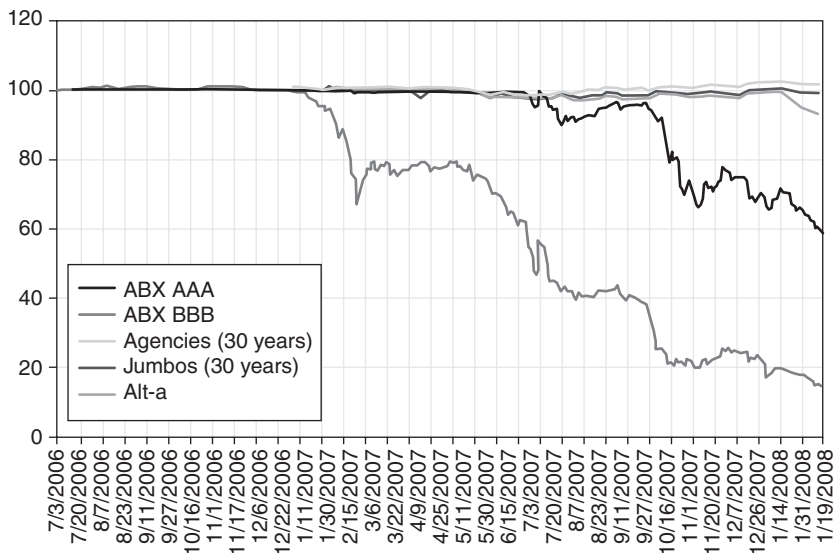


Figure 2.2 Prices of U.S. mortgage-related securities (US dollars) (source: JPMorgan Chase; Lehman Brothers; IMF 2008, p. 6, Figure 1.9).

Notes

ABX = index of credit default swaps on mortgage-related asset-backed securities; MBS = mortgage-backed security.

real economy and expanding financial insecurity. The prices of crude oil, food, and other commodities increased sharply, due largely to massive inflows of investment money into commodities markets. These conditions encouraged speculative manipulation, pushed up costs, and dampened consumption.

What followed was the dysfunction of the entire securitization market and the financial impairment of banks and other financial institutions. This in turn caused the credit crunch and a contraction in lending, as well as the functional deterioration of the financial markets, including the bond and commercial paper (CP) market. In particular, the failure of Lehman Brothers on September 15, 2008, sent stock markets tumbling globally. Then came the breakdown of the CDO market, which is centered on synthetic CDOs that incorporated credit default swaps (CDS) and other derivatives. The CDO market is far larger in size and more speculative than the markets for MBS and other securitized products, so its collapse deepened the overall financial crisis. That crisis, interacting with trends in the battered real economy, accelerated the negative spiral. The result was a substantive structural crisis similar to that of the “Great Depression” of the 1930s, threatening a complete collapse of the financial system itself.

A basic perspective on the global financial crisis

The development of the global financial crisis can be interpreted in terms of three broad processes. First was the subprime crisis and its immediate cause, the growth and subsequent collapse of the “housing bubble” in the United States. The housing bubble itself developed because of the massive inflows of hot money and other domestic and overseas investment funds into the housing-financing market via securitization mechanisms, including risk transfers, after the bursting of the “IT bubble” of the late 1990s. These flows and the housing bubble reached a peak in the 2003–05 period. Second was the expansion of subprime loans, particularly to ethnic minorities. These loans fed the “housing boom” and, because of their especially precarious contractual terms, created the conditions for the subprime crisis.

Subprime lending itself demonstrates how this financial crisis was “made in America.” It was one of the forms of “predatory lending,” various credit vehicles provided primarily to ethnic minorities at higher interest rates, for higher fees, and at worse terms and conditions than were “mainstream” loans. From lenders’ perspective, these loans responded to the Community Reinvestment Act (CRA), which aimed at reversing the “redlining” of minority areas and the discriminatory treatment of ethnic minorities in mortgage-backed lending (and other credit markets). The CRA, together with the Civil Rights Act, represented an effort to overturn the federal policies and “restrictive covenants” that both generated the American pattern of residential racial segregation and compromised minority areas’ successful development.⁵ From the viewpoint of the community activists whose efforts had secured the CRA, however, subprime lending (and other forms of predatory lending) only demonstrated that when minorities and minority areas did receive access to housing finance, it would only be on discriminatory terms.⁶

Third, however, the bubble-like development and collapse of the U.S. “housing boom” is a direct extension of the long economic boom of the 1990s, in particular the development and collapse of the “IT bubble.” We will argue below that both of these trends have to be seen in the context of the new linkages and mechanisms of U.S. economic expansion (that is, the capital accumulation system) that developed during the period of the decline and transformation of postwar Pax Americana after the 1970s.

In the meantime, a new phase of economic expansion on a global scale emerged through a set of linkages involving the globalization of companies, finance and information as well as the neo-liberal transformation of government functions in the United States. These linkages revolve around the key currency role of the U.S. dollar and the financial facility of the New York global financial center. This combination links, as node and intermediary, the “global city” function and the “new empire circuit” of capital flow centered in the U.S. The nexus created by these linkages has defined the sequence of U.S. economic cycles since the 1990s, including the unusually long boom, the formation and collapse of the “IT bubble” toward the end of that boom, and the subsequent “housing bubble”

and its bursting. The latest global financial crisis emerged from this nexus. In this sense, that crisis has to be analyzed not just as a simple case of a financial bubble, but as a result of the decline and transformation of postwar Pax Americana – and specifically of the movement of the United States toward global capitalism after the mid-1970s. This latter has been a key feature of the present phase of the transformation of the global capital accumulation system, denoted here as “modern capitalism,” both in the United States and in the financial world that centers on the United States.

The long boom, the 1990s IT bubble, and the subprime loan problem

Characteristics of the long boom in the 1990s and the “IT boom”

How is the long economic boom of the 1990s linked to the “housing boom” of the 2000s? As elaborated in Kawamura (2008a), two factors made the long post-1991 American boom possible. The first was improved corporate earnings, which stemmed from cost reductions resulting from the post-1980 restructuring of the postwar corporate system. This business restructuring was accomplished via offshoring and outsourcing (globalization), via management innovations such as business process innovation, and via the introduction of “lean” production systems and the reorganization of rigid traditional labor-management relations. The second factor was low interest rates, helped by narrower budget deficits, which resulted from fiscal reform and the “peace dividend” following the end of the Cold War. Low interest rates and improved corporate earnings brought about a substantial expansion in corporate capital spending. This was the dynamic of the economic expansion of the early 1990s.

The “IT boom” from the mid-1990s onward added to this dynamic and led to an unusually lengthy economic boom. The “IT boom” in the latter half of the 1990s came about as newly established companies and venture firms, notably “dot.com” companies emerged amidst a venture capital boom as flag-bearers of the “IT revolution.” The initial public offering (IPO) craze and the zooming share prices on the high-tech stock-dominated NASDAQ exchange drew massive amounts of investment and speculative funds to Silicon Valley and other IT clusters (see Figure 2.3). This generated a major phase of economic expansion, with the New York securities market – and NASDAQ in particular – and New York’s global-city financial facilities acting as the main nexus.

The “flight to quality” after the 1997 Asian currency crisis increased the flow of investment funds, including hot money, into the IT-related sector, resulting in a bubble-like expansion of the “IT boom.” These developments led to sharp rises in the IT-related capital spending that drove the economic expansion forward; meanwhile, the strong earnings performance of major IT companies spread to the “old economy” and led to an upward trend in its firms’ share prices. Thus growth in the “new economy” and “old economy” alike combined to accelerate the economic expansion, which increasingly took on the nature of a boom linked

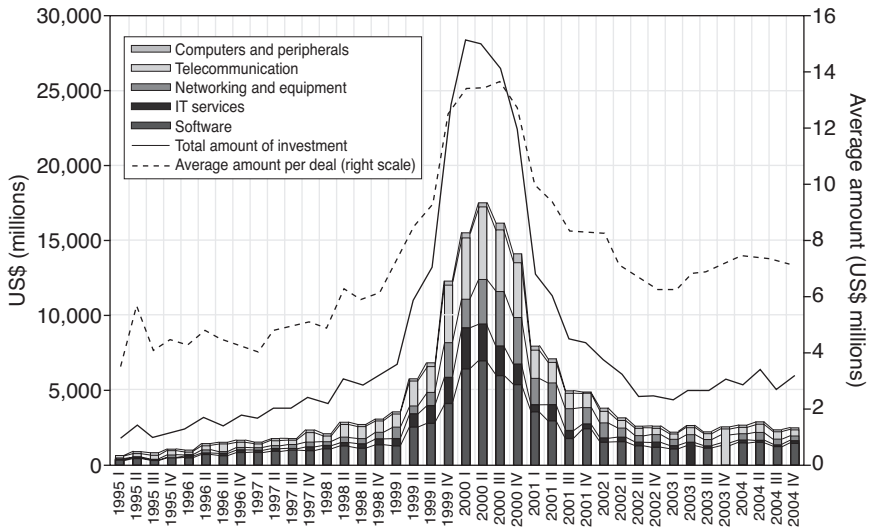


Figure 2.3 Venture capital investment: quarterly, 1995–2004 (source: Prepared from data from Pricewaterhouse Coopers/National Association of Venture Capital (www.pwcmoneytree.com/MTPublic/ns/)).

to stock and other asset prices. Such, in outline, are the real circumstances of the “new economy” phenomenon.⁷

What is noteworthy in relation to the subprime problem that triggered the latest financial crisis is that the housing sector also perked up toward the end of the 1990s and further spurred sustained U.S. expansion. Backed by stability in interest rates and steady income growth, the baby boomers who had become first-time home buyers in the 1980s showed strong replacement demand for more expensive, larger houses, providing a boost to a robust housing market. Facilitated by rising home prices (see Figure 2.4) and the relative stability of interest rates, and by new housing financing mechanisms established after the 1980s savings and loan (S&L) crisis, including the expansion of jumbo loans, issues of new home mortgage loans grew robustly, as did refinancing and home-equity loans (see Figures 2.1 and 2.5). The additional income derived from cashing in on rising house prices supported robust consumer spending, further fueling a sustained boom.

Particularly noteworthy was the rapid growth of adjustable rate mortgages (ARMs, approved in 1979), which, coupled with the securitization mechanism, helped expand mortgage-backed loans to non-white borrowers. A conspicuous feature of the home ownership rate, which grew by almost 70 percent in April–June 1999, was the rise in ownership among non-whites. This in part resulted from a number of measures to help expand home-financing opportunities for minority people on low incomes, including the Community Reinvestment Act

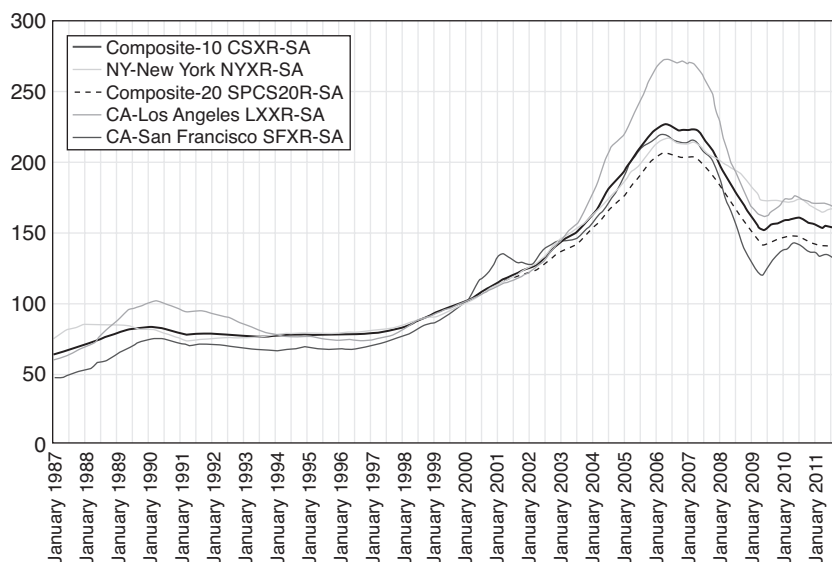


Figure 2.4 S&P/Case-Shiller home price indices: monthly, 1987–2011 (source: Prepared from S&P/Case-Shiller Home Price Indices, May 2008 (published July 29, www2.standardandpoors.com)).

Note

Three-month moving average. Including two-month lag.

(CRA) and disclosure of credit information and borrower information (Dymski 2007, pp. 8–9). Then Federal Reserve Chairman Alan Greenspan described this as progress in the “democratization of credit” (Greenspan 1997). In reality, however, the basic conditions for the subprime loan crisis were gradually being formed. Federal financial regulators, as early as the late 1990s and up to 2001, expressed concern over unscrupulous subprime loans and sounded a warning to those who were prepared to listen.⁸

Responses to the collapse of the IT bubble and the housing boom

The “IT boom” was a speculative boom based on expectations that in fact overplayed the growth of IT and the Internet far beyond existing realities, and had a strong tendency toward the development of “bubbles” inflated by a massive inflow of volatile investment money.⁹ Not surprisingly, the boom collapsed when the Federal Reserve Board (FRB) tightened credit in response to the emerging negative aspects of the long economic expansion. These included signs of inflation such as labor shortages and rising oil prices as well as a steep fall in the savings rate. Between August 1999 and March 21, 2000, the FRB raised the target federal funds rate by 0.25 percentage points four times; and on May 19, 2000 it increased this rate by 0.5 percent.¹⁰

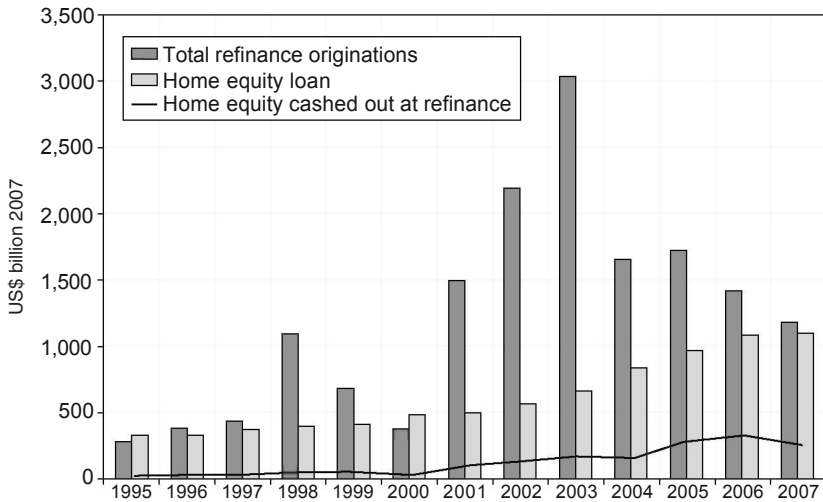


Figure 2.5 Mortgage refinance, cash-out and home equity loan volumes, 1995–2007 (source: Freddie Mac, Cash Out and Refinance data; Freddie Mac, Economic and Housing Market Outlook, February 2008; Federal Home Loan Mortgage Corporation).

Notes

Dollar values adjusted for inflation using the CPI-U for all items. Home equity cashed out at refinance is difference between size of mortgage after refinance and 105% of balance.

The NASDAQ Composite Index plunged from a peak of over 5,000 in March 2000 to one-third that level in early September 2001 (just before the 9/11 terrorist attacks), falling further to 1,100 by autumn 2002. IT investment declined sharply after the first quarter of 2001. Sluggish IT-related demand, shrinking capital spending after the stock market plunge, as well as the “negative wealth effect” of the plunge on consumer spending, set off a downturn in economic activities. The unemployment rate climbed from less than 4 percent in early 2001 to nearly 6 percent by January 2002. New York Stock Exchange (NYSE) prices, which had been moving sideways, turned down as of spring 2000; the shock of the 9/11 terrorist attacks in autumn 2001 sent the Dow Jones Industrial Average spiraling down to 7,600 by March 2003.

However, the FRB’s credit easing and the administration’s expansionary policy, including the Bush tax cuts and spending on both homeland security and the Afghanistan and Iraq wars, averted a major downturn in the growth of the American economy.¹¹ Particularly important was the adoption of an extremely easy credit policy. The FRB already began to ease its grip on credit in January 2001. In response to the financial-market paralysis induced by the shock of the 9/11 terrorists attacks, the FRB made emergency rate reductions in the Fed discount federal funds rates, cutting them by 0.5 points in early October and again in early November. These key interest rates ultimately declined to the extremely

low levels of 2.0 percent and 1.0 percent respectively, by late January 2002 (the peak level before the easing cycle set in was 6.0 percent for the discount rate and 6.5 percent for the target federal funds rate in late May 2000). This extremely easy credit policy can be seen as an attempt to avert asset deflation in the wake of the collapse of the “IT bubble,” which had increasingly taken on the nature of a “boom linked to stock and asset prices” (see Greenspan 2007, translation, pp. 331–335).

In fact, by the end of 2003, NYSE prices recovered to the levels of the late 1990s. The NASDAQ Composite Index regained the 2,000 mark in early 2004 and continued to rise thereafter. What should be emphasized in relation to the latest financial crisis is that extremely easy credit conditions caused a major shift in the flow of volatile investment money from the “IT bubble” to housing finance, and helped sustain and expand the “housing boom” while expanding speculative financial operations through the securitization mechanism. In this sense, the “housing bubble” and its collapse, which triggered the latest financial crisis, can be understood as an extension of the “IT bubble” and *its* collapse.

The record-setting decline in mortgage loan rates led to an expansion of new mortgage lending and refinancing (see Figures 2.1 and 2.5); this facilitated further increases in housing prices, while at the same time boosting consumer spending. In the first three quarters of 2002, a period that encompassed a high point in the refinancing boom, \$59 billion was cashed out from conventional housing loans. This cash was used primarily to support consumption expenditure, thus pushing up GDP in this same time-frame by an estimated 0.4 percentage point (CEA 2003, translation, pp. 40–41). In 2003 and 2004, subprime loans increased substantially in the context of an American economy registering a particularly strong recovery (see Figure 2.1 and Table 2.1).

The expansion of housing finance and the “housing boom”

Government-sponsored enterprises (GSEs), especially Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), have been central components in the U.S. housing finance system throughout the postwar period. They have underwritten a large share of “conforming” loans – that is, loans below a predetermined ceiling level that “conform” to loan/income requirements.

During the late 1990s and early 2000s, the ratio of GSE-underwritten loans to total housing loans increased, reaching as high as 47.1 percent in 2003. Since housing prices were rising, the GSEs – especially Fannie Mae and Freddie Mac – maintained their share of the market by raising the ceilings on conforming loans. The ceiling level for conforming single-family homes was raised from \$252,700 in 2000 to \$275,000 in 2001 and to \$359,650 in 2005. Securitization programs by GSEs expanded as well (see Table 2.1). At the same time, there was a marked expansion in jumbo loans – those whose level exceeded conforming loan ceilings – and in home equity loans. The weight of subprime mortgage loans in the overall market also increased rapidly (see Figure 2.1).

From 2004 onward, housing finance by private-sector lenders other than GSEs and commercial bank and other traditional home loan providers expanded (see Figure 2.6), putting into place one of the immediate causes of the subprime crisis. This shift involved a massive inflow of volatile investment funds – especially from hedge funds and other sources of hot money – into housing finance, primarily through the securitization mechanism.

These developments are centrally important to the argument advanced here. First, housing mortgage loan originators were able to transfer risks by selling those mortgages to investment banks and other buyers through securitization. Second, financial institutions, because they could readily avoid risk-bearing, were able to expand high-risk loans. This made it easier to extend loans to borrowers with low credit standings. Subprime housing mortgage loans almost doubled between 2002 and 2004; these loans' securitization ratio reached 70 percent in 2004 and topped 80 percent in 2005 and beyond (see Table 2.1).

Third, the investment banks and securities firms that bought these loans so as to structure them into instruments such as MBS and ABS were regarded as being capable of broadly diversifying the risks of the loans they bought – even when they were purchasing subprime and other high-risk loans. It was commonly believed that these large firms would maintain financial soundness, in part by keeping these loans off their balance sheets through the use of structured

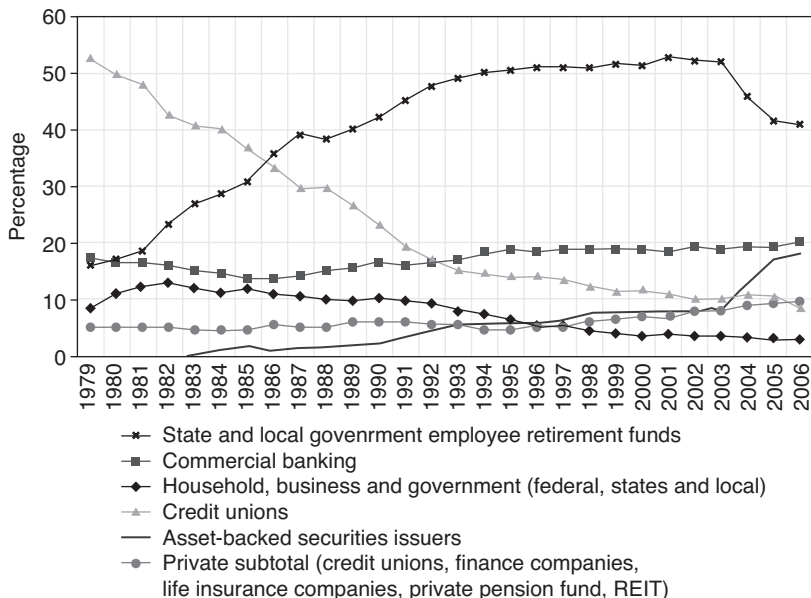


Figure 2.6 Mortgage debt outstanding by type of property and holder, 1979 to 2006 (source: Prepared from Board of Governors of the Federal Reserve System, "Federal Reserve Statistical Release, Z.1: Flow of Funds Accounts of the United States," published March 8, 2007, Table 1161 (www.federalreserve.gov/releases/z1/20070308)).

investment vehicles (SIVs). Similar mechanisms were used to expand the issuance of collateralized loan, bond, and debt obligations (known respectively as CLOs, CBOs, and CDOs). Thus, through multiple stages of increasingly complex operations, banks and securities firms drew investment funds from a wide range of sources, domestic and overseas, into securitization processes entailing broad risk diversification and multilayered risk premiums.

Securitization as established in this period built in a mechanism for accelerating the inflow of hot money. Each securitization and re-securitization process, when originated, involved carving the underlying assets and risks into tranches on a stratified basis, using financial engineering techniques. This stratification of assets by risk-class ensured high credit ratings for a large share – if not all – of the paper originated, and thus represented a mechanism for embedding high credit ratings in a wide range of securitized products.

Generally speaking, the senior/subordinate structure divides securitized assets into low-risk and low-return senior tranches, middle-risk and middle-return mezzanine tranches, and high-risk and high-return equity tranches. The last are the first to incur losses in the event of default. Even when BBB-rated (the lowest investment-grade rating) RMBS are included, senior tranches were given the top rating of AAA. The overall risk distortion brought about by the structuring of AAA-rated senior tranches was tucked into equity tranches. Various hedge funds came forward as the primary risk-takers, purchasing high-risk, high-return CDOs and other securitized instruments. Leveraged loans (syndicated loans with low credit ratings) for hedge funds, investment funds and real estate funds expanded substantially, fueled by banks' credit extension.

Thus the financial boom developed in the United States in the early 2000s. It was led by a rapid escalation in house prices, whose major driver was the massive inflow of volatile domestic and overseas investment funds into the housing finance and other financial areas, an inflow that involved a surge of speculative funds (such as hedge funds) into high-risk tranches via the securitization mechanism. As noted above, this inflow can be traced to the "IT boom" of the late 1990s, which had attracted massive amounts of investment and speculative funds into New York's financial facilities, especially its securities markets. With the collapse of the "IT bubble," volatile investment funds flowed into housing and accelerated the housing boom. These funds' pursuit of high returns insured a concentrated inflow into subprime loan-linked high-risk securitized.

The major focus here is on the forces that drove both booms, and that are inherent in the tide of American global capitalism. A key in this era was "financialization" (Epstein 2006), which emerged as a striking feature of postwar Pax Americana, and which both facilitated a new phase of economic expansion (the sine qua non of capitalist accumulation), but at the same time gave rise to a new and unstable financial system, based in the United States, which has had increasingly important ramifications throughout the rest of the world.

American global capitalism and the emergence of a new nexus of economic expansion on a global scale

The development of financialization

“Financialization” can be seen as a process in which financial transactions grow far in excess of the size of the real economy. It was brought about by the decline and transformation of the postwar Pax Americana since the 1970s.¹² The main distinguishing characteristic of financialization, in the United States and throughout the world, is the massive accumulation of volatile investment funds, including hot money.

The ratio of financial transactions to GDP in the United States stayed relatively stable at just more than two in the 1950s and early 1960s. This ratio rose slightly in the second half of the 1960s, but then climbed rapidly in the 1970s. It climbed to as much as 40 in the 1980s and to more than 50 in the 1990s (see Figure 2.7).¹³

The changing role of postwar Pax Americana in the arenas of international currency and world finance led to increased volatility and fluctuation risks in the financial and foreign exchange markets. Its origins can be traced to the suspension of the convertibility of dollars into gold and the shift to the floating exchange rate system in the early 1970s, and accelerated due to a mounting degree of dollar uneasiness, driven by the twin deficits generated under “Reaganomics.” All these developments reflect changes in Pax Americana.

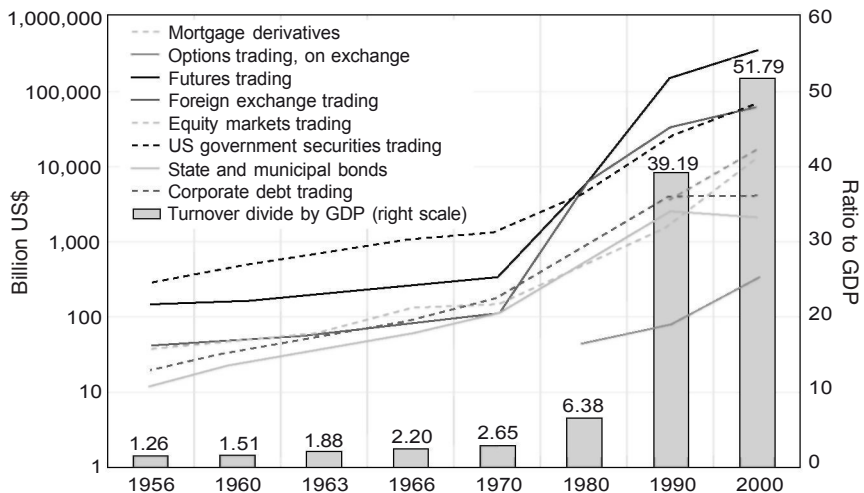


Figure 2.7 Financialization of the U.S. economy: dollar value of trading in the U.S. financial markets (source: prepared from Tony Wikrent, *Financial Trading in U.S. Table* (<http://en.wikipedia.org>)).

Note

Logarithmic scale except for ratio to GDP.

The trigger for the explosion of financialization in the 1980s was financial liberalization under Reaganomics, which in turn resulted from inflation rates that had grown higher in the 1960s and brought about disintermediation from the U.S.'s New Deal-era banking system. The loosening of financial regulation led to significantly expanded cross-market, cross-border financial operations and financial transactions, including the development of new financial products and financial operations on the strength of financial engineering techniques. Among these were the use of junk bonds and leveraged-buyout loans to finance mergers and acquisitions, program trading, portfolio management and the development of derivatives. Freed from domestic financial regulation, the leading players in the latest financial crisis – including American banks, investment banks, securities firms, institutional investors (including pension funds), and hedge funds – developed global networks of financial business and financial operations and pressed forward with the globalization of finance, turning the financial markets into “casinos.”¹⁴

The financial boom in the latter half of the 1980s, based on the restructuring and transformation of postwar corporate structure, constituted the first visible phase of the above process. This financial boom turned into a “money game” and drew to a close, albeit temporarily, with the collapse of the junk bond market and the debacle of the savings and loan crisis. However, the financialization phenomenon carried through into the 1990s (see Figure 2.7). Many authors – including Epstein and the authors included in Epstein (2006) – have cited continued financialization, coupled both with institutional distortions of national and regional currency and financial markets and with structural frailties in international balances of payments, as the fundamental cause of the string of currency and financial crises that arose frequently in the 1990s, particularly outside the United States.

The bubble that accompanied the “IT boom” was caused largely by the inflow of hot money into IT-related and other venture businesses due to the “flight to quality” that followed the Asian currency crisis of 1997 and the Russian currency and financial crisis of 1998, which in turn caused the failure of the American hedge fund Long-Term Capital Management. Similarly, the latest America-based global financial crisis may also be explained as a direct result of the U.S. housing finance market turning into a “casino” due to problems inherent in the securitization mechanism.

However, as discussed in Kawamura (2008a), the American economic cycles of the 1990s, including the unusually long boom, cannot be explained solely by the development and collapse of an IT bubble created by a massive inflow of hot money. American economic cycles can be understood in terms of the emergence of a new nexus of capital accumulation system in the United States. This nexus has arisen through the combination of the growth of global capitalism with the development of American “global city” functions and a “new empire circuit” of financial flows centered on the United State. The emergence of this nexus represents an integrated consequence of the globalization of American corporate activity, finance, and information that emerged in the early 1980s and of the

neo-liberal transformation of government functions touched off by Reaganomics. It may also be seen as an inevitable result of the restructuring and transformation of the postwar corporate structure of the United States, which revealed its own limits in the late 1960s.¹⁵

The global capitalism/global city/new empire circuit nexus represented the essence of the process of the decline and transformation of postwar Pax Americana. It governed economic developments in the U.S. from the 1990s to the latest financial crisis, and profoundly shaped global capitalism throughout the world. We now examine the three elements of this nexus in detail.¹⁶

The global capitalism/global city/new empire circuit nexus

Together with the globalization of financial services, the process by which major American firms turned into global companies constituted the core of the global capitalism led by the United States. Major American corporations, in varying degrees and forms by industry, sector, and company, built up business networks on a global scale. This involved expanding global outsourcing and offshoring related operations and specialized services in many business areas, from manufacturing, research, and development to supply chains in sales and distribution. These firms also resorted to expedient alliances and partnerships with other companies, a development that often involved cross-border mergers and acquisitions (M&A). Meanwhile, they shifted to strategies designed to secure high profitability globally by integrating and managing global networks that linked business bases in each country and region with affiliated companies subject to head office functions.

From the broader perspective of the drivers of the transformation of postwar modern capitalism, this strategic globalization by leading American corporations represented an effort to reorganize the postwar corporate structure. The capital accumulation system of the United States in the 1950s and 1960s, which constituted the core of the Pax Americana political and economic systems that governed postwar modern capitalism, aimed at achieving “sustained growth” by integrating three elements: a postwar corporate structure with large and mega corporations in leading American industries (characterized by the “mature oligopolistic system”) at its core; a set of governmental policies that facilitated managerial capitalism (“Keynesianism”); and the global, political, and economic institutions of postwar Pax Americana (the International Monetary Fund (IMF) and the associated dollar regime – the international managed money system – the General Agreement on Tariffs and Trade (GATT) regime, the “Cold War,” and the global military regime). This system began to malfunction and break down in the 1960s, due mainly to problems inherent in the postwar corporate structure. Caught between a burdensome cost structure stemming from high labor and energy costs, and intensifying mega-competition amidst the shift to low rates of growth, America’s leading corporations attempted to cope with the serious dysfunction of the postwar corporate structure in the latter half of the 1970s. The severe decline in these corporations’ international competitiveness

provided a fundamental driver for the dynamism of the United States' global capitalism.

In essence, the true nature of this dynamism lay in the search for a new system of capital accumulation, accompanied by changes in the existing institutional structures that underpinned postwar Pax Americana. This gave rise to a systemic transformation of American corporate activity, finance, and governmental functions. In the United States, the postwar capital accumulation system became dysfunctional and its systemic interrelationships broke down. The "basic logic of capital" (basically, the profit principle expressed by the formula $M \dots M'$) was severed from the existing institutional linkage, and became manifest in a "bare" form. In that sense, the American system underwent a "stage of transition" in capitalism.¹⁷ In sum, this dynamism prompted the globalization of companies, finance, and information in a mutually accelerating manner beyond the realm of domestic institutional changes and restructuring; and in response to this globalization, it facilitated the neo-liberalistic transformation of government functions (from the "managerial state" exemplified by Keynesianism to the "competition-based state" initiated under Reaganomics).

A second element of the global city/new empire circuit/global capitalism nexus is the emergence of the "global city," which involves the re-working of urban space to facilitate global city functions. This function revolves around the head office and involves a management organization that performs the central function of controlling strategic planning of global business operations, including global business management administration and global research and development activities. In a global city, these activities are supported by concentrations of finance, distribution, legal affairs, accounting, information, and other ancillary professional business services, and by other integrated urban functions such as entertainment and housing. This phenomenon, first identified by Reich (1991), was later conceptualized by S. Sassen and others (Sassen 2001). The global city function has developed in conjunction with the globalization of companies, finance, and information, and by the neo-liberalistic transformation of government functions over these years. Its emergence can be traced particularly to the building of global business networks and the development of head office functions to integrate and manage those networks by leading American companies seeking to secure high profitability on a global scale in response to the pressures of mega-competition.

The point that needs emphasis here is that the global city serves as a central "field" in which real business and financial profits can be accumulated through global business linkages, and in which the global corporate wealth of the United States can be concentrated. At the same time, a key function of the global city is to attract substantial quantities of labor, including immigrants, by increasing the number of professional jobs in related specialized services and various other kinds of employment. Development of the global city, moreover, implies the provision of various urban public services and housing construction, and the employment and income flows created by these activities. In this way, the global city function has driven the expansion of domestic demand within the United States (see Figure 2.8).

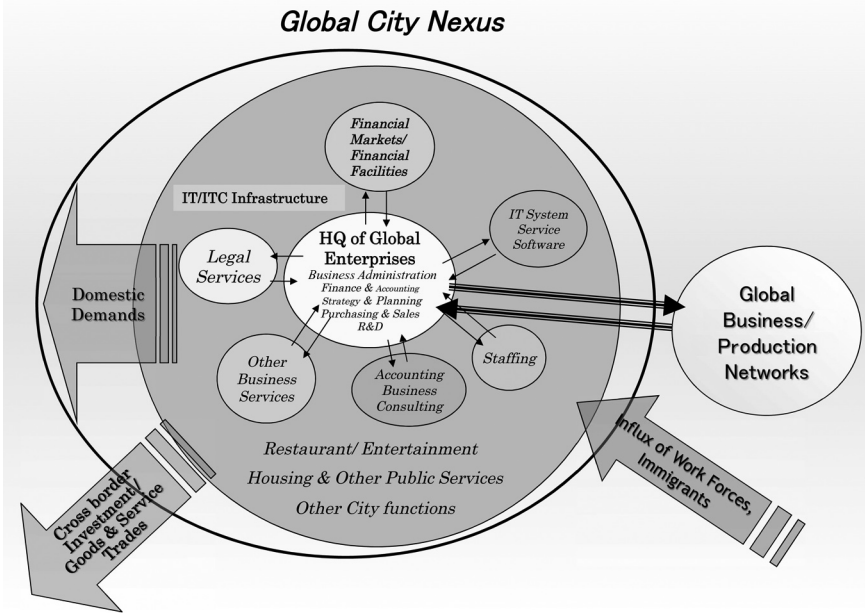
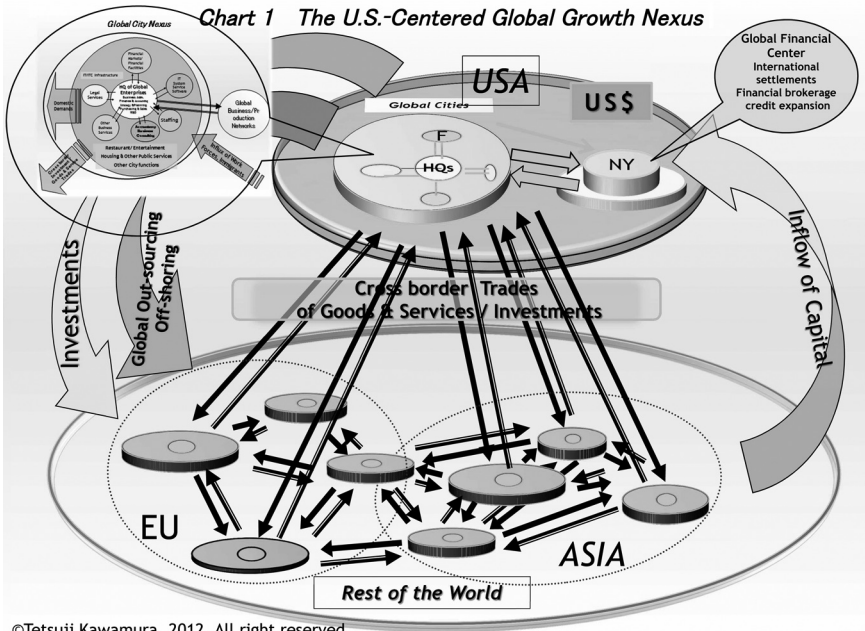


Figure 2.8 The U.S.-centered global growth nexus (source: © Tetsuji Kawamura, 2012. All rights reserved).

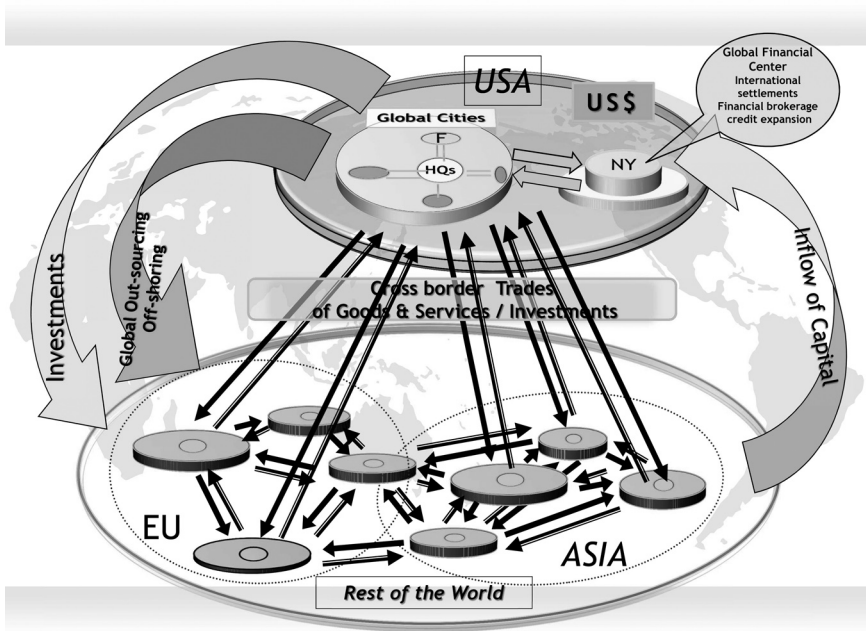


Figure 2.8 Continued

In the United States, global cities have developed in a multilayered way, and have come to form the axis of the new economic expansion of American global capitalism. New York tops the list as the American global financial center *par excellence* on the strength of the role of the dollar as the world's key currency and because of its concentration of global settlement functions and international financial facilities. Multilayered global city domains have emerged outside the U.S. as well. London and Tokyo are examples, as are Shanghai, Bangkok, and several other cities in emerging economies. These global cities form a network of important intermediaries and nodes of global capitalism.

The archetype of the global city structure can be found in California (where the author conducted an on-site field survey in September 2007 and August–September 2009). Areas surrounding Silicon Valley and Los Angeles and its vicinity are home to head offices and sales firm functions that grew up during the IT boom, and accommodate R&D laboratories and the design footholds of IT venture businesses and IT-related R&D firms. The same complex is home not just to American firms, but contains the offices and factories of foreign global corporations, including those with close ties to China, Taiwan, and other Asian emerging economies. The IT-based region of Southern California is supported by a well-developed port, and by distribution, commercial, and other specialized business services, which have significantly expanded employment opportunities

ranging from business management, professional, senior engineering, legal affairs, accounting, and other specialist business service jobs to various fairly simple jobs involving uncomplicated work. This dynamism has facilitated the influx of a varied population, including immigrants.

Of course, this dynamism can cut both ways. As the housing bubble proceeded in the 2000s, new residential construction expanded even in parts of California cities that had previously been “redlined” by mortgage lenders. These areas typically had concentrations of subprime loans, and thus were profoundly and adversely affected in the latest financial crisis.¹⁸

The third element of the global city/new empire circuit/global capitalism nexus consists of a new emerging structure of flows of funds, centering on the United States – or what might be called the “new empire circuit” of capital flows. At the level of the national economy, the globalization of companies and the axis of the “global city” function in the American economy have given rise to a structure that constantly generates huge current account deficits for the United States by massive worldwide outsourcing and offshoring systems, regardless of cross-border internal transactions of global corporations or market transactions. These deficits are partially offset by profits from investments overseas and revenues from financial, commercial, and information services, and earnings derived from intellectual property rights. Overall, however, they are financed by very substantial inflows of funds into the United States on a global scale on the back of the dollar as the international key currency and the ample and deep financial facilities of New York. This is the “new empire circuit” of the global capital flow with the United States as the pivot.¹⁹

Another point that should be emphasized in this connection is the phenomenon of the financial markets turning into “casinos” in the context of financialization and of the globalization of financial services. Dollar funds were accumulated in the global financial center in New York City due to the dollar’s position as the international key currency. This burgeoning of financial activity, including the expansion of credit with those accumulated dollars as resources, helped to expand the entire “new empire circuit.” This played the role of an “engine of growth” for the United States and the rest of the world, and facilitated economic expansion globally in an inflated manner. At the same time, however, this process spread the financial instability and systemic risks of financial markets globally, and was accompanied by the formation of massive amounts of investment funds such as hedge funds and cross-border speculative financial operations.

U.S.-centered global capitalism and the global financial crisis

The shifts described above transformed the relationship between the American and global economies. Capital accumulation in the U.S. economy came to require – and depend on – expansion, a situation very different from the reliance on sustained domestic growth that characterized the heyday of the postwar Pax Americana. Understanding the intertwined elements of this new nexus makes it possible to capture the development of U.S. economic cycles during this period,

including the long boom of the 1990s, the development and collapse of the “IT bubble,” and the subsequent development and collapse of the “housing bubble.”

First, the formation of new capital ventures and the “IT bubble” and its overheated development were the first phenomena to be deeply affected by this new nexus. Rapid growth in these sectors brought about a great economic expansion, which spread to the “old economy,” by linking three factors: (1) the development of core urban areas, with Silicon Valley heading the list, on the strength of progress in new technological innovations such as IT and biotechnology and the emergence of new business models; (2) the expansion of IT-related capital spending, with the New York securities markets, the NASDAQ market in particular, and their financial facilities combining to attract massive amounts of investment funds at home and abroad; and (3) the development of various specialized business-related and other services, including housing construction and related urban public services, entertainment and commercial facilities and miscellaneous services (see Kawamura 2008a, 2008b).

Second, the serious global financial and economic crises that were triggered by the subprime problem came about because the development of the bubble-like housing boom, which emerged after the collapse of the IT bubble, depended on an expansion of subprime loans – and thus, of subprime loan problems, in the context of particular socioeconomic features of the United States. This boom went into reverse from mid-2006 and by doing so exposed “institutional” defects²⁰ of the “securitization mechanism,” such as the unreliability of schemes for risk sterilization. Prices of securitized products fell steeply causing market paralysis through extensive downgrades.

To a large extent, the mechanisms for expanding credit with dollar funds accumulated in New York via the “new empire circuit” operated through highly leveraged hedge fund investments. The dependence of the securitization mechanism on structured investment vehicles (SIVs) funded by asset-backed commercial paper (ABCP) and characterized by inflated margins of collateral, overpricing, and multiple-stage securitization accelerated the speculative expansion of credit.²¹ The spurious nature of that mechanism was revealed as delinquencies in subprime loans interacted synergistically with declining house prices and rising foreclosure levels. This caused sharp price declines for all securitized products, resulting in extensive downgrades that paralyzed the markets.

The credit collapse spread to real estate finance, credit cards, loans for leveraged buy-outs, CDOs, and the entire securitization market, including credit default derivatives (CDS). This led to large losses for banks, securities firms, other finance companies and hedge funds (see Table 2.2), as well as large-scale failures of financial institutions in Britain and continental Europe. These failures, in turn, led to a serious liquidity crisis, widespread financial-market dislocations, and downward stock-price spirals. The substantial credit contraction caused by the breakdown of the global “engine of growth” led to a sudden unraveling of the global growth nexus, causing chain-reaction contractions of real economic activity that spread from the United States across the globe. These developments can be comprehended as part and parcel of the same basic structure.

Table 2.2 Base case estimates of writedowns on U.S. loans (US\$ billion)

	Outstanding	April	October	Percentage	Banks	Insurance	Pensions/ savings	GSEs and government	Other
	estimated	estimated	estimated	distribution					(hedge
	losses	losses	losses						funds, etc.)
<i>Base case estimates of writedowns on U.S. loans</i>									
Subprime	300	45	50	3.56	35-40	0-5	0-5		10-15
Alt-A	600	30	35	2.49	20-25	0-5	0-5		5-10
Prime	3,800	40	85	6.05	25-30	0-5	0-5	45-55	0-5
Commercial real estate	2,400	30	90	6.41	60-65	5-10	0-5		10-20
Consumer loans	1,400	20	45	3.20	30-35	0-5	0-5		10-15
Corporate loans	3,700	50	110	7.83	80-85	0-5	0-5		25-30
Leveraged loans	170	10	10	0.71	5-10	0-5	0-5		0-5
Total for loans	12,370	225	425	30.25	255-290	5-40	0-35	45-55	60-100
<i>Base case estimates of mark-to-market losses on related securities</i>									
ABS	1,100	210	210	14.95	100-110	40-45	35-55	39,736	39,746
ABS CDOs	400	240	290	20.64	145-160	55-75	30-45	15-20	15-30
Prime MBS	3,800	0	80	5.69	20-25	39,736	39,741	20-25	0-5
CMBS	940	210	160	11.39	80-90	20-25	15-35	39,741	15-20
Consumer ABS	650	0	0	0.00					
High-grade corporate debt	3,000	0	130	9.25	65-75	20-30	20-35	5-20	
High-yield corporate debt	600	30	80	5.69	45-50	39,736	15-20	5-15	
CLOs	350	30	30	2.14	15-20	0-5	0-5	5-10	
Total for securities	10,840	720	980	69.75	470-530	155-210	125-215	55-80	55-125
Total for loans and securities	23,210	945	1,405	100.00	725-820	160-250	125-250	100-135	115-225

Sources: Goldman Sachs; JPMorgan Chase; Lehman Brothers; Markit.com; Merrill Lynch; and IMF staff estimates, IMF World Economic and Financial Surveys, *Global Financial Stability Report Financial Stress and Deleveraging Macro-Financial Implications and Policy*, October 2008, Table 1.1 (www.imf.org/external/pubs/ft/gfsr/2008/02/index.htm#tablesc1).

Notes

ABS = asset-backed securities; CDO = collateralized debt obligation; CLO = collateralized loan obligation; GSE = government-sponsored enterprises; CMBS = commercial mortgage-backed security □

Conclusion: the current global financial crisis and the historical dimension of contemporary capitalism

The latest global financial crisis is a clear manifestation of the inherent instability embedded in financialization and in financial globalization. It illustrates the problem of financial markets turning into “casinos,” with the uniquely American socioeconomic problem of racial segregation and the institutional defects of the securitization mechanism playing an important role.

However, the crisis cannot be attributed solely to the development and collapse of a speculative bubble economy. It should be viewed, rather, as the surfacing of significant institutional defects in the U.S.-centered “global growth nexus” that emerged after the decline of the postwar Pax Americana.²² The seriousness of the current situation becomes clear only when it is viewed in the context of this broader structural change in modern capitalism.

The current crisis involves the *global growth nexus* itself, that is, the system that emerged from trends in globalized capital in the 1990s. Expansion in this *global growth nexus* was propelled by a huge increase in the size of financial markets. These markets’ casino-like operations arose via highly leveraged finance based on dollar balances accumulated in the New York global financial center. The focal point is the U.S. dollar position as the key international currency. The new *global growth nexus* ultimately failed because it generated a financial bubble which collapsed through its inherent systemic defects, thereby giving rise to a full-blown financial and economic crisis on a global scale (Kawamura 2009). In this sense, the essence of the crisis – which is now entering its second phase with recent developments in the Eurozone – involves the core relationships in global capital.

Central banks in the United States, Japan, and European countries, among others, have addressed the first phase of the global financial crisis by unconventional methods: virtually unlimited quantitative easing and emergency government expenditures on an unprecedented scale (especially after the G20 communiqué of November 2008). These measures narrowly staved off financial failure and prevented economic panic from causing a cumulative downward spiral as in the Great Depression. While the situation appeared to have improved as of early 2010, subsequent events have revealed the limitations of these governmental interventions.

In the United States, almost “all possible measures” (see G20 2008) have been taken, including de facto nationalization of Fannie Mae and Freddie Mac, capital injections into the banking and financial sectors, measures to directly provide funds to money market fund (MMF) and CP markets, and credit easing with a zero interest rate policy. Industry bailout loans to GM, Chrysler and other companies have already been provided, at a fiscal burden of over \$2 trillion in FY2008 (including \$700 billion under the Emergency Economic Stabilization Act; \$300 billion in assistance to housing loan borrowers; purchases of \$144 billion worth of GSE housing loan securities; and \$50 billion worth of principal guarantees for MMFs). The Obama administration hammered out a stimulus

package of \$775 billion over a two-year period. The federal budget deficit already climbed to a record \$450 billion in FY2008, and over \$1,200 billion (equivalent to 8.3 percent of GDP) in FY2009 (U.S. Congressional Budget Office 2009).

With these governmental emergency measures, states have taken over the burden of “market failure.” This continues the characteristic state role in postwar modern capitalism, which was developed through the experiences of the Great Depression and the World War II war economy. However, the market crisis has now grown into a crisis in state finances, even while the original crisis itself continues. The consequence of these ineffective state interventions is that the idea of the sustainability of contemporary capitalism is itself losing credibility. This is evident in the most recent developments, which have involved the Eurozone and some of the emerging economies.

Emergency measures to resolve national deficit problems that triggered the Eurozone crisis have actually worsened the already huge financial deficit and exacerbated national debt. The second phase of the crisis has come to a head in the Eurozone’s weakest countries – Portugal, Ireland, Italy, Greece, and Spain. The crisis in Greece has not abated, despite support from the larger EU countries via the European Financial Stability Facility and despite commitments by the ECB and the IMF. The European crisis itself has exposed a fundamental contradiction inherent in the European unification framework, between the Eurozone’s currency integration and member states’ national sovereignty. In the United States, too, a deficit of over \$1 trillion dollars has existed since 2009, leading to an intensification of partisan political conflict when the federal government reached its maximum legal borrowing limit in 2011. The issue of Japan’s national debt is equally serious. After the “lost decades,” it has reached an historic level of almost 1,000 trillion yen (over \$8 trillion dollars), or twice GDP – the highest ratio of any developed country. The situation, already worse than during World War II, is now exacerbated by the devastating “once a millennium” earthquake and tsunami disaster and ensuing nuclear crisis in northeast Japan.

Further, the unconventional and emergency financial measures taken by large nations’ central banks – zero interest rates, purchasing schemes, and large-scale quantitative easing – have led to excessive funds in global markets, whose side effects have included the speculative rise in crude oil, food, and raw materials prices, as well as a bubble economy in the Chinese littoral and in Vietnam. Rising food prices were a central cause of the uprisings in Egypt and other Middle Eastern countries. In this sense, those events are also part of the financial and economic crisis triggered by the failure of global expansion.

These situations where states have to shoulder market failure clearly show that the limit has been reached. It has also become obvious that there is a limit to the contemporary capitalist state’s role as moderator of the global market economy. States are not always able to prevent global markets from running amok, or stabilizing the economy and rehabilitating society when they do. In this sense, the requisites for recovery from the global crisis cannot now be addressed by the logic of “state vs market.” The essence of global capitalist dynamics lies

in antagonism between *markets* and *communities*; so it has become apparent that socio-economic systems' true recovery must lie in an autonomic rehabilitation of private and local (regional) constituents beyond market-economy dynamics. In short, the current global crisis has made it clear that communities must be the base for true socio-economic rejuvenation of the current world. The nation state system has to be reorganized on that basis.

The current global financial and economic crisis has revealed that global capitalism, which has evolved since the end of the postwar Pax Americana, and of which the United States has been the biggest seismic center, is still in the process of seeking to form institutions and systems, and in this sense remains transitional in character. In this way, the current global crisis represents a catalyst that will shape the future development of postwar modern capitalism.

Notes

- 1 This view is shared by the authors of the statement of the G-20 Summit on Financial Markets and the World Economy (November 15, 2008) (G20 2008).
- 2 See Kawamura (2009) for a similar discussion of the latest global financial crisis.
- 3 For a definition and reference to the problems of "predatory lending," see U.S. Department of Housing and Urban Development (2001), p. 16.
- 4 What made the subprime crisis come to the surface was the spread of market rumors that two Bear Stearns-affiliated hedge funds investing in subprime MBS incurred huge losses and were about to sell off \$3.8 billion worth of bonds to raise funds to meet margin calls between June 14 and June 22, 2007 (new capital was injected into one hedge fund, while the other was liquidated). During the period October 11–23, 2007, Moody's Investors Service downgraded a total of 2,500 subprime bonds, and then Standard and Poor's downgraded 590 CDOs as well as 145 CDO tranches worth \$3.7 billion and placed them on the Monitoring list. In the same week, Moody's downgraded 117 CDO tranches, while Fitch Ratings announced it would review ratings of some \$37 billion worth of CDOs. The announcements of extensive downgrades caused sharp falls in the prices not only of RMBS but also of other securitized products, aggravating the subprime crisis (BIS 2007, p. 96).
- 5 The basic framework of the U.S. housing loan market of today that incorporates government sponsored enterprises (GSEs) goes back to the late 1930s when the Federal National Mortgage Association (FNMA, Fannie Mae) was established as part of the New Deal program. For many years subsequently, restrictions on housing finance remained in place through racial segregation of resident areas by "restrictive covenants" (covenants not to sell houses to non-whites) and overlapping "redlining" (refusal to grant mortgages in the form of secured loans and insurance coverage in specific "troubled" areas). These measures helped sustain discrimination in mortgage lending to non-white people in red-lined districts with concentrations of non-white populations, resulting in a shortage of rental housing, high rents, and low-quality housing. A number of remedial measures were taken following the enactment of the Civil Rights Act of 1964. Following the Fair Housing Act (Title VIII of the amended Civil Rights Act of 1968), the Equal Credit Opportunity Act of 1974, Federal Reserve Board (FRB) Regulation B and the Home Mortgage Disclosure Act (HMDA) of 1975, the Community Reinvestment Act of 1977 was enacted. Thereafter, the FRB substantially reformed the methods for CRA-based inspection and supervision, clarifying and streamlining inspection criteria and extending coverage to loans to small businesses. These measures helped improve the situation greatly. See Yamamoto (2002) and Dymski (2007), pp. 8–9.

- 6 The fact that some analysts later attempted to blame the subprime crisis as the result of banks being “forced” by the CRA to make subprime loans that, from the perspective of civil-rights activists, undercut the purposes of the CRA itself, further shows the complex intersections between racial inequality and lending markets in the United States.
- 7 See Kawamura (2003a) and (2008a) for the unusually long boom and the “IT bubble” and the “new economy” of the 1990s.
- 8 “Interagency Guidance on Subprime Lending” (March 1, 1999) and “Expanded Guidance for Subprime Lending Programs” (January 31, 2001). These statements of guidance pressed financial institutions to develop risk management systems to specify, monitor, and manage risks inherent in subprime loans and to fatten out capital bases and bad debt reserves. From the standpoint of consumer protection, the guidance documents established criteria to make acts of lending with either one of the following as unfair or predatory lending and urged firms to refrain from such lending practices: (a) lending based on collateral value rather than on repayment capacity; (b) demand for frequent refinancing with exorbitant fees; and (c) fraudulent marketing to camouflage the structure of loans. See also Mizuho Research Institute (2007), p. 22.
- 9 Many business models of Internet-related venture businesses (the so-called “dot.com” firms) were hyper-optimistic, confusing the potential for the IT revolution with short-term earnings prospects. The formation of dot.com stock prices factored in earnings several decades into the future and in that sense were “bubble” ingredients pure and simple. For details, see Kawamura (2003a), Chapter 7 and (2008a).
- 10 The series of credit tightening moves was described as “taking out ‘a little bit of insurance’ against the possibilities of a tightening of the domestic labor market and economic overheating” and “prepared the system for making another try at soft landing when the economy ultimately started declining,” but it was presumably intended to avert a general collapse in stock prices. See Greenspan (2007), translated, pp. 286–294.
- 11 The direct contractionary effect of the collapse of the “IT bubble” boils down to the following two points: (a) the shift to the “stock adjustment” phase following the unusually long boom. The collapse of the “IT bubble” turned capital spending that followed the overly ascending demand curve into excess capacity, leading to a substantial cutback of IT-related investment, which formed the core of robust capital spending; and (b) the “negative wealth effect” of the general decline in stock prices. The sharp rise in the household share holding ratio during the 1990s (by 1999 the ratio reached 47.9 percent, almost half of the number of households, U.S. Department of Commerce (2006), Table 1187) helped broaden the “negative wealth effect” of the stock market falls. The loss of asset value for stockholders between the first quarter of 2000 and the second quarter of 2002 amounted to \$7 trillion, which is believed to have reduced consumption by some \$280 billion, equivalent to about 3 percent of gross domestic product (GDP) (CEA (2003), translation, p. 39). This significant “negative wealth effect” was offset by (a) direct and indirect military spending linked to the war in Afghanistan (from October 2001) and the Iraq War (from March 2003), and fiscal expenditure on counterterrorism measures at home and abroad; (b) large-scale tax cuts by the Bush administration; and (c) maintenance and expansion of the housing boom fueled by easy credit. For details, see Kawamura (2008a), pp. 46–48. Regarding spending on the Afghan and Iraq wars, Stiglitz and Bilmes (2008) point to the overall negative effect, including the “social cost.”
- 12 See Epstein (2006) for the concept of “financialization” and the problem of financial instability. Imura (2008) also views financialization as “financial activities independent of the real economy,” and addresses the subprime problem, along with its cause, as a crisis generated by speculative financial activities.
- 13 See BIS (2000, 2007). These figures do not include over-the-counter (OTC) transactions such as derivatives and swaps.

- 14 Strange (1986) and many others have addressed this issue. See Kawamura (2008a).
- 15 For the “new economy” theory on the long boom of the 1990s, see Kawamura (2008a).
- 16 Because of the limited space available, these cannot be discussed at length. See Kawamura (2003a, 2003b, 2006, 2008a) for details. The basic developments in the restructuring and transformation of the American economy since the 1970s are discussed in Kawamura (2003a), particularly in Chapters 5–7. Kawamura (2006) focuses on the problem of the transformation of the postwar corporate structure, and discusses its development and the nature of American companies transforming themselves into global firms as well as the significance of this development for shedding light on the historical phase of modern capitalism. This chapter’s basic perspective, that finds the emergence of the new capital accumulation system of global capitalism in the United States in the combination of the “global city” function and the “new empire circuit,” is outlined in Kawamura (2006), Section 4, pp. 155–158, and is discussed in more detail in Kawamura (2008a), particularly Section 4, pp. 49–58.
- 17 See Kawamura (2006), pp. 149–154 and Kawamura (2008b) for the significance of the formation of “institutions” and the formation of “systems” in the shift within the capital accumulation system.
- 18 Regarding this point, on-site field surveys were conducted under the author’s direction on the “global city” structure of a region comprising the Bay Area of California (including San Francisco and Silicon Valley), on Los Angeles and its surrounding areas and on Tijuana, Mexico, as well as on the subprime housing loan situation in Sacramento. The field work was done in September 2007 under the open research center project of the Musashi University Research Center (with Tetsuji Kawamura as FY2003–04 research leader and FY2005–07 research supervisor). This chapter is based on the results of these field surveys. In Sacramento, 70 percent of the non-white population reside in “redlining” areas, which overlap areas where delinquencies and foreclosures were concentrated in the latest subprime problem. See also Hernandez (2007).
- 19 Here, the “new empire circuit” differs from the “empire circuit” during the heyday of postwar Pax Americana and is also different from the “new empire circuit” under the “dollar standard system” that emerged in the 1980s. See Ikeda (2003) for the global flow of funds centering on the United States and its structural characteristics, and see Ikeda (2003) and note 1 for the term “empire circuit.” See also Kawamura (2008a).
- 20 See Epstein (2005) for the concept of “financialization” and the problem of financial instability.
- 21 What can be cited as defects of the “securitization mechanism” include (a) “risk transfer” and “risk dispersion” problems of “structured bonds” – the spuriousness of taking assets off balance sheets via SIVs, carving out assets by the senior/subordinate relationship, and so on; (b) negotiation transactions – “equity” tranches, CDSs and CDOs incorporating them; and (c) problems related to the pricing of securitized instruments – problems with margins of collateral, default probability distribution assumptions by approximate measurements by market participants in disregard of the nature of risks (rather than “Knightian uncertainty”), and disregard of linkages among various variables. These defects tend to expand their problems cumulatively as securitization and re-securitization processes become multilayered.
- 22 Many business models of Internet-related venture businesses (the so-called “dot.com” firms) were hyper-optimistic, confusing the potential for the IT revolution with short-term earnings prospects. The formation of dot.com stock prices factored in earnings several decades into the future and in that sense were “bubble” ingredients pure and simple. For details, see Kawamura (2003a), Chapter 7 and (2008a).

References

- BIS (Bank for International Settlement) (2000), *The Global OTC Derivatives Market Continues to Grow*, Press release, November 13, 2000 (www.bis.org).
- BIS (Bank for International Settlement) (2007), Triennial and Semiannual Surveys on Positions in Global Over-the-Counter (OTC) Derivatives Markets at End-June 2007, November 2007 (www.bis.org).
- BIS (Bank for International Settlement) (2008), *BIS 78th Annual Report*, June 30, 2008 (www.bis.org).
- Bank of Japan Financial Markets Department (2008), *Financial Markets Report*, June 31, 2009, Tokyo (www.boj.or.jp/en/research/brp/fmr/mkr1002.htm/).
- Bernanke, Ben, Board of Governors of the Federal Reserve System (2008), *Monetary Policy Releases*, 2008 (www.federalreserve.gov).
- Board of Governors of the Federal Reserve System (2007), “Federal Reserve Statistical Release, Z.1: Flow of Funds Accounts of the United States,” March 8, 2007 (www.federalreserve.gov/releases).
- CEA (Councils for Economic Advisors) (2003), *The Annual Report of the Councils for Economic Advisors*, 2003, USGPO.
- Dooley Michael P., David Folkerts-Landau, and Peter M. Garber (2008), *Will Subprime be a Twin Crisis for the United States?*, NBER Working Paper 13978, April 2008.
- Dymski, Gary A. *From Financial Exploitation to Global Banking Instability: Two Overlooked Roots of the Subprime Crisis*, (mimeo) presented at the Musashi University Research Institute ORC Project International Symposium, “The Dynamism of Globalization: Its Impact and Transfiguration of Economy, Society and Culture,” December 15, 2007, Musashi University, Tokyo, Japan.
- Epstein, Gerald A., ed. (2005), *Financialization and the World Economy*, Edward Elgar.
- Federal Home Loan Mortgage Corporation, Corporate Communications (2007), *The Freddie Mac Reporter Fact Book 2007* (www.freddiemac.com).
- Federal Home Loan Mortgage Corporation, Primary Mortgage Market Survey Archives: Conventional, Conforming, Treasury-Indexed FRM and ARM weekly data (www.freddiemac.com).
- G20 (2008), *Declaration of the Summit on Financial Markets and the World Economy*, November 15, 2008, Ministry of Foreign Affairs of Japan (www.mofa.go.jp/policy/economy/g20_summit/index.html).
- Government of Japan, Cabinet Office (2008), *World Economic Trends*, Spring 2008, Tokyo (http://www5.cao.go.jp/j-j/sekai_chouryuu).
- Greenspan, Alan (1997), Remarks by Chairman Alan Greenspan at the Economic Development Conference of the Greenlining Institute, San Francisco, California, October 11, 1997: “Consumer Credit and Financial Modernization” (www.federalreserve.gov).
- Greenspan, Alan (2007), *The Age of Turbulence*, Penguin Press.
- Greenspan, Alan (2008), Remarks in “This Week with George Stephanopoulos” interview, September 14 (<http://blogs.abcnews.com>).
- Harvard University, The Joint Center for Housing Studies (2006), *State of the Nation’s Housing 2006* (www.jchs.harvard.edu/son).
- Harvard University, The Joint Center for Housing Studies (2008), *State of the Nation’s Housing 2008* (www.jchs.harvard.edu/son).
- Hernandez, Jesus (2007), *The Subprime Crisis at a Micro Scale: Redlining, Housing Segregation, and the Crisis of Social Reproduction in Sacramento*, (mimeo) presented at the Musashi University Research Institute ORC Project International Symposium:

- “The Dynamism of Globalization,” December 15, 2007, Musashi University, Tokyo, Japan.
- Ikeda, Masao (2003), “The Changing Pattern of World Capital Flow centering in the U.S. and its historical Significance,” (in Japanese), Chapter 4 in Tetsuji Kawamura *et al.* (eds), *Dynamics and Structure of the Global Economy*, Vol. I, SGCIME, Tokyo: Ochanomizu Shobo.
- IMF (International Monetary Fund) (2008), *World Economic and Financial Surveys. Global Financial Stability Report: Containing Systemic Risks and Restoring Financial Soundness*, April 2008 (www.imf.org/external/pubs/ft/gfsr/).
- Imura, Kiyoko (2008), “The Implications of the Sub-prime Loan Problems” (in Japanese), *Keizai*, No. 153, Tokyo, Shinnihon Shuppansha, June 2008.
- Joint Center for Housing Studies of Harvard University, *The State of the Nation’s Housing 2008* (www.jchs.harvard.edu/).
- Iwai, Katsuto (2008), “The second end of laissez-faire” (in Japanese), *Nikkei Shinbun*, October 24, 2008.
- Joint Center for Housing Studies of Harvard University, *Housing Markets, 2006* (www.jchs.harvard.edu/).
- Kawamura, Tetsuji (2003a), *The Modern American Economy* (in Japanese), Yuhikaku.
- Kawamura, Tetsuji, (2003b), “The United States as the Epicenter of Globalization Impacts” (in Japanese), Introduction, in Tetsuji Kawamura *et al.* (eds), *Dynamics and Structure of the Global Economy: Global Capitalism and National and Global System*, SGCIME Global Capitalism series, Vol. 1, Tokyo: Ochanomizu Shobo.
- Kawamura, Tetsuji (2006), “Capital Accumulation Regime of the U.S. Firms” (in Japanese), Chapter 1, in Yoshin Sugahara, Tetsuji Kawamura *et al.* (eds), *Transfiguration of the Corporate System under Global Capitalism*, SGCIME Global Capitalism series, Vol. 3, Tokyo: Ochanomizu Shobo.
- Kawamura, Tetsuji (2008a), “The U.S. Long Economic Boom in the 1990s and the New Economy: The Decline of the Postwar Pax American and Business Cycles under Global Capitalism” (in Japanese), Chapter 1, in Tomiichi Hoshino, Tetsuji Kawamura *et al.* (eds), *Global Capitalism and the Business Cycle*, SGCIME Global Capitalism series, Vol. 4, Tokyo: Ochanomizu Shobo.
- Kawamura, Tetsuji (2008b), “The Methodology of the Stages Theory and the Energeia of Categories of Capitalism,” Proceedings of the Thirtieth Anniversary of the death of Kozo Uno (www.gssm.musashi.ac.jp/uno/).
- Kawamura, Tetsuji, (2009), “Global Financial Crisis and the Global Capitalization of Modern Capitalism” (in Japanese), *EPI Journal*, No. 144, Tokyo, Economic Policy Institute for Quality Life, January 2009.
- Mizuho Research Institute (2003), “Systemic Risks of the Housing Finance in the United States: Problems of the GSEs” (in Japanese), *Mizuho Reports*, August 25, 2003, Tokyo (www.mizuho-ri.co.jp).
- Mizuho Research Institute (2007), “U.S. Housing Finance after Subprime Crisis” (in Japanese), *Mizuho US Insight*, December 15, 2007 (www.mizuho-ri.co.jp).
- New York Times (2008), *Times Topics: Economic Stimulus*, January 9, 2008 (<http://topics.nytimes.com>).
- OECD (2002), *Economic Outlook*, No. 71, June 2002.
- Reich (1991), <<<info to come>>>**
- Sassen, Saskia (2001), *The Global City: New York, London, Tokyo*, 2nd edition, Princeton University Press.

- Stiglitz, Joseph E. and Linda J. Bilmes (2008), *Three Trillion Dollar War: The True Cost of the Iraq Conflict*, W.W. Norton.
- Strange, Susan (1986), *Casino Capitalism*, Basil Blackwell.
- U.S. Congressional Budget Office (2007), *Estimated Appropriations Provided for Iraq and the War on Terrorism, 2001–2006* (www.cbo.gov).
- U.S. Congressional Budget Office (2009), *The Budget and Economic Outlook: Fiscal Years 2009 to 2019*, January 2009 (www.cbo.gov).
- U.S. Councils for Economic Advisors (2003), *The Annual Report of the Councils for Economic Advisors*, 2003, USGPO.
- U.S. Department of Commerce, Bureau of the Census (2006), *Statistical Abstract of the United States: 2006* (www.census.gov/compendia/statab/2006).
- U.S. Department of Housing and Urban Development (2001), *HUD-Treasury Joint Report on Predatory Lending*, February 16, 2001 (www.hud.gov/library/bookshelf12/pressrel/treasrpt.pdf).
- Wikrent, Tony (2007), *Financial Trading in U.S.*, Table, November 12, 2007 (<http://en.wikipedia.org>).
- Yamamoto, Toichi (2002), “Personal Credit Records in the United States” (in Japanese), *US Insight Silicon Valley Research*, Vol. 12, January, 2002, Report 2 (www.nttdata.com/usinsight).

3 Financialization and capitalist accumulation

A structural account of the crisis of 2007–09

Costas Lapavistas

Introduction¹

The upheaval of 2007–09 is replete with historical peculiarities. It emanated in finance and spread to production partly through financial mechanisms. Its global character was largely due to securitization, which encouraged adoption of investment banking practices among commercial banks. Above all, its proximate causes lay in mortgage lending to the poorest sections of the U.S. working class.

Not surprisingly there has been a flood of writings on the crisis from a heterodox and critical perspective. Some have relied on traditional arguments of Marxist political economy, typically emphasizing over-accumulation and falling profit rates. Others have stressed the financialization of capitalism, and therefore the exceptional role of finance in causing the crisis. These approaches are far from mutually exclusive, indeed use of the term “financialization” is becoming commonplace. But they reveal an underlying concern that traditional explanations have fared poorly in explaining the current crisis.

The concept of financialization is one of the few innovative ideas to come out of radical political economy in recent years. It holds considerable theoretical promise because it is capable of relating the unusual features of the current crisis to the secular growth of finance. Moreover, it can give insight into the structural transformation of capitalist economies with its attendant social implications. To be sure the concept is still raw and undeveloped, as is shown below. But there is no denying its power.

This chapter reviews some of the literature on financialization and subsequently puts forth a particular theoretical analysis that is situated within Marxist political economy. Financialization is defined as a systemic transformation of mature capitalist economies comprising, first, increasing distance between banks and non-financial corporations, second, the turning of banks toward mediating in financial markets and lending to individuals, and, third, increasing involvement of individuals in the realm of finance both as debtors and as asset holders. The crisis of 2007–09 is a crisis of financialization because it is directly related to these developments.

The second section of this chapter offers an empirical account of the crisis focusing, above all, on the role of finance. The third section discusses several

approaches to financialization and the crisis, paying particular attention to Marxist, post-Keynesian and other heterodox work that has significant overlaps with economic sociology. The fourth section then develops a theoretical view of financialization treated as systemic transformation by drawing on the methodological approach of classical Marxism. Correspondence with the empirical account of the crisis in the second section is also established. The final section concludes.

A crisis of financialization, 2007–09

The crisis of 2007–09 reflects the ascendancy of finance in contemporary economies or, more accurately, of financialization. To demonstrate this point, as well as to navigate among contesting theoretical accounts of financialization, it is necessary to start with some key empirical aspects of the upheaval.

The crisis broke out in the financial sector of the U.S. and other leading developed countries, subsequently spreading across the world economy. Consequently, analysis in this section focuses on the U.S., Japan, Germany, and the UK during 2001–07, using primarily flow of funds statistics. There are problems of comparability and consistency with this data, and it should be used with caution in cross-country analysis. But it is more than adequate for capturing the underlying processes that led to the crisis.

It should be stressed that the focus of this section lies entirely on the domestic economy of these four countries. The international dimension of the crisis (and of financialization) is left out of account. This omission, far from being a weakness, makes it possible to pay closer attention to the chief mechanisms of crisis (and of financialization) which are domestic. The financial bubble preceding the crisis undoubtedly had an international dimension that resulted from the flow of capital into U.S. financial markets. After 2004, these flows originated heavily in developing countries, mostly China but also the Gulf states, Russia, and so on. The underlying cause of this development was not a “savings surplus” in developing countries which was selflessly absorbed by the U.S. through high domestic consumption. As has been discussed elsewhere (Painceira 2009; Lapavitsas 2009a and 2009b) a “reverse flow” of capital from poor to rich countries took place during the last decade, which arose because poor countries accumulated extraordinary foreign currency reserves (mostly dollars). The exorbitant size of reserves was dictated by the structure of the international financial system, which has shifted the onus of confronting international financial crises onto developing countries. Consequently, capital flowed from developing countries into the U.S. to buy dollar-denominated public bonds. But foreign flows were of secondary importance to the over-expansion of credit in U.S. markets during the last decade. The bubble in the U.S. was primarily due to the growth of domestic credit. By the same token, the underlying causes of financialization are domestic, even if the process also has an integral international dimension. Thus, the proximate roots of the upheaval lie in the expansion of U.S. mortgage lending after 2001 (see Figure 3.1).

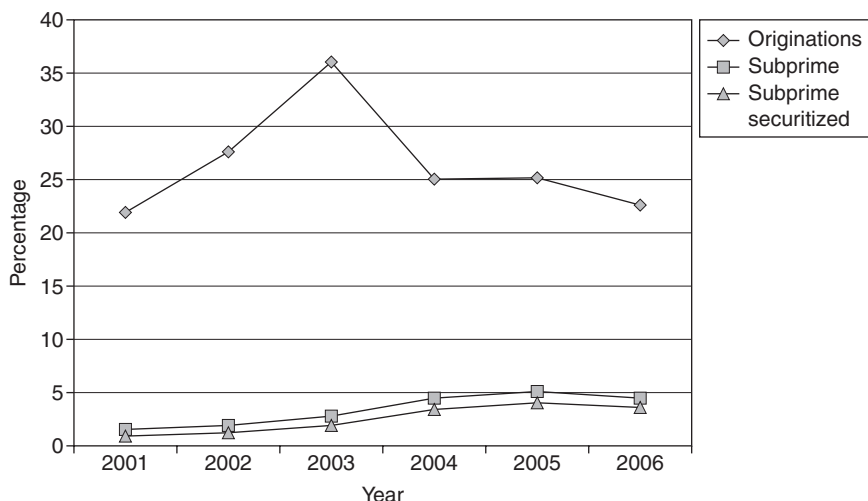


Figure 3.1 Mortgage lending, U.S., percentage of GDP (source: Mortgage Bankers Association, various issues).

Mortgage originations rose rapidly as interest rates were reduced after 2001, but peaked in 2003 as the prime market became increasingly saturated. At that time subprime mortgages began to rise steeply, thus supporting overall mortgage lending. Rapid increase was possible because up to 80 percent of subprime mortgages were securitized. Securitization, as is well-known, involves the creation of marketable debt by combining other debts that might not be marketable themselves, such as mortgages. New and artificial debts are thus created, the characteristics of which can vary according to the mix of mortgages (or other debts) that have gone into creating the “securitizations” in the first place. The originator of this process (typically a bank) makes profits through trading these artificial debts, rather than through the actual lending of money.

A vast U.S. real estate bubble ensued, which had repercussions on financial institutions across the world as securitized mortgage-based assets were traded internationally. The UK had its own real estate bubble during the same period, but there were no similar phenomena in Japan and Germany. Consequently, the impact on financial institutions varied considerably among the four countries, as is clear from the behavior of commercial bank assets (Figure 3.2).

Commercial banking in Japan and Germany barely grew during the period, while growth appears modest in the U.S. because non-bank financial institutions took the lead in the real estate bubble. But securitization created close links between the non-bank sector and U.S. commercial banks, causing the ultimate downfall of the latter. A more revealing picture of the role of commercial banks is given by the UK, where assets rose enormously, reaching five times GDP.

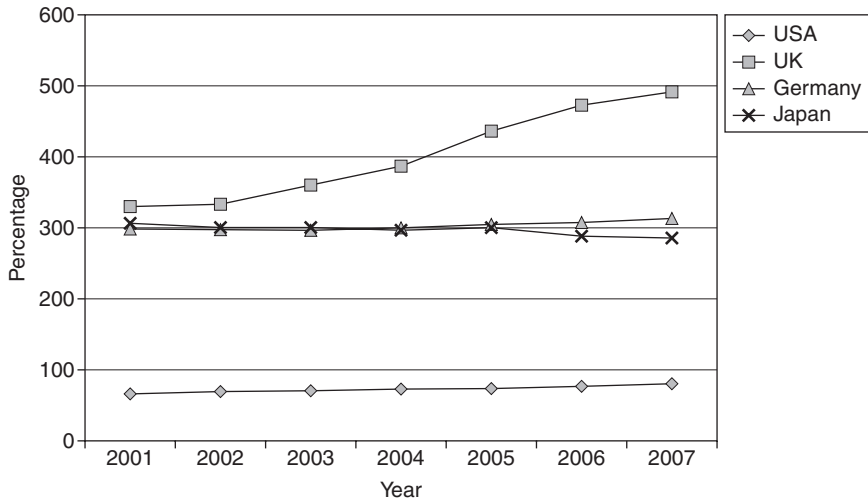


Figure 3.2 Bank assets as percentage of GDP (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

Elementary banking theory indicates that the expansion of bank assets has to be matched by appropriate rebalancing of liabilities. In this light, consider bank leverage measured as plain equity in proportion to assets, as shown in Figure 3.3.

There are significant problems of data comparability and measurement in this connection, but it is safe to state that leverage has been significantly lower

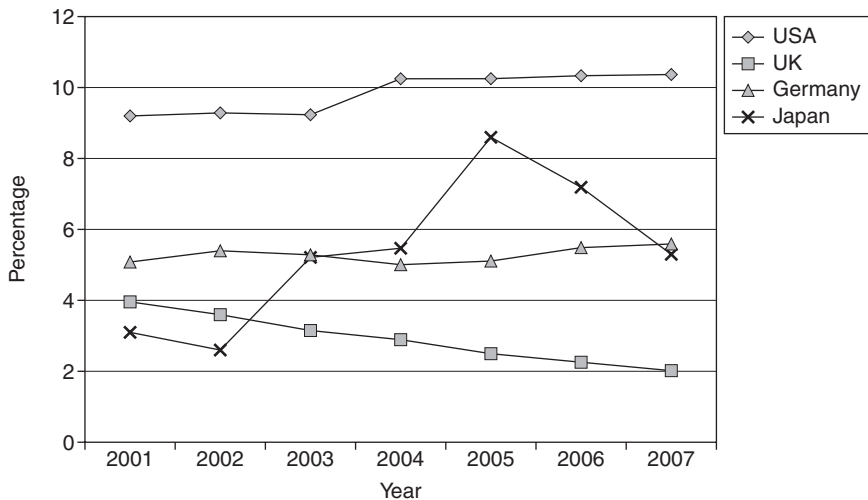


Figure 3.3 Commercial bank equity as percentage of assets (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

among U.S. commercial banks. This probably reflects lower holdings of government bonds (which carry a higher capital adequacy coefficient) forcing U.S. banks to keep higher proportions of equity. German banks show no great fluctuations in this regard, in contrast to dramatic changes for Japanese banks, which reflect the long-running turmoil in Japanese finance. British commercial banks, once again, offer a more revealing picture, also casting light on the practices of U.S. investment banks and non-bank institutions: UK bank leverage rose steadily.

The implications are evident. Return on equity (RoE) can be disaggregated as $RoE = \Pi/E = (\Pi/A) * (A/E)$, where Π is profit, E is equity and A is assets. Therefore, the rise in leverage, A/E , supported high profitability for equity holders. Banking profits in the UK and the U.S. in the 2000s depended on banks expanding assets while lowering equity. There is little evidence that banking profits were due to skill in lending.

But who accumulated the debt that matched growing bank assets, thus supporting bank profits in the 2000s? The traditional site for such debt would be the corporate sector. Consider, then, the leverage of non-bank corporations, defined as debt to equity, shown in Figure 3.4. It is apparent that indebtedness did not rise significantly within the productive sector. There is considerable variation within the four countries but, in general, indebtedness declined or remained fairly stable throughout the period. This is consistent with the evidence on investment which, as Figure 3.5 shows, remained practically stagnant, or declined significantly in all four countries. The fall in investment was most pronounced in the U.S., the country at the epicentre of the bubble.

A further potential venue for debt accumulation would have been the public sector. However, as is shown in Figure 3.6, there was no significant rise in public

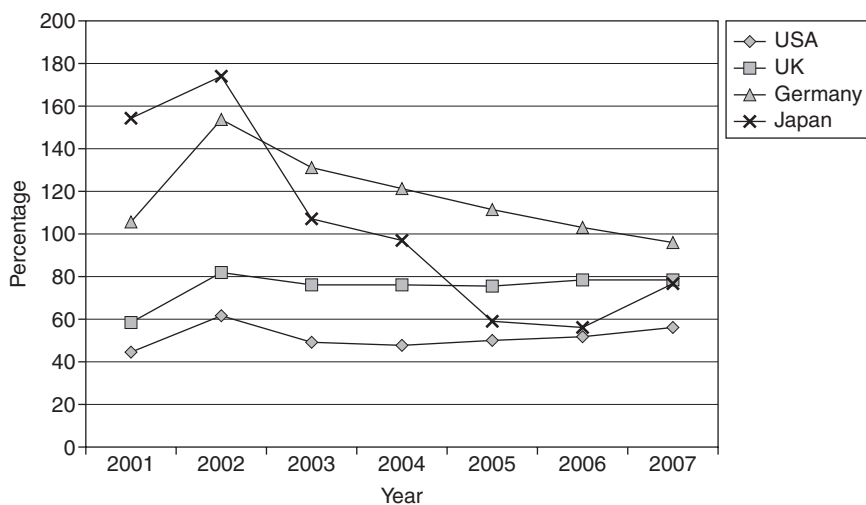


Figure 3.4 Leverage of non-bank corporations (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

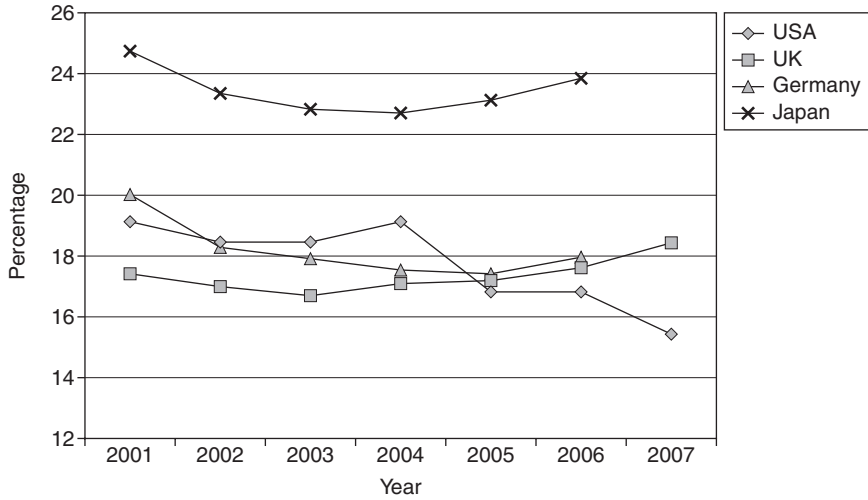


Figure 3.5 Aggregate investment as percentage of GDP (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

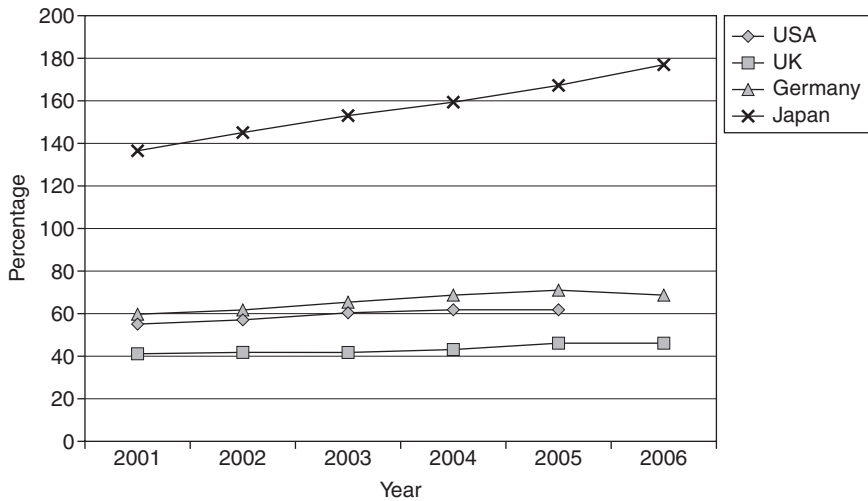


Figure 3.6 Public debt as percentage of GDP (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

debt in the U.S., the UK and Germany. Public debt escalated even further in Japan, but the causes were clearly associated with the country's internal travails since the early 1990s. Since the relevant debt accumulation occurred neither in the corporate, nor in the public sector, inevitably household debt rose to support bank profits (see Figure 3.7).

The four countries present a very different picture with regard to household debt. While indebtedness among German and Japanese households fell, that among U.S. and UK households rose steeply. The bulk of this debt – up to 80 percent – was due to mortgages. Bank profitability was supported by mortgaged household incomes as workers and other social layers were caught in a housing bubble. Indeed, the weight of unsecured consumer debt fell in the late 2000s, especially in the UK. This is consistent with the performance of consumption during the bubble. Contrary to what has often been asserted in public debate, consumption relative to GDP remained at best stable, or even fell in Germany and the UK, as shown in Figure 3.8. At the root of this phenomenon lay stagnant real wages.

To recap, a pure financial bubble occurred in 2001–07, fed by mortgage credit and sustained by securitization. Banks and other financial institutions grew rapidly in the U.S. and the UK, sustaining profitability through higher leverage. During this period the real sector performed indifferently, and investment even fell in the U.S. This is a notable difference with the Japanese real estate and stock market bubble of the 1980s, during which private investment rose significantly.

Furthermore, corporate and public indebtedness did not escalate. Rather, the debt that supported bank profits was accumulated by the household sector, primarily in the U.S. and the UK. Much of this debt was acquired by the least

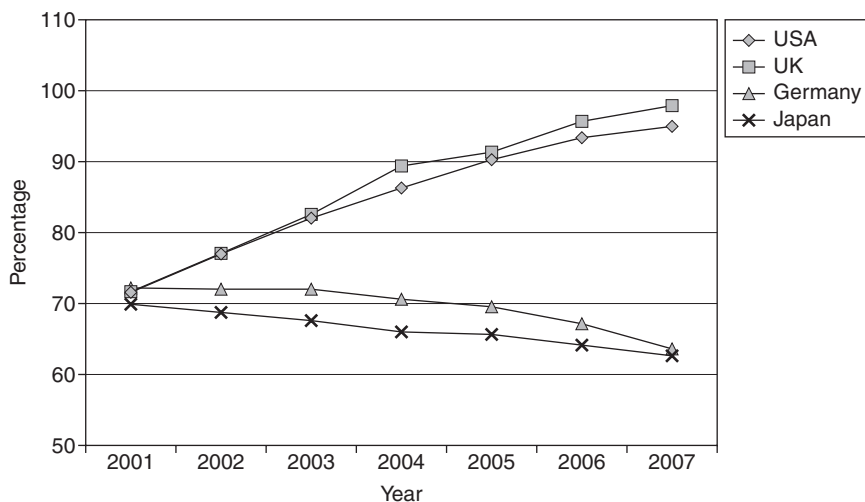


Figure 3.7 Household debt as percentage of GDP (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank), ONS).

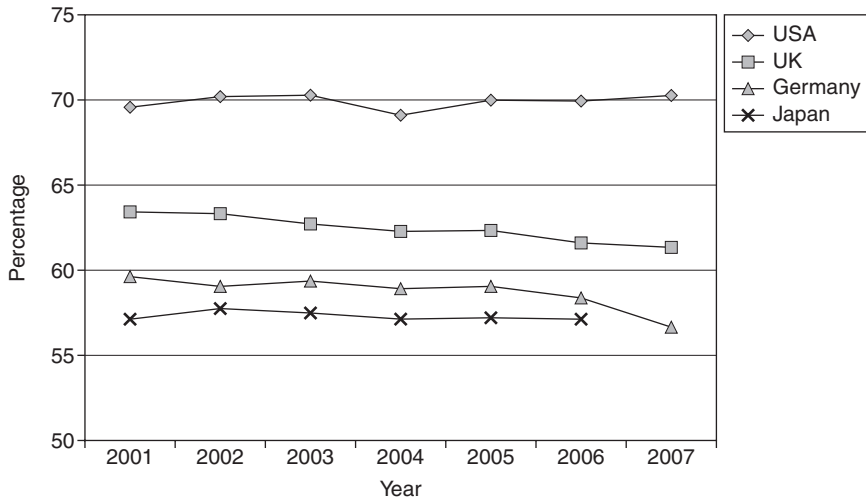


Figure 3.8 Consumption as percentage of GDP (source: Flow of funds accounts (Fed, Bank of Japan, Bundesbank, ONS).

creditworthy layers of the working class as subprime lending surged. When repayment difficulties materialized among the poorest workers, the bubble came to an end, and banks were prostrate. The world recession that followed in 2008–09 was in large measure rendered by shrinkage of credit and collapsing demand.

It is historically unprecedented for a global crisis to be precipitated by debt default among the poorest workers. The global dimension of the crisis, moreover, is largely due to securitization that spread problematic mortgage debt across the world. This is a further vital difference with the Japanese bubble of the 1980s, which remained a local occurrence. In these respects, the crisis reflects the transformation of mature capitalist economies in recent decades, and more specifically the advance of financialization. Consider now some of the theoretical responses to the issues posed by financialization in general, and by the crisis in particular.

Radical approaches to financialization and the crisis of 2007–09

Marxist political economy of financial expansion

The Marxist current of *Monthly Review* already published original insights on the rise of finance in the 1970s.² According to *Monthly Review*, capitalist accumulation in the twentieth century is characterized by three trends: first, slowing down of the rate of growth; second, rise of monopolistic multinational

corporations; third, financialization (Sweezy 1997). These trends are associated with the fundamental problem of the “absorption of the surplus” that presumably characterizes mature capitalism (Baran and Sweezy 1966).

Specifically, monopolies generate an ever expanding surplus, which cannot be absorbed by the sphere of production, resulting in stagnation. To relieve stagnation, unproductive consumption (including pure waste) inexorably rises in mature capitalism. This argument was put to use when economic turmoil took hold in the 1970s.³ For the *Monthly Review* current, as production stagnated under the weight of the surplus, capital began to seek refuge in circulation, and above all in the speculative activities of finance. Financialization emerged as the sphere of production became inundated by the investible surplus.

The gist of this argument has proven extremely influential among Marxist and other heterodox theories. Political economy explanations of the crisis of 2007–09 typically stress the contrast between stagnating or declining production and thriving finance. There is a presumption that capital has attempted to deal with problematic profitability in production by seeking financial profits. However, at some point the potency of the financial escape declined and crisis manifested itself.

The most sophisticated and influential variant of this argument has been offered by Brenner (2002, 2006, 2009), for whom stagnation in the sphere of production is related to Marx’s theory of the tendency of the rate of profit to fall. To be specific, since the late 1960s there has been sustained overcapacity in production that has exacerbated competition, thus lowering profit rates. Actual crisis has been evaded by palliatives, such as boosting demand through exchange rate manipulation and encouraging cheap credit. When credit creation spurred by the Federal Reserve in 2001 had run its course, the underlying reality of problematic production manifested itself and the world was plunged into crisis.

Brenner’s account of the tendency of the rate of profit to fall has little in common with Marx’s theory of the rate of profit.⁴ Still, Brenner’s readiness to treat the economic upheavals of recent years as crises of long-term over-accumulation and falling profit rates has had an important impact on other Marxist writing. Harman (2009, 2010) and Callinicos (2010), for instance, have shared this view, without necessarily accepting Brenner’s core theoretical analysis. For both, financial expansion and credit provision were able to create prosperity, but as soon as credit growth had run its course, the underlying crisis of profitability burst out. Unlike Brenner, however, both openly accept that financialization is a notable trend of contemporary capitalism. They do not offer a systematic definition of it, but superimpose financial expansion on the presumably fundamental process of over-accumulation.

The strand of Marxist writing that aims to show the applicability of (some version of) over-accumulation theory to the current crisis is not persuasive, as is apparent from the analytical description of the current crisis in the next section. There is little evidence that significant over-accumulation took place in the four key economies in the 2000s. What occurred, mostly in the U.S. and the UK, was a pure bubble with peculiar characteristics, above all, with a very limited impact

on industrial and other productive capital. In short, there can be no explanation of the crisis that does not first analyze the financial transformation of contemporary capitalism.

Post-Keynesian analysis of financialization

Post-Keynesian analysis of financialization also stresses the putative link between stagnating production and booming finance, for instance, Epstein (2005). Unlike the Marxist approaches, however, post-Keynesians typically ascribe the stagnation of production to the deleterious role of booming finance. The poor performance of the real sector in mature capitalist countries is caused in large measure by the expansion of the financial sector.

Post-Keynesian analysis of financialization does not derive from Minsky, who did not generally discuss the long-term balance between finance and the rest of the economy, except in some very late output (Minsky 1996; Minsky and Whalen 1996). Rather, post-Keynesian analysis is based on the concept of the rentier, and in particular on the money lender as rentier. This is clear in several influential works, such as Crotty (1990), Pollin (2007), and Epstein (2005). The re-emergence of the rentier as a result of neoliberal economic policy has induced poor performance in investment, output and growth in developed countries. Policy intervention is required to regulate finance – for instance, liquidity reserves of banks, direction of credit, limits on investment banking activities, and so on – resulting in improved output, employment, and income (Crotty 2008, 2009; Crotty and Epstein 2008, 2009).

In Keynes' (1973: ch. 24) analysis of mature capitalism the rentier is a parasitical economic entity that extracts profits due to the scarcity of capital, and which might thus depress investment and profitability. Successful capitalism requires the “euthanasia of the rentier” effected through low interest rates. In some of Marx's (1981: chs. 21, 22, 23, 24) writings the analysis of “monied” capitalists is certainly reminiscent of the rentier. “Monied” capitalists are a section of the capitalist class that does not invest its capital in production but prefers to lend it to others. Thus, money capital available for loans is owned by the “monied” section, but is put to use by the productive section, the latter paying a part of the resulting surplus value as interest to the former.

However, in Marx's *Capital* loanable capital is also seen as emerging spontaneously through the operations of industrial (and other) capital, by taking the form of idle money in the first instance.⁵ It does not belong to “monied” capitalists, and nor does the receipt of interest define a distinct section within the capitalist class. Rather, the financial system is a set of markets and institutions (operating as separate capitalist concerns) that mobilize loanable capital and support capitalist accumulation. This approach is naturally averse to treating financialization as the triumph of the rentier over the productive capitalist. It also offers far richer insight into contemporary capitalism, as is shown in the fourth section.

The post-Keynesian stress on the rentier is also present in more recent publications, for instance, Stockhammer (2004) and Orhangazi (2008). Much of this

output has a strong empirical dimension, seeking to show that the rentier has a depressing effect on the real sector, typically by constraining available investment funds and/or lowering the returns of industrial capitalists. There are affinities with the work of the “finance-led capitalism” current which also stresses the depressive effect of financialization on production (Hein *et al.* 2008; Evans 2009).

Other approaches to financialization

A further approach to financialization that has proven influential is that of Arrighi (1994), who places financialization within a cyclical theory of the world economy starting with the early modern era. Financialization represents the autumn of hegemonic capitalist powers as productive prowess declines and the sphere of finance expands. Genoa, the Netherlands, Britain and the U.S. became financialized as their production and trade declined, subsequently becoming lenders to the emerging hegemonic powers.

An intractable problem with Arrighi’s theory, when it is applied to the current era, is the absence of an obvious hegemonic replacement for the U.S. Arrighi’s own suggestion in the Epilogue of his book that Japan might play this role looks unfortunate with hindsight. The U.S. has been a massive net borrower, not lender, for many years, not least from Japan and China. If this is the autumn of U.S. hegemony, it has not coincided with the U.S. emerging as lender to the world, and certainly not to China. Nonetheless, Arrighi’s work has been path-breaking, not least in motivating Krippner’s (2005) innovative empirical study of U.S. financialization that set the terms of the debate on financial profits within economic sociology. Krippner has established the rising importance of financial profits for non-financial corporations during the last five decades.

Still another approach to financialization is that of the Régulation School, resulting partly from the long-standing interest of this school in money and finance.⁶ The presumed disintegration of Fordism has led Régulation theorists to search for a new regime of accumulation, including in the sphere of finance. For Boyer (2000), the new regime of accumulation has begun to be formed around financial markets, mostly the stock exchange. However, regulation through finance can have problematic effects for the performance of accumulation, including rates of growth, output, and so on (Aglietta 2000; Aglietta and Breton 2001).⁷

The regulationist approach has affinities with the voluminous literature on changes in corporate governance since the 1970s. “Shareholder value” and the associated short-termism of corporate enterprises have attracted the interest of political economists and business school writers. The widely quoted article by Lazonick and O’Sullivan (2000) demonstrated the connections between shareholder value and company downsizing as neoliberalism rose to ascendancy. This theoretical terrain clearly overlaps with economic sociology, particularly with regard to the problematic implications of financialization for work and employment (Thompson 2003; Clark 2009). Financialization has rebounded against labour with respect to security of employment and intensity of work, as Dore

(2008) has also observed with regard to inequality and the distribution of skill across industries.

Finally, economic geographers and sociologists have traced the further social impact of financialization, including its implications for the spatial development of capitalism (Leyshon and Thrift 2009). Considerable work has been produced on the financialization of individual life (Langley 2008), as well as on the cultural aspects of finance in contemporary capitalism (Pryke and Du Gay 2007). Researchers at the UK Centre for Research on Socio-Cultural Change in recent years have also discussed “coupon pool” capitalism, the transformation of banking, and the emergence of new elites (Savage and Williams 2008). These insights are important to developing a coherent political economy of financialization.

Financialization as systemic transformation: the roots of the current crisis

For Marxist political economy, the line of causation between real accumulation and finance is never direct but always mediated. Moreover, real accumulation sets the parameters for the functioning of finance, although the direction of causation can run in both directions (Itoh and Lapavitsas 1999: ch. 4). A complex set of structures, often reflecting historical, institutional, political, customary, and even cultural factors, mediate the interaction between finance and real accumulation (Lapavitsas 2003: ch 4).

The analysis of financialization, therefore, must specify the mediations through which malaise in production has been associated with booming finance, ultimately leading to crisis. This involves establishing changes in the behaviour of industrial capitals, the operations of banks, the practices of workers, the articulation of financial markets with each other and with the rest of the economy, the interventions of the state, and so on. The issue, in other words, is to show how industry, banks, workers, financial markets, and so on, have become “financialized,” individually as well as jointly.

A distinct social layer of rentiers, for instance, is far from evident in contemporary capitalism. Financial institutions are, of course, intermediaries that mobilize idle money across social classes, they are not a rentier social layer. Furthermore, the presumed social tension between rentier and industrialist has been far from visible in the course of the recent crisis. Indeed, there has been remarkable commonality of response to the crisis by corporate and financial interests.

Similar problems hold for the “crisis-in-suspension” view of contemporary capitalism, exemplified by Brenner, according to which crises are due to underlying over-accumulation, but are postponed or delayed through financial expansion. This is a reversal of classical Marxism, for which restructuring is an inevitable response to over-accumulation, while crises are temporary and sharp upheavals that prepare the ground for the restoration of profitability. Moreover, there is little evidence of over-accumulation in the U.S., Japan or across Europe in the 2000s, as was shown in the second section of this chapter. And nor was

there a decline in profit rates on the approach to crisis commensurate with the gigantic nature of the upheaval that commenced in 2007. To be sure, average profitability in developed countries has been consistently below the levels of the 1960s, despite recovering from the trough of the early 1980s.⁸ But the crisis of 2007–09 has little in common with a crisis of profitability, such as 1973–75.

There is no doubt that the rise of finance in recent decades has been accompanied by indifferent performance of real accumulation.⁹ But for a theory of financialization it is necessary to focus analysis on the transformation of the conduct of industrial and commercial capital, banks, and workers. In this respect there is broadly Marxist work that can be of considerable help. There is, for instance, path-breaking work on derivative markets by Bryan and Rafferty (2007), even though they interpret derivatives as a new type of money. There is also recent writing on the international political economy of the current crisis, undertaken from a variety of standpoints, for instance, Gowan (2009), Panitch and Gindin (2009), and Wade (2008). Even more significantly, Blackburn (2006) has put forth several insights regarding the operations of financial markets and associated financial institutions. Finally, Chesnais (1997) has long studied financialization, stressing the role of the rentier while remaining fully aware of the international aspect of financial flows.

The approach to financialization put forth in what follows was originally developed after the emergence of crisis in 2007.¹⁰ It is acutely aware of the theories mentioned above, but also draws heavily on classical Marxist debates on imperialism and finance capital, particularly the methodological approach of Hilferding (1981) and Lenin (1964). Hilferding argued that capitalism was transformed through the rise of finance capital at the end of the nineteenth century. Finance capital was created as monopolistic corporations increasingly relied on banks for investment finance. Industrial and banking capitals were amalgamated, with banks in dominant position. The rise of finance capital led to erection of trade barriers, export of capital, militarism, and imperialism. Lenin took the core of Hilferding's analysis, added "parasitical rentiers" as well as a greater emphasis on monopoly, and produced the definitive Marxist theory of imperialism.

Hilferding also identified a new form of profits for the capitalist class arising because future profits are discounted at the rate of interest in stock markets, but capital actually invested generates the rate of profit. Since the rate of interest tends to be below the rate of profit, the price paid for shares exceeds the capital actually invested. The difference is "founder's profit," and accrues in a lump sum to those who issue shares, or manage the flotation of shares in stock markets.

Financialization represents a structural transformation that has evident analogies with Hilferding's and Lenin's time: multinational corporations dominate the world economy; finance is on the ascendant; capital export has grown substantially; a certain type of imperialism has reasserted itself. But it is also apparent that the original theory does not fully fit present conditions: there is no fusion of banks with industrial capital; banks are not dominant over industry; there are no trade barriers corresponding to territorial empires.

The most important element of Hilferding's and Lenin's analysis is their methodological approach. Namely, both sought the deeper causes of the phenomena of their time in fundamental relations of accumulation, including credit relations among monopolistic enterprises and banks. The rise of finance capital had organizational implications, such as dense connections between finance and industry through interlocking appointments, exchange of information, and joint decision making. Trade barriers, capital export, and imperialism flowed naturally from these developments. Imperialism was not an arbitrary political strategy but a phenomenon with specific historical content rooted in economic processes.

A similarly systemic analysis of financialization ought to commence from the molecular relations between contemporary industrial and financial capitals. Since the late 1960s the world economy has come to be dominated by large monopoly capitals (multinational corporations) in terms of both trade and foreign direct investment.¹¹ However, contrary to Hilferding, large corporations have been able to finance investment without relying heavily on banks. The primary mechanism has been retention of own profits, as was observed by Sweezy (1942: 267) decades ago.

External finance for large corporations, meanwhile, has been raised heavily in open financial markets due to flexibility and low cost. Even the wage bill is frequently financed through the issuing of commercial paper. Consequently, corporations have developed skills in independent financial trading, including trade credit but also securities and foreign exchange trading. Successive waves of take-overs, furthermore, have led to corporations becoming heavily involved in bond and equity trading in stock markets.¹² In short, monopoly capitals have become "financialized," i.e., they are at once more independent from banks and more heavily involved in financial activities on their own account. This fits the evidence shown in section 2: the enormous expansion of bank assets in the 2000s has had little to do with lending to corporations for investment.

Consequently, banks have restructured themselves in several ways since the 1970s, two of which stand out. First, banks have turned toward households and individuals as sources of profit; second, banks have turned to financial market mediation to earn fees, commissions, and profits from trading, i.e., toward investment banking. The turn of banks toward households is related to the financialization of workers' revenue, a striking aspect of the last three decades. This trend includes increased borrowing (mortgages, general consumption, education, health, and so on) but also expanding financial assets (housing, pensions, insurance, money market funds, and so on). Financialization of workers' revenue is associated with real wages remaining stagnant, or rising very slowly, since the late 1970s. It is also related to public provision retreating across a range of services: housing, pensions, education, health, transport, and so on.

Workers' consumption has become increasingly privatized and mediated by the financial system. Banks and other financial institutions have been able to extract profit directly out of wages and salaries, rather than surplus value. They have also been able to make profits out of workers' assets, particularly as public

provision of pensions has retreated, encouraging the channelling of workers' savings to pension funds, insurance companies, money funds, and thus to the stock market.

The "financialization" of workers' income, savings, consumption, and assets characterizes the current period. It has also stamped the crisis of 2007–09, as was shown in section 2. But relations between banks and households are qualitatively different from relations between banks and industrial capitalists. The former involve finance that is not directly involved in generating surplus value in accumulation. Furthermore, the aim of workers, generally speaking, is to acquire use values, while financial institutions and industrial capitalists share a similar aim, i.e., profit extraction. By the same token, there are systematic differences in information as well as economic and social power between banks and workers.

The emergence of financial profits out of wages and salaries as a systematic social phenomenon has been called financial expropriation (Lapavistas 2009b).¹³ Given the specific features of relations between workers and financial institutions, it is not surprising that predatory and usurious practices have proliferated, both in lending and in the handling of workers' assets.¹⁴ In these respects financialization represents the revival of the ancient predatory outlook of the financial system toward both economy and society.

The turn of banks toward investment banking, on the other hand, has been fostered by the growth of open financial markets. Investment banking typically borrows in wholesale money markets to invest in securities, thus earning profits through fees, commissions, and proprietary trading. The rise of these banking activities was given formal status with the abolition of the Glass–Steagall Act in the U.S. in 1999, and similar legislation elsewhere. Investment banking has been fuelled by successive waves of mergers and acquisitions among monopoly capitals during the last three decades. It has also benefited from the channelling of personal savings to stock markets at the behest of the state. Finally, it has found room for growth in the new markets that have emerged in derivatives, particularly as exchange rate instability set in.

The crisis of 2007–09 represents a particularly acute combination of bank lending to individuals with investment banking, summed up in the second section. Large commercial banks borrowed in the money markets, used the funds to finance lending to workers for mortgages, and made profits out of trading mortgage-based securities. In effect banks "churned" their capital to create off-balance sheet items, drawing profits from fees or capital gains. By implication banks came to rely on money markets to obtain liquidity, while weakening their solvency. These two effects combined to produce the most acute phenomena of the crisis.¹⁵

The transformation of commercial banks was inevitably accompanied by profound changes in information-gathering and risk management. Dealing with individuals normally has prohibitive informational costs due to large numbers and small size of transactions. But the technological revolution in information and telecommunications in recent decades has allowed banks to adopt "credit scoring" and associated statistical manipulation of risk.¹⁶ Similarly, banks have

adopted essentially investment banking techniques to manage the risk attached to their balance sheets in general. The dominant practices of Value at Risk rely on computationally intensive statistically-based techniques, which rest on mark-to-market accounting.

In short, “relational” have been replaced by “hard” methods of ascertaining creditworthiness. Banks relied less on personal visits, the placement of bank employees within corporation structures, and the management of corporate accounts and monetary transactions, and more on computationally intensive statistical methods. Furthermore, due diligence on marketed loans has often been subcontracted to other institutions, such as credit rating agencies. The net result appears to have been a net loss of ability of banks to judge creditworthiness. This, again, was a notable feature of the crisis of 2007–09, marked by explosive growth of self-evidently problematic subprime loans.

Conclusion

The upheaval of 2007–09 emerged at the end of a bubble sustained by housing credit and financial innovation. A striking feature of the bubble was rapid growth of financial institutions on the back of investment banking activities. Such growth was matched by household indebtedness in the U.S. and the UK. Meanwhile, the bubble had a modest impact on production – and even consumption – in mature countries.

The crisis of 2001–07 was thus systemic and reflected the rise of finance relative to production in recent years, a trend that political economists have increasingly captured through the term financialization. The origins of this concept lie within Marxist political economy, but it has been deployed in complex ways by other social scientists, including sociologists.

The literature on financialization relates the concurrent phenomena of expanding finance and poorly performing production. The point is, however, that there is no direct causation between finance and production, in either direction. Rather, complex mediating processes exist between the two, which have to be analyzed in their own right, if the concept of financialization is to have explanatory power.

It was argued in this chapter that financialization is a systemic transformation of capitalist economies with three distinguishing features, all of which are important in explaining the crisis of 2007–09. First, relations between large non-financial corporations and banks have been altered, as the former have come to rely heavily on internal finance, while seeking external finance in open markets. Large corporations have acquired independent financial skills – they have become financialized.

Second, banks have consequently transformed themselves. Specifically, banks have turned toward mediating transactions in open markets, thus earning fees, commissions, and trading profits. They have also turned toward individuals in terms of lending and handling financial assets. The transformation of banks has relied on technological development, which has encouraged “hard” as opposed to “soft” practices of risk management.

Third, individual workers and households have been led into the financial system both with regard to borrowing and to holding financial assets. The retreat of public provision in housing, health, education, pensions, and so on, has facilitated the financialization of individual income, as have stagnant real wages. The result has been the extraction of bank profits through direct transfers of personal revenue, a process called financial expropriation.

Notes

- 1 This article is based on a keynote address to the annual conference of Japan Society for Political Economy (Keizairiron Gakkai), Tokyo University, November 2009. Thanks are due to several JSPE members, who have been friends to me for many years. The article also draws heavily on the work of the network Research on Money and Finance. A broadly related analysis of financialization has also appeared in Lapavitsas (2011). All errors and omissions are the author's own.
- 2 See Magdoff and Sweezy (1987). See also Bellamy Foster (2007, 2008) and Foster and Magdoff (2009). Interesting insights on Sweezy's understanding of financialization can be found in Pollin (2004).
- 3 Sweezy had already surmised the future weight of finance in the 1970s, despite the relative neglect of finance in his work.
- 4 As was made clear by several contributors to two special issues of *Historical Materialism* (Vol. 4, No. 1, 1999 and Vol. 5, No. 1, 1999) dedicated to Brenner's original argument.
- 5 For further discussion, see Lapavitsas (1997).
- 6 Anglo-Saxon audiences were introduced to it largely through the journal *Economy and Society*, above all, by the seminal special issue on financialization in 2001 (No. 30).
- 7 See Grahl and Teague (2000).
- 8 See Dumenil and Levy (2004, 2005).
- 9 Shown by Glyn (2006) succinctly and concisely.
- 10 See, above all, the special issue of *Historical Materialism* on financialization, particularly Lapavitsas (2009b) and Dos Santos (2009).
- 11 See Morera and Rojas (2009).
- 12 See Dos Santos (2009) for evidence for the U.S.
- 13 See also Dos Santos (2009) for further analysis.
- 14 See Dymski (2009) for analysis of U.S. predatory lending, especially the racial dimension.
- 15 See Lapavitsas (2009b).
- 16 See Lapavitsas and Dos Santos (2008).

References

- Aglietta, M. 2000. "Shareholder value and corporate governance: some tricky questions," *Economy and Society*, 29(1): 146–159.
- Aglietta, M. and R. Breton. 2001. "Financial systems, corporate control and capital accumulation," *Economy and Society*, 30(4): 433–466.
- Arrighi, G. 1994. *The Long Twentieth Century: Money, Power, and the Origins of Our Times*, London and New York: Verso.
- Baran, P. and P. Sweezy. 1966. *Monopoly Capital*, New York: Monthly Review Press.
- Bellamy Foster, J. 2007. "The financialization of capitalism," *Monthly Review*, 58(11), www.monthlyreview.org.

- Bellamy Foster, J. 2008. "The financialization of capital and the crisis," *Monthly Review*, 59(11), www.monthlyreview.org.
- Bellamy Foster, J. and F. Magdoff. 2009. *The Great Financial Crisis: Causes and Consequences*, New York: Monthly Review Press.
- Blackburn, R. 2006. "Finance and the fourth dimension," *New Left Review*, 39: 39–70.
- Brenner, R. 2002. *The Boom and the Bubble: The US in the World Economy*, London: Verso.
- Brenner, R. 2006. *The Economics of Global Turbulence*, London: Verso.
- Brenner, R. 2009. "What is good for Goldman Sachs: the origins of the current crisis," New Introduction for Brenner, R. 2006. *The Economics of Global Turbulence*, www.sscnet.ucla.edu/issr/cstch/papers/BrennerCrisisTodayOctober2009.pdf.
- Boyer, R. 2000. "Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis," *Economy and Society*, 29(1): 111–145.
- Bryan, D. and M. Rafferty. 2007. "Financial derivatives and the theory of money," *Economy and Society*, 36(1): 134–158.
- Callinicos, A. 2010. *Bonfire of Illusions*, New York: John Wiley.
- Chesnais, F. 1997. *La mondialisation financière*, Paris: Syros.
- Clark, I. 2009. "Owners and managers: disconnecting managerial capitalism? Understanding the private-equity business model," *Work, Employment and Society*, 23: 775–786.
- Crotty, J. 1990. "Owner-manager conflict and financial theory of investment stability: a critical assessment of Keynes, Tobin, and Minsky," *Journal of Post Keynesian Economics*, 12(4): 519–542.
- Crotty, J. 2008. "Structural causes of the global financial crisis: a critical assessment of the 'New Financial Architecture'," Political Economy Research Institute, Working Paper 180.
- Crotty, J. 2009. "Profound structural flaws in the US financial system that helped cause the financial crisis," *Economic and Political Weekly*, XLIV(13): 127–135.
- Crotty, J. and G. Epstein. 2008. "Proposals for effectively regulating the US financial system to avoid yet another meltdown," Political Economy Research Institute, Working Paper 181.
- Crotty, J. and G. Epstein. 2009. "Regulating the US financial system to avoid another meltdown," *Economic and Political Weekly*, XLIV(13): 87–93.
- Dore, R. 2008. "Financialisation of the global economy," *Industrial and Corporate Change*, 16(6): 1097–1112.
- Dos Santos, P. 2009. "On the content of banking in contemporary capitalism," *Historical Materialism*, 17(2): 180–213.
- Dumenil, G. and D. Levy. 2004. *Capital Resurgent: Roots of the Neoliberal Revolution*, Cambridge, MA: Harvard University Press.
- Dumenil, G. and D. Levy. 2005. "The profit rate: where and how much did it fall? Did it recover? (USA 1948–1997)," CEPREMAP-ENS, www.jourdan.ens.fr/levy/dle2004y.pdf.
- Dymski, G. 2009. "Racial exclusion and the political economy of the subprime crisis," *Historical Materialism*, 17(2): 149–179.
- Epstein, J. (ed.) 2005. *Financialization and the World Economy*, Northampton, MA: Edward Elgar.
- Evans, T. 2009. "The 2002–7 of US economic expansion and limits of finance-led capitalism," *Studies in Political Economy*, 83: 33–59.
- Gowan, P. 2009. "Crisis in the Heartland," *New Left Review*, 55: 5–29.

- Grahl, J. and P. Teague. 2000. "The *Régulation* School, the employment relation and financialization," *Economy and Society*, 29(1): 160–178.
- Glyn, A. 2006. *Capitalism Unleashed*, Oxford: Oxford University Press.
- Harman, C. 2009. *Zombie Capitalism*, London: Bookmarks.
- Harman, C. 2010. "Not all Marxism is dogmatism: a reply to Michel Husson," *International Socialism Journal*, 125, www.isj.org.uk/index.php4?id=613&issue=125.
- Hein, E., T. Niechoj, P. Spahn, and A. Truger. (eds) 2008. *Finance-Led Capitalism?*, Marburg: Metropolis Verlag.
- Hilferding, R. 1981[1910]. *Finance Capital*, London: Routledge & Kegan Paul.
- Itoh, M. and C. Lapavistas. 1999. *Political Economy of Money and Finance*, London: Macmillan.
- Keynes, J.M. 1973[1936]. *The General Theory of Employment, Interest and Money*, London: Macmillan/Palgrave.
- Krippner, G. 2005. "The financialization of the American economy," *Socio-Economic Review*, 3: 173–208.
- Langley, P. 2008. *The Everyday Life of Global Finance*, Oxford: Oxford University Press.
- Lapavistas, C. 1997. "Two Approaches to the concept of interest-bearing capital," *International Journal of Political Economy*, 27(1), Spring: 85–106.
- Lapavistas, C. 2003. *Social Foundations of Markets, Money and Credit*, London: Routledge.
- Lapavistas, C. 2009a. "Financialisation embroils developing countries," *Papeles de Europa*, Special issue on financialisation, 19: 108–139.
- Lapavistas, C. 2009b. "Financialised capitalism: crisis and financial expropriation," *Historical Materialism*, 17(2): 114–148.
- Lapavistas, C. and P. Dos Santos. 2008. "Globalization and contemporary banking: on the impact of new technology," *Contributions to Political Economy*, 27: 31–56.
- Lapavistas, C. 2011. "Theorizing financialisation," *Work, Employment and Society*, 25(4): 611–626.
- Lazonick, W. and M. O'Sullivan. 2000. "Maximizing shareholder value: a new ideology for corporate governance," *Economy and Society*, 29(1): 13–35.
- Lenin, V. 1964 [1916]. "Imperialism, the Highest Stage of Capitalism," in *Collected Works*, Vol. 22, Moscow: Progress.
- Leyshon, A. and N. Thrift. 2009. "The capitalization of almost everything: the future of finance and capitalism," *Theory Culture Society*, 24: 97–115.
- Magdoff, H. and P. Sweezy. 1987. *Stagnation and the Financial Explosion*, New York: Monthly Review Press.
- Marx, K. 1981 [1894]. *Capital*, Vol. III, London: Penguin/NLR.
- Minsky, H. 1996. "Uncertainty and the institutional structure of capitalist economies," Working Paper 155, Levy Economics Institute of Bard College.
- Minsky, H. and C. Whalen. 1996. "Economic insecurity and the institutional prerequisites for successful capitalism," Working Paper 165, Levy Economics Institute of Bard College.
- Morera, C. and J.A. Rojas. 2009. "The globalisation of financial capital, 1997–2008," RMF Discussion Paper 6, www.soas.ac.uk/rmf.
- Orhangazi, Özgür. 2008. "Financialization and capital accumulation in the non-financial corporate sector: a theoretical and empirical investigation of the US economy, 1973–2004," *Cambridge Journal of Economics*, 32: 863–886.
- Painceira, J.P. 2009. "Developing countries in the era of financialisation: from deficit accumulation to reserve accumulation," RMF Discussion Papers No. 4, February.

- Panitch, L. and S. Gindin. 2009. "The current crisis: a socialist perspective," *Studies in Political Economy*, 83: 7–31.
- Pollin, R. 2004. "Remembering Paul Sweezy," *Counterpunch*, March 6/7, www.counterpunch.org.
- Pollin, R. 2007. "The resurrection of the rentier," *New Left Review*, 46, July–August: 140–153.
- Pryke, M. and P. DuGay. 2007. "Take an issue: cultural economy and finance," *Economy and Society*, (36)3: 339–354.
- Savage, M. and K. Williams (eds). 2008. *Remembering Elites*, London: John Wiley.
- Stockhammer, E. 2004. "Financialization and the slowdown of accumulation," *Cambridge Journal of Economics*, 28: 719–741.
- Sweezy, P. 1942. *The Theory of Capitalist Development*, New York and London: Monthly Review.
- Sweezy, P. 1997. "More (or less) on globalization," *Monthly Review*, 49(4), www.monthlyreview.org.
- Thompson, P. 2003. "Disconnected capitalism: or why employers can't keep their side of the bargain," *Work, Employment and Society*, 17: 359–378.
- Wade, R. 2008. "Financial regime change," *New Left Review*, 53: 5–21.

4 The global financial crisis as a world great depression

An analysis using Marxian economics

Masayoshi Tatebe

Structure of the global financial crisis as a world great depression

The current global financial crisis constitutes a great depression that is raging on a global scale, which I believe can be best understood in the context of the following scheme.

Since the 1990s, the world economy has been experiencing the phenomena of surplus money and surplus capital. What has emerged from these twin phenomena is a very conspicuous case of the tail wagging the dog: that is, the financial economy (the tail) is seen to be wagging the real economy (the dog).

Some thought has to be given at this point to the meaning of “surplus.” For our purposes, let us adopt the following definitions. First, “surplus funds” refers to funds for which new fields of investment are difficult to find. By implication then, surplus funds are funds for which investment opportunities that would yield a certain expected profit rate cannot be found (Suzuki 2008: 5). On the other hand, “surplus money capital” is generated when the accumulation of money capital proceeds on a global market scale at a pace that exceeds the accumulation of real capital, such that money capital cannot readily be converted into real capital – that is, money capital that cannot participate in generating the expected profit rate (Koni 2008: 10). In other words, surplus funds and surplus money capital are not directed toward productive investments because of the very low expected profit rate. Instead, in pursuit of financial gain, surplus funds and surplus money capital remain in the financial market (or, in certain cases, in the commodities market) where they roam about in the form of money capital. Of course, this does not imply that the companies themselves are being transformed into money capitalists. On this particular point, it should be understood that the lion’s share of corporate profits are absorbed by the very high levels of executive remuneration, the buyback of the company’s own shares, and merger and acquisition (M&A) activities.

In discussing surplus funds and surplus capital, the following three facts should be pointed out:

- 1 In the United States, funds raised by corporations in the stock markets have remained negative overall on a net basis since the 1980s. This is because, while many companies continue to issue new shares, they are constantly

outnumbered by companies that are utilizing surplus funds and surplus money capital to buy back and retire their own shares as a defense against M&A and buyout threats from other companies. Moreover, consider the case of leveraged buyouts (LBOs), which deem corporations to be no more than a certain type of financial instrument. (In LBOs, the acquiring company procures the necessary funds for acquisition by pledging the assets of the acquired company as collateral. LBOs are frequently aimed at restructuring and reselling the acquired company.) The proliferation of LBOs bears eloquent testimony to the fact that acquiring companies have determined that the expected profit rate on productive investments in their own business fields is unacceptably low.

- 2 The fact that profit rates are declining in the industrialized countries can be readily confirmed by observing the trends in the real yield of ten-year government bonds, which serves as a substitute variable for the profit rate (Mizuno 2007: 44). Specifically, real yields in the industrialized capitalistic countries fell sharply from an average of 4.8 percent for the 1980s and through the first half of the 1990s to the 2-percent range after 2004. Thus, the rate of return on real investments with a ten-year maturity has declined precipitously (*ibid.*).
- 3 The approximate scale of global financial assets can be estimated by taking aggregate market capitalization, the outstanding balance of bonds issued, and the aggregate amount of deposits. Comparing the sum of these to nominal GDP for the entire world reveals the fact that, whereas global financial assets amounted to 1.7 times global GDP in 1990, this ratio had risen to 3.2 times by 2006.

It should be noted that this surplus money or surplus capital can take various forms, such as the funds available to institutional investors that comprise pension funds, foundations, insurance companies, and investment trusts. Other prominent forms include hedge funds, sovereign wealth funds, and the foreign currency reserves of current-account surplus countries. Funds supplied from these sources are absorbed into a broad range of markets where they accumulate. Needless to say, the leading markets for financial instruments consist of the stock markets, bond markets, interest markets, and foreign exchange markets. Parallel to these markets, funds are also absorbed into derivatives markets that utilize the foregoing financial instruments as underlying assets. Furthermore, these funds go to housing loan and other types of asset-backed securities (ABS) markets as well as commodities markets. Finally, in this context, the credit-creating ability of commercial banks must not be overlooked.

Furthermore, the existence of surplus money or surplus capital can be seen as a representation of the risk of overproduction that lies dormant in the modern capitalistic economy. That is to say, if this surplus money or surplus capital were to be directed toward productive investments, the modern capitalistic economy would immediately experience overproduction.

Thus far, we have looked only at the side of nonfinancial corporations. However, significant changes have also taken place on the side of financial

institutions. Certainly, we must not overlook the collapse of traditional business models in the financial sector and the ongoing transition to new models.

To begin with, commercial banks have shifted the focus of their lending from the productive sphere to non-productive, personal, and financial spheres. The latter group includes lending to LBOs (a form of lending that does not lead to an increase in investment or production from the perspective of the national economy), hedge funds, and households. As commercial banks continue to shift their focus, their primary source of revenue has also begun to shift from earnings on interest margins to earnings on fee-based business, a part of which originates in the securitization of loans to households and LBOs. Looking at this situation from a different vantage point, one can say that commercial banks have found that they have no alternative but to turn to these types of activities to fill in as their primary revenue source. This must be seen as the collapse of the existing business model, which is based on interest margins derived from lending to productive corporations, and the transition to new models.

We turn next to investment banks. When we exclude revenues derived from proprietary trading, the revenue source of investment banks can be seen to be shifting from fees earned on the underwriting of stocks and corporate bonds to fees earned on M&A advisory services, the securitization of housing loans, and the management of surplus money and surplus money capital held by investors. One of the reasons for this shift can be found in the enactment of the Gramm–Leach–Bliley Act of 1999, which abolished Section 20 of the Glass–Steagall Act of 1933 (that banned banks from entering into corporate affiliations with companies principally engaged in securities underwriting). The abolition of Section 20 effectively opened the way for bank holding companies and national banks to enter the securities business through the formation of sister companies and subsidiaries. (This, however, does not mean that the Gramm–Leach–Bliley Act allowed investment banks to accept deposits.) The crucial point under the new legislation was that investment banks were left with no other way than the above-mentioned activities to earn substantial revenues. With competition from commercial banks, where else could the investment banks turn for revenue? This change must also be seen as a transition to new business models following the collapse of the traditional business model that was based on fees earned on the underwriting of stocks and corporate bonds.

In a well known passage, Lenin (1934: 44) states: “The concentration of production, the monopolies arising therefrom, the merging or condescence of banks with industry: this is the history of the rise of finance capital and the content of this concept.” Furthermore, Hilferding (1981: 225) presents the following argument.

The banks have to invest an ever-increasing part of their capital in industry, and in this way they become to a greater and greater extent industrial capitalists. I call bank capital, that is, capital in money form which is actually transformed in this way into industrial capital, finance capital.

The question arises whether the “content of” the concept of finance capital, particularly the “merging or concrescence of banks with industry” and “bank capital ... actually transformed ... into industrial capital,” is consistent with the content of the concept of modern finance capital.

While at this point I have yet to arrive at a final conclusion and definitive expression, in light of the definitions of surplus funds and surplus money capital, and in considering the collapse of the traditional business models of commercial banks and investment banks and their pursuit of new models, I believe that labeling modern finance capital as “casino-type finance capital” is certainly a viable option. In view of the fact that the terms “casino capitalism” and “financial capitalism” are already in common use, it seems to me that casino-type finance capital is an appropriate and defensible expression.

Assuming that the concept of casino-type finance capital can be outlined as above, this presentation of the concept directly and immediately leads us to an awareness of the parasitism and decay that lies within casino-type finance capital. In other words, whereas in the traditional setting, the productive sphere and productive profits functioned as the primary source of revenues, casino-type finance capital comprises none other than a form of finance capital with marked tendencies for deriving its revenues from the personal sphere and personal income, and from the financial sphere and financial gain.

When we examine the process of financial deregulation and globalization that has gained momentum since the 1980s, we can say without any doubt that this process was advocated and carried forward by an amalgam of casino-type finance capital and the state, and that casino-type finance capital clearly lies behind the current global financial crisis which constitutes a world great depression.

Perhaps a caveat should be interjected at this point: this explanation of casino-type finance capital does not in any way imply that the intimate relationships that exist between industry and financial institutions under modern capitalism have been severed or in any way undermined. This intimate relation continues to exist as can be reaffirmed from the fact that failing major corporations still have nowhere to turn for their final salvation but to banks and to the state.

On the other hand, in view of the essential features of the world of finance, the following five points can be readily confirmed:

- 1 Insofar as economic bubbles constitute a dramatic rise in asset prices (or commodity prices) to a degree that cannot be validated by developments in the real economy, while it may not be possible to predict the timing and trigger of a bubble in advance, it can be stated with certainty that all bubbles eventually collapse.
- 2 From the perspective of the national economy, financial transactions do not generate value or value-added in and of themselves. From the point of view of Marxian economics, interest is nothing more than a special term used to describe the amount that is part of the average profit generated by an industrial capitalist who borrows money (that is, possible or potential capital)

from money capitalists (or banks) and utilizes the money productively, and that is not pocketed by the industrial capitalist and is instead handed over to money capitalists (or banks). Therefore, interest merely constitutes a portion of the average profit (surplus value). Hence, financial transactions, such as lending and borrowing, do not generate interest as part of any form of created value. The same applies to buying and selling of stocks and land (homes). These transactions also do not generate any value or value-added.

- 3 While derivatives and the securitization of housing loans and other assets may be used to transfer risk from financial institutions to investors, they do not function as instruments for reducing or eliminating overall risk. In other words, derivatives and securitization cannot rise above the strictures of a zero-sum game.
- 4 Financial institutions (commercial banks and investment banks) derive revenue from the securitization of housing loans and other types of loans in the form of fees, such as securitization fees and selling fees. Financial institutions also gain from the spread between the purchase price of loans and the selling price of the mortgage- and asset-backed securities made up of these loans. Finally, investors earn interest income on the financial instruments that they hold. However, all of the above revenue streams originate in and are bounded by the interest paid by households that have taken out housing loans.
- 5 In other words, from the point of view of Marxian economics, finance provides nothing more than a framework for redistributing existing value or value-added.

Let us now attempt to tie together the essence of casino-type finance capital (i.e., from the perspective of the national economy, financial transactions do not generate value or value-added in and of themselves) with the essence of the world of finance (i.e., from the point of view of Marxian economics, finance provides nothing more than a framework for redistributing existing value or value-added). It will be interesting to see what understanding can be gleaned and what conclusion can be derived from this juxtaposition. The answer is immediately obvious. Casino-type finance capital periodically gives rise to economic bubbles (which frequently result in the revitalization of the real economy and give rise to a situation in which the interests of financial institutions coincide with those of big firms). After an economic bubble has formed, households as well as investors (primarily consisting of pension funds, investment trusts, and hedge funds) heavily laden with surplus funds and surplus money capital that cannot find their way to productive investment are inexorably sucked into the vortex of the bubble. It is only by doing so and by fully and aggressively utilizing its credit-creating ability (an ability unique to commercial banks and not shared by investment banks) that casino-type finance capital can achieve the expected level of financial gain.

This conception allows us to gain a very clear and full understanding of a series of economic events that have occurred since the 1990s, including the

Asian and Russian currency crisis, the rise and fall of the dot-com bubble, the rise and fall of the housing bubble, and the rise and fall of the prices of oil and grains.

This brings us to the next set of questions. Compared to these earlier financial crises, why has the current financial crisis become so severe? Why didn't this crisis remain localized in the United States? And finally, how did this crisis develop into a global financial crisis and further morph into a great depression on a world scale?

Let us begin with a closer look at the aspect of global financial crisis. It is immediately obvious that a number of developments stand at the root of this phenomenon of global financial crisis. It cannot be denied that the most notable contributing factors include problems arising from the proliferation of derivatives and the securitization of subprime loans encompassing housing loans and various other types of loans. These developments can be shown to be deeply intertwined with the emergence of the current global financial crisis. In turn, these developments are closely linked to financial globalization and advances in financial engineering, a by-product of financial deregulation. In the process, a host of previously unknown terms have come to be widely used in both the business world and in academia, such as collateralized debt obligations (CDO), CDO squared, credit default swaps (CDS), and synthetic CDOs. In the final analysis, the essence of what occurred can be summarized as follows. First, historically low interest rates on a global scale fed the housing bubble. Next, U.S. commercial banks and investment banks originated various relatively high-yield ABS and CDO products that provided an ideal destination for surplus funds and surplus money capital. Sure enough, not only U.S. investors but also investors from throughout the world, including European and Japanese financial institutions, vied to purchase these financial instruments. As the final piece of the scheme, CDSs were brought in to hedge the risks of the large volumes of CDOs that had been acquired.

The current global financial crisis is rooted in the confluence of a number of conditions that include the accumulation of surplus funds and surplus money capital, the emergence of casino-type finance capital, financial globalization, and the widespread use of securitization and derivatives. If these conditions had not existed together, the current financial crisis would most probably have remained localized in the United States and would not have developed into a global financial crisis. However, this observation does not imply that the modern capitalistic economy has the option of turning back from where it stands today. This inability to turn back in fact symbolizes the dilemma that is inherent in the modern capitalistic economy.

Next, let us consider the aspect of a world great depression. As we observe economic bubbles, on the one hand, we can clearly determine that bubbles have a far-reaching impact on the real economy. In the case of a housing bubble, the extension of housing loans by commercial banks combined with a sharp rise in property values stimulates personal consumption, which in turn activates the real economy by increasing the corporate sector's plant and equipment investment.

By the same token, the collapse of an economic bubble extracts a heavy toll on the real economy. Once again in the case of a housing bubble, the process begins to unwind with rapidly declining property prices. Parallel to this, commercial banks begin to accumulate bad loans and to experience serious deterioration of their capital to risk-weighted assets ratio, the outcome of which is a precipitous cutback in lending to households and firms. These factors combine to suppress personal consumption and plant and equipment investment, which ultimately results in the slowdown and stagnation of the real economy. The conclusion and lesson derived from the observation of economic bubbles is that both of these opposing developments must be kept in mind simultaneously. The implication that the financial economy, as the tail, is wagging the real economy, as the dog, must be examined in this context.

This can be restated as follows. Looking at the domestic U.S. economy, the housing bubble led to overconsumption (consumption exceeding the repayment ability of home loan borrowers) as well as overinvestment (investment instigated by overconsumption). These developments resulted in an increase in U.S. imports and an increase in exports of other countries to the United States. (Exports to the United States from China and other Asian countries and European nations increased. While Japanese exports to the United States decreased, Japanese exports to China increased.) Consequently, the United States came to play the role of locomotive to the world economy and ultimately served to stimulate and activate the entire world economy. However, the reverse side of overconsumption and overinvestment was overproduction, an outcome that obviously could not be avoided. The collapse of the housing bubble triggered the reversal of this process. Under the newly emergent circumstances, the overproduction that had remained dormant until then would sooner or later manifest itself, giving birth to depression.

The situation would soon be further worsened by the vicious cycle that was set in motion by the deterioration of the financial economy and the downturn in the real economy.

Looking back to the Asian and Russian currency crisis, the dot-com bubble, and the speculative boom in oil and grains, it is notable that the scope of each of these past crises was localized and remained within the geographic or market confines of Asia and Russia, the United States, and the commodities markets, respectively. On the other hand, the recent housing bubble has had a global impact, both in terms of the financial economy and the real economy. Herein lies the most salient feature of the current economic crisis, which rendered its development into a global financial crisis and world great depression inevitable.

Finally, a comment is in order regarding the future outlook. Let us suppose that governments and central banks temporarily succeed in bringing the current crisis and depression under control and ending them by resorting to the maximum available measures of fiscal and monetary policies. The crux of the problem is that such a resolution does not by any means imply an elimination of surplus money or surplus capital. The irony of the situation is that surplus money and surplus capital are supported and bolstered by the very fiscal and monetary

measures implemented to overcome the crisis, and for the most part will continue to exist, including the credit-creating ability of commercial banks. From there, surplus money and surplus capital will continue to roam freely in the financial markets (and commodities markets). That will, as a matter of course, lead to a situation in which casino-type finance capital will continue to dominate the modern capitalistic economy, conspiring to use surplus money and surplus capital in another round of moneymaking. There is no way to predict the scale and form of the next economic bubble because much will depend on the positions taken in financial regulation and supervision, which in turn will be affected to a great extent by the activities of the casino-type finance capital lobby. However, what can be predicted with confidence is that other bubbles will inevitably continue to form and to collapse in the future.

Present situation and future direction of state monopoly capitalism

In this section, I shall consider the current global financial crisis and world great depression from the perspective of the present situation and future direction of state monopoly capitalism.

The term “state monopoly capitalism” is an expression that Lenin coined and began to use toward the end of the 1910s. In the context of this chapter, I shall define it to refer to a specific phase in the stage of monopoly capitalism where the merging or condescence of finance capital with the state has become essential and indispensable to the continuation of capitalism, not only during wartime but also during peacetime. In adopting this definition, I am positing that the stage of free competition capitalism gave way to the stage of monopoly capitalism at the beginning of the twentieth century, that the transition from the stage of monopoly capitalism to the stage of state monopoly capitalism was triggered by the Great Depression that started in 1929, and that the transition was finally consummated after World War II. Furthermore, it is my position that state monopoly capitalism comprises two separate types, which are Keynesian state monopoly capitalism and neo-liberal state monopoly capitalism.

Let us begin with an examination of Keynesian state monopoly capitalism. Keynes’ *The General Theory of Employment, Interest and Money* (1933) is founded on the theory of effective demand, which can be summarized as follows.

Effective demand consists of consumption demand and investment demand. The size of consumption demand is determined by the propensity to consume. According to the fundamental psychological law of modern society, which states that “men are disposed, as a rule and on the average, to increase their consumption as their income increases, but not by as much as the increase in their income,” the propensity to consume can be assumed to be “a fairly stable function” (ibid.). Therefore, in considering the factors affecting consumption demand, Keynes goes no further than to hint at the probability of involuntary unemployment. That is, once it is assumed that the propensity to consume

remains stable, involuntary unemployment can occur only when investment demand is not large enough to cover the gap between aggregate supply price (defined as the “proceeds which entrepreneurs expect to receive from the employment of” certain men) and consumption demand, thus leading to a shortage of effective demand. This leads us to the implication that the key to the determination of the employment level lies in the size of investment demand.

As for the size of investment demand, this is determined by the marginal efficiency of capital (approximately equal to the rate of prospective profit) and the rate of interest. Regarding the former, Keynes (*ibid.*) argues that the marginal efficiency of capital was significantly lower during the twentieth century as compared to the nineteenth century. To explain the nineteenth century’s higher level, he cites such reasons as “the growth of population and of invention, the opening-up of new lands, the state of confidence and the frequency of war over the average of (say) each decade.” Next, increased investment in any given type of capital asset will tend to lower the marginal efficiency of that type of capital asset. In the short term, due to the law of diminishing returns, marginal efficiency declines as supply prices rise. In the long term, marginal efficiency declines as the prospective yield falls due to the increase in that type of capital asset and the intensification of competition. Thus, insofar as the marginal efficiency of capital is determined by economic datum (the state of confidence of entrepreneurs, the conditions of competition) and various non-economic factors (population growth, the law of diminishing returns, etc.), marginal efficiency of capital can be generally treated as a given.

Turning next to the rate of interest, this variable is determined by the quantity of money and the level of liquidity preference (the propensity of people to hold savings in the form of money, i.e., liquidity, not in the form of debts). In an economy that is under the gold standard, it is also basically possible to treat the quantity of money as a given. Thus, what remains at the end is the level of liquidity preference. However, in reality the level of liquidity preference generally remains higher than the marginal efficiency of capital. This happens because the special characteristics of money (gold) – elasticities of production and substitution are nearly zero, and carrying cost is low – combine with the love of money on the part of the possessors of assets (as differentiated from entrepreneurs) and their desire to hold assets in money form. (“John Bull can stand many things, but he cannot stand 2 per cent.”)

Therefore, the ultimate reason for involuntary unemployment can be found in the combination of the special characteristics of money and the asset possessors’ love of money and their desire to hold assets in money form. Accordingly, the direct path to remedying involuntary unemployment lies in abolishing the gold standard and transitioning to a managed currency system, which will lead to an increase in the quantity of money (the quantity of inconvertible paper money) and thus to a decline in the rate of interest. This conclusion of the *General Theory* can be easily and directly identified in the words of Keynes himself.

Regarding the ultimate cause of unemployment, Keynes (*ibid.*: 235) states: “Unemployment develops, that is to say, because people want the moon; — men

cannot be employed when the object of desire (*i.e.*, money) is something which cannot be produced and the demand for which cannot be readily choked off.” Next, regarding the remedy for unemployment and depression, Keynes (*ibid.*: 235, 234) writes:

There is no remedy but to persuade the public that green cheese is practically the same thing and to have a green cheese factory (*i.e.*, a central bank) under public control. [...] The only relief – apart from changes in the marginal efficiency of capital – can come (so long as the propensity towards liquidity is unchanged) from an increase in the quantity of money.

However, what happens when the marginal efficiency of capital declines very precipitously? Under such a condition, it suddenly becomes possible to imagine a situation in which it would prove very difficult to maintain an appropriate quantity of investment by merely manipulating the rate of interest. This brings us to Keynes’s trump card, which is none other than the state.

For my own part, I am now somewhat sceptical of the success of a merely monetary policy directed towards influencing the rate of interest. I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage, taking an ever greater responsibility for directly organising investment.
(*ibid.*: 164)

It should be noted that the multiplier theory is none other than a formula for determining the increase in national income that would result from an increase of one unit of effective demand.

Regarding the theory of effective demand proposed in the *General Theory*, before all else, we must turn to the words of Keynes (*ibid.*: 380) himself. “The enlargement of the functions of government, ... I defend it, ... as the only practicable means of avoiding the destruction of existing economic forms in their entirety.” As can be seen from this statement, insofar as they were aimed at avoiding the destruction of the capitalistic economy, Keynesian policies undeniably represent state monopoly capitalistic policies.

Second, therefore, the essential reality of Keynesian state monopoly capitalistic policy lies in the effective demand policies pursued through low interest rate policies and fiscal spending policies that are implemented by the government and by the central bank that functions under public control. Fiscal spending policies have the effect of increasing government demand for industrial capital (monopolistic industrial capital). Thus, it can be easily recognized that fiscal spending policies are directly linked to the interests of industrial capital. In contrast to this, it would appear at first sight that low interest rate policies work to the detriment and disadvantage of rentiers and banking capital (monopolistic banking capital). However, in reality, by stimulating increased investment by industrial capital and thereby generating increased lending by banking capital to

industrial capital, low interest rate policies undeniably contribute to profit maximization by banking capital. While the *General Theory* may point to the ultimate painless death of the rentier, it certainly does not envision banking capital meeting its death, painless or otherwise.

It would be timely at this juncture to point out that Keynesian policies are made vulnerable by two Achilles' heels. The first relates to the tolerance for inflation (call to mind the Phillips curve), while the second pertains to the inherent exposure to massive and constant fiscal deficits. However, things took an unexpected turn in the 1970s. The two oil price shocks of the decade brought an abrupt end to the age of low inflation and high economic growth and ushered in the new phenomenon of stagflation. No longer was the world presented with a choice between inflation and depression. Rather, simultaneous inflation and depression had now become the single and unavoidable choice. Under these newly emerging circumstances and the massive buildup of fiscal deficits, Keynesian economics suffered a rapid decline in influence in the realms of both theory and policy. Thus, the "death of Keynesian economics" and the "end of Keynesian policies" came to be widely and loudly proclaimed.

It was at this point that a new actor appeared on center stage to replace the fast declining Keynesian Revolution. This was none other than the monetarism and neo-liberalism of Milton Friedman who advocated a counter-revolution against Keynesian economics.

There is no need here to delve into the details of Friedman's thinking. Suffice it to say that while Keynes advocated discretionary fiscal and monetary policies as an appropriate response to depression and unemployment that were inevitable and unavoidable so long as the capitalistic economy functioned under the policies of *laissez-faire*, Friedman countered by advocating rule-based fiscal and monetary policies based on the conviction that the market economy has a tendency to achieve full employment so long as the market remains free of artificial distortions. Furthermore, Friedman's neo-liberalistic policies contain such features as the review and revision of social welfare policies, the undermining and weakening of labor unions, the implementation of a far-reaching agenda for deregulation, and the privatization of national enterprises.

It is in these points that we can discover the innermost secrets of why and how neo-liberal state monopoly capitalism emerged to replace Keynesian state monopoly capitalism. Consider once again the events of the 1970s and the conditions that prevailed then. The emergence of stagflation combined with the accumulation of fiscal deficits brought on the most serious crisis since the Great Depression of 1929, this occurring at a time when the Soviet type of socialism was still boasting of its sound and excellent health. Faced with these conditions, neo-liberal state monopoly capitalism came to the fore as an attempt to fundamentally resolve the difficult challenges posed by the accumulation of capital and the maximization of profit. On the one hand, the endeavors of neo-liberal state monopoly capitalism featured the promotion of financial deregulation and globalization. On the other hand, as we have already noted, neo-liberal state monopoly capitalism called for the review and revision of social welfare

policies, the undermining and weakening of labor unions, the implementation of a far-reaching agenda for deregulation, and the privatization of national enterprises. In reality, however, attempts to realize any of these objectives in ways consistent with the interests of monopoly capital would have proven to be extremely difficult to achieve without the strong leadership of the state. As for the globalization of finance, one needs to go no further than to call to mind such expressions as the Washington Consensus and the Wall Street-Treasury Complex.

To summarize, when we focus our attention on the merging or condescence of monopoly capital with the state, the undeniable fact is that it is virtually impossible to identify any essential difference between Keynesian state monopoly capitalism and neo-liberal state monopoly capitalism. In this sense, we must not allow ourselves to be misled and duped by the term “liberal.”

The irony of the situation is that the shrinking of domestic demand caused by the implementation of neo-liberalistic policies created for industrial capital the headache of having to cope with a decline in the expected profit rate. On the other hand, this system of neo-liberal state monopoly capitalism created an ideal environment for rampant casino-type finance capital, which ultimately would result in the housing bubble, as well as the current global financial crisis and world great depression which followed the bubble’s collapse.

The current economic crisis, which has been labeled the result of a “once-in-a-century credit tsunami,” is notable for generating a movement toward the resurrection of Keynesian fiscal policies. Certainly, there is no surprise in this turn of events. As presented by Friedman, the prescriptions that underlie neo-liberalistic policies include a tendency to favor monetary policies over fiscal policies (combined with a tendency to emphasize the supply side and to downplay the demand side). However, monetary policy has its limitations. While generally capable of providing financial institutions with the liquidity that they require, monetary policy, unlike fiscal policy, is unable to directly generate the demand (effective demand) needed by the real economy. That is, central banks are only able to indirectly stimulate demand by lowering their operating target interest rate, which sets off a transmission mechanism that begins with banks lowering their lending rates, thereby contributing to an increase in corporate plant and equipment investment and household consumption demand. Moreover, monetary policy is burdened by the zero-interest rate constraint. In other words, once the operating target interest rate is lowered to zero, monetary policy is robbed of its ability to even indirectly stimulate additional demand.

All of this does not imply that the world is prepared to entrust its future to Keynesian fiscal policies. It is helpful to remember that thanks to the principles of sound fiscal management that had prevailed under the gold standard, the fiscal policies of the 1930s that followed the Great Depression of 1929 were launched from a position of zero accumulation of fiscal deficit. It can be said that it was exactly for this reason that the fiscal measures of the 1930s proved relatively effective. The situation surrounding the current economic crisis can hardly be more different, with the United States and Japan already burdened with massive

amounts of accumulated fiscal deficits. The question that arises is whether such countries will be able to tolerate or withstand any further increase in government debt.

What conclusion can be drawn concerning the future course of the modern capitalistic economy? Unable to find a third way, the modern capitalistic economy faces an extremely narrow range of choices. Perhaps all that can be predicted at this point is that it will continue to swing like a pendulum between Keynesian state monopoly capitalism and neo-liberal state monopoly capitalism.

Consequences of neo-liberal monetary policy

The current global financial crisis started with the collapse of the housing bubble in the United States. It is well known that as asset prices continued to rise, a sharp clash in thinking emerged between the FRB (Federal Reserve Board) view and the BIS (Bank for International Settlements) view on how central bank monetary policies should respond to the situation.

The FRB view is generally described as comprising the following (Shirakawa 2008: 400–401):

- 1 Monetary policies should target price stability, not asset-price stability.
- 2 Whether or not rising asset prices represent a bubble can only be determined after the fact. Asset prices reflect the knowledge and information available to large numbers of market participants, and it is unlikely that the central bank is capable of making better judgments than the market participants. Even assuming that the central bank does have such a capability, short-term interest rates would have to rise very dramatically in order to squelch the bubble, and there is no way to know in advance how far interest rates would have to be raised to achieve this purpose. Therefore, it is inappropriate to respond to rising asset prices by raising short-term interest rates.
- 3 If public authorities want to lower the risks of a bubble, monetary policy should not be the tool of choice. Instead, the authorities should opt for bank supervision and other forms of prudential policies.
- 4 Thus, monetary policies should not be used in preventing the rise of asset prices. On the other hand, aggressive monetary easing should be implemented after asset prices have fallen.

Needless to say, both Alan Greenspan and Ben Bernanke were passionate believers in the FRB view.

However, the FRB view contains several mistakes. First, as we have seen, the FRB view advocates that asset prices reflect the knowledge and information available to large numbers of market participants and that it is unlikely that the central bank is capable of making better judgments than the market participants. However, by accepting that market participants are privy to greater information and wisdom than the authorities, this position represents nothing other than a

complete capitulation of the monetary authorities to neo-liberalism. Ultimately, this is a position that brings the very existence and significance of central banks into question. It is generally emphasized that monetary policies must be implemented independently of the government. I should note that my thinking is that it is absolutely essential today for monetary policies to be implemented independently of the markets as well.

Second, advocating that monetary policies should be implemented independently of the markets does not imply a rejection of the necessity of dialogue with the markets. Let us assume that central banks are actively on the lookout for bubbles and that they determine that a bubble has emerged based on the rise in asset prices, in which case the trend in “fair price” based on fundamentals serves as a key criterion. In this scenario, the central bank should gradually raise interest rates while gauging market reactions. In certain cases, the central bank should proceed to take the bold step of raising interest rates in a more dramatic fashion. Even in this present age, it would be wrong to think that the markets would completely ignore the actions of the central bank.

Third, while it is reported that the FRB carefully studied and learned from Japan’s experience with deflation during the early 1990s, it would have been more productive to focus on Japan’s experience with quantitative easing monetary policy during the period between March 2001 and March 2006. It is an undeniable fact that Japan’s quantitative easing failed to generate economic recovery by increasing bank lending. In other words, the portfolio rebalancing effect anticipated by monetarists did not materialize. This is to say that Japan’s experiment with monetarist monetary policy predated the U.S. experiment and ended in complete failure. Thus, since the start of the current crisis, the United States has been following in the footsteps of Japan.

Fourth, while the above argument may very well draw rebuttals arguing that the United States was in fact able to successfully generate economic recovery through aggressive monetary easing after the collapse of the dot-com bubble, the truth of the matter is that this recovery was made possible by the housing bubble that was waiting in the wings (the “bubble relay”). In the case of the current phase of monetary easing, there is no bubble factor of comparable scale in waiting. Although there are some candidates for the next bubble, including oil prices, grain prices, and the possible emergence of bubbles in newly industrialized countries as a result of capital inflows from industrialized countries, these are small in scale compared to the housing bubble and clearly lack the power and momentum needed to restart the U.S. economy.

The inference that can be drawn from the above is that, buttressed by the Greenspan put and the Bernanke put, market participants were able to frolic in the “bubble game” without fear or worry. On the other hand, once the bubble collapsed, all the aggressive monetary easing that the FRB has been able to muster has failed to generate any significant recovery in the U.S. economy. Responsibility for this failure must be attributed solely to monetary policies based on the FRB view that arose out of the philosophies of neo-liberalism and monetarism. It is very clear that by leaving the bubble unattended,

the FRB has dramatically magnified the amplitude of the swings in the business cycle.

Moving next to the BIS view, this is generally described as comprising the following (ibid.: 402):

- 1 It is necessary to pay full attention to the buildup of various forms of financial imbalance. In this context, “financial imbalance” refers to the simultaneous occurrence of financial phenomena that are unlikely to be sustainable in the long run. Classic examples include rising asset prices, credit inflation, leverage expansion, and increase in investment ratio.
- 2 Admittedly, it is difficult to determine whether a bubble has come into existence. However, instead of trying to determine whether rising asset prices represent a bubble, central banks need to determine whether or not present economic conditions are sustainable. The above-mentioned factors serve as important criteria in making this determination.
- 3 Both monetary policies and prudence policies are needed in preventing financial imbalances. Therefore, central banks and bank regulatory authorities must engage in even closer cooperation than in the past.
- 4 Considering the massive negative impact of the collapse of a bubble on the economy, monetary policies should also target the prevention of bubbles.

I strongly sympathize with the BIS view and believe that if Marx were alive today, he would wholeheartedly agree with me.

In conclusion, it appears that, in the future, central banks throughout the world will have no choice but to orient their monetary policies toward a two-front battle of acting in advance to prevent the emergence of bubbles and acting after the fact to reduce the negative economic effects of the collapse of bubbles.

Bibliography

- Hilferding, R. (1981) *Finance Capitalism*, London: Routledge & Kegan Paul.
- Imura, K. (2010) *Sekaiteki kinyu kiki no kozu* [The structure of the global financial crisis], Tokyo: Keiso Shobo.
- Itoh, M. (2009) *Sabupuraimu kara sekai kyoko e* [From subprime to a world depression], Tokyo: Seidosha.
- Keynes, J.M. (1973) *The General Theory of Employment, Interest and Money*, Vol. VII, *The Collected Writings of John Maynard Keynes*, London: Macmillan.
- Koni, H. (2008) “Kinyu guobarizeshon to doru taisei” [Financial globalization and the dollar system], in S. Akiyama and M. Yoshida (eds) *Doru taisei to guobarizeshon* [Dollar system and globalization], Tokyo: Surugadai Shuppansha.
- Lenin, V.I. (1934) *Imperialism: The Highest Stage of Capitalism*, 2nd edn, London: Martin Lawrence.
- Mizuno, K. (2007) *Hitobito wa naze guobaru keizai no honshitsu o miayamaru noka* [Why do people misunderstand the essence of the global economy?], Tokyo: Nikkei Publishing.

- Shirakawa, M. (2008) *Gendai no kinyu seisaku: Riron to jissai* [Modern monetary policy in theory and practice], Tokyo: Nikkei Publishing.
- Suzuki, Y. (2008) *Gurobaru kinyu shihon shugi* [Global financial capitalism], Tokyo: Hakuto-Shobo Publishing.
- Takada, T. (2009) *Kinyu kyoko o yomitoku* [Understanding the financial crisis], Tokyo: Shinnihon Shuppansha.
- Tsuruta, M. (2009) *Gurobaru shihon shugi to nihon keizai* [Global capitalism and the Japanese economy], Tokyo: Sakurai-Shoten Publishers.

5 The demise of the Keynesian regime, financial crisis, and Marx's theory

Shinjiro Hagiwara

Introduction

The most recent world economic crisis started in Europe in the summer of 2007, and the U.S. economy plunged into a recession at the end of 2007. The latter in particular turned into a state of serious financial chaos following the bankruptcy of Lehman Brothers on September 15, 2008. The world's securities markets were thrown into very serious confusion for the first time since the stock market crash of October 1929. The financial crisis had a serious effect on real sectors worldwide, and the level of world trade was dramatically reduced in the first half of 2009. The world economy – and especially the economies of the United States and Europe – has not completely recovered from the crisis or undergone an altogether strong recovery process.

In this chapter, we will present the theoretical viewpoints needed to understand the financial crisis, as extolled by Karl Marx. Because Marx's theory was created in the middle of the nineteenth century, most scholars claim it is impossible to apply it to any financial crisis in the twenty-first century. However, we are adamant that the basic viewpoints concerning the contemporary financial crisis should be constructed by way of Marx's theory; we will show how his viewpoints are valuable in understanding contemporary financial crisis by studying the three historical stages of economic crisis in Europe and the United States. First, we will highlight some crucial viewpoints in Volume 3 of Marx's *Capital*; these viewpoints will help us understand not only the basic characteristics of a financial crisis in the mid-nineteenth century, but also those of one in the twenty-first century. Second, we will focus specifically on the economic situation in the period following World War II, when financial crisis was defused through the application of Keynesian policy. Finally, we will focus on financial crisis in the period of neo-liberalism after the collapse of the Keynesian regime. We will also apply Marx's theory to the analysis of financial crisis in the twenty-first century.

Financial crisis in the age of Marx: crucial viewpoints from Volume 3 of Marx's *Capital*

The role of credit in causing an economic crisis

Volume 3 of *Capital* is not a work that pertains to economic crisis, nor does it fully outline the viewpoints by which one can evaluate a financial crisis. However, it is possible to highlight some crucial phrases that assist in understanding financial crisis, as found in Chapter 27, “The Role of Credit in Capitalist Production.” In that chapter, Marx makes general observations about the credit system, and pays particular attention to the three ways in which credit leads to a reduction in circulation costs. First, when credit is in generally heavy use, in a large proportion of transactions, no currency is used. Second, the circulation of the circulating medium is accelerated. Third, gold money is replaced by paper (Marx 1981: 566–567). Therefore, the capitalistic credit system – based on commercial credit and developed into bank credit – economizes money, accelerates circulation speed, and creates a system in which there is no need for gold money; instead, money bears only the *concept* of value. The provision of credit allows the acts of buying and selling to take place over a longer time-frame, and it thus serves as a basis for speculation (Marx 1981: 567).

Joint-stock system and speculation

In terms of examining a contemporary financial crisis, however, we must choose some key phrasing from Marx's work with respect to the joint-stock system, because that system has borne a crucial role in financial crises in the period of neo-liberalism. It can be said that “the joint-stock system is an abolition of capitalist private industry on the basis of the capitalist system itself;” therefore, it accelerates speculation. “Credit offers the individual capitalist, or the person who can pass as a capitalist, an absolute command over the capital and property of others, within certain limits, and, through this, command over other people's labor” (Marx 1981: 570). Speculative behavior based on the property of others emboldens capitalists; and the success or failure of that behavior leads to the centralization of capital and expropriation. Indeed, “Credit gives these few [capitalists] more the character of simple adventurers,” says Marx; “Since ownership now exists in the form of shares, its movement and transfer become simply the result of stock-exchange dealings, where little fishes are gobbled up by the sharks, and sheep by the stock-exchange wolves” (Marx 1981: 571).

In capitalist society, the reproduction process, which is elastic in character, is assisted by credit in expanding to the utmost limits. The credit system thus becomes a “lever” for over-production and can lead to excessive speculation in commerce. In this way, says Marx,

The credit system hence accelerates the material development of the productive forces and the creation of the world market, which is the historical task of the capitalist mode on production to bring to a certain level of development,

as material foundations for the new form of production. At the same time, credit accelerates the violent outbreaks of this contradiction, crises, and with these the elements of dissolution of the old mode of production.

(Marx 1981: 572)

How does the credit system – especially the joint-stock system – drive the capitalists to partake in excessively speculative behavior? To answer this question, we must first research the formation of fictitious capital, as capital created by the joint-stock system. Marx argues that

The formation of fictitious capital is known as capitalization. Any regular periodic income can be capitalized by reckoning it up, on the basis of the average rate of interest, as the sum that a capital lent out at this interest rate would yield.

(Marx 1981: 597)

Therefore, says Marx, “the capital value of this security is still pure illusion” (Marx 1981: 597). The market value of this security moves of its own accord, even if real capital itself does not change. For example, if the face value of a stock is \$100, the rate of interest is 5 percent, and the yield of this stock is \$10, the market value of this stock is \$200, because the yield of \$10 will be capitalized by the 5 percent interest rate. The market value of this stock will be, in part, speculative, because it will be affected by the future yield of this stock. This is why a promising stock value rises rapidly in value. However, as Marx points out, “In times of pressure on the money market these securities fall in price for two reasons: first, because the interest rate rises, and second, because they are put up for sale in massive quantities, to be converted into money” (Marx 1981: 598). The proverbial financial-crisis storm passes away, and the market value of these securities revert to their former levels, insofar as the undertakings they represent have not come to grief and are not fraudulent. They are the best investment targets for speculators looking to make large profits, and their depreciation during a crisis is a powerful means of centralizing money wealth. If an increase or decrease in the market value of these securities has nothing to do with the movement of real capital, it will never change nations’ levels of wealth. “The nation was not a penny poorer by the bursting of these soap bubbles of nominal money capital” (Marx 1981: 599).

Formation of great financiers and stock-jobbers

The accumulation of the ownership of titles for real capital follows from the development of capitalist system. When these titles based on real capital are priced and circulate as commodities, they represent the value of capital. However, these title values move independent of the capitalist system; therefore, profits and losses caused by the price fluctuations among these titles become the result of gambling. Marx writes that

Gambling now appears in place of labor as the original source of capital ownership, as well as taking the place of brute force. This kind of imaginary money wealth makes up a very considerable part not only of the money wealth of private individuals but also of banking capital, as already mentioned.

(Marx 1981: 609)

The rapid development of the joint-stock system accelerates the accumulation of money capital for loans; it accumulates at the expense of both the industrial and commercial capitalists alike, because money capitalists buy up devalued industrial and commercial securities on a massive scale, knowing that they will soon rise again in value at a later time, perhaps even surpassing normal levels. Buyers will then sell off, and hence realize massive capital gains. The money-capitalists transform these gains into money capital for loans in the short term. The gains of money-capitalists constitute not just a source of money capital for loans; industrial and commercial capitalists transform the portion of profits not destined to be consumed as revenue into money capital for loans in the short term, while another portion is destined to be consumed as revenue and is transformed into loanable capital. If the price of materials and elements of production fall, capital may be released; likewise, an interruption of business can also set capital free. A considerable number of people who have retired from reproduction also transform money into loanable capital.

Marx argues that

As material wealth increases, the class of money capitalists grows. On the other hand there is an increase in the number and wealth of the retired capitalists, the rentiers; and secondly the credit system must be further developed, which means an increase in the number of bankers, money-lenders, financiers, etc. With the expansion of available money capital, the volume of interest-bearing paper, government paper, shares, etc. also expands, as explained already. At the same time, however, so does the demand for available money capital, since the jobbers who speculate in this paper play a major role in the money market.

(Marx 1981: 642–643)

Commercial banks respond to the jobber's demand for available money capital; therefore "With the development of the credit system, large and concentrated money markets are created as in London, which are at the same time the major seats of dealings in these securities;" eventually "The bankers put the public's money capital at the disposal of this gang of dealers on a massive scale, and so the brood of gamblers multiplies" (Marx 1981: 644).

The development of the British capitalist system, in institutional terms, created "financial superiority" over industry. It is well known that this superiority resulted in the passage of the English Bank legislation of 1844; the Bank of England was divided into an Issue Department and a Banking Department by

virtue of this law. The gold standard had been a currency system in use in the nineteenth century, but paper circulation governed precisely by the laws of metal circulation was considered the ideal system, with reference to this legislation. When gold drained, bank notes withdrew from circulation. In case of over-production, such behavior on the part of the Bank of England sometimes drew the British economy into a financial panic and economic crisis, because several means of payments were needed in times of emergency. Funds would not be supplied, interest rates rose rapidly, and business failures occurred in succession.

However, financiers capitalized on high interest rates the most in the money market. The high interest rates created by the 1844 Banking Act constituted, in an economic crisis, great opportunities for them to be great financiers in London by making considerable profits and centralizing capital. On this very issue, Marx exclaims:

Talk about centralization! The credit system, which has its focal point in the allegedly national banks and the big money-lenders and usurers that surround them, is one enormous centralization and gives this class of parasites a fabulous power not only to decimate the industrial capitalists periodically but also to interfere in actual production in the most dangerous manner – and this crew know nothing of production and have nothing at all to do with it. The Acts of 1844 and 1845 are proof of the growing power of these bandits, added to whom are the financiers and stock-jobbers.

(Marx 1981: 648–649)

The gold standard and the world economic crisis

The worldwide economic crisis broke out because so many countries had over-extended themselves simultaneously in terms of both exports and imports. In those times, the value of precious metals, that is gold or silver, was based on the circulation of money. A drain of gold, which was considered a sign of economic crisis, might begin in England, because this country tended to give the most credit and take the least of it. Even though the overall balance of trade was in England's favor, the balance of payments due, which had to be settled immediately, was against it. However, a real crisis did not break out at once following the drain of gold; there is a precedent for this in that "The real crisis has always broken out only after the exchange rates have moved, i.e., once the import of precious metal has the upper hand again over the export" (Marx 1981: 702). If a drain of gold were to start, the Bank of England would withdraw the bank notes from circulation, interest rates would rise, and money stringency would occur. The exchange rates would move, and a drain of precious metal would change into an inflow. Simultaneously an economic crisis would break out in England, leading to a drain of gold from other countries to England. Interest rates would rise and money stringency would then occur in other countries. The exchange rates would move, and a drain of precious metals would change into inflows into

other countries. An economic crisis would then, in turn, break out in another country. In this way, whenever an economic crisis broke out in England, it would successively spread to other countries. In the end,

As soon as the general crisis has burned itself out, and we again have a state of equilibrium, the gold and silver (leaving aside the influx of fresh precious metal from the producing countries) is again distributed in the proportions in which it previously existed as hoards in the various countries.

(Marx 1981: 703–704)

This chain of events shows us that a considerable amount of wealth must be sacrificed in the name of surmounting an economic crisis and retaining enough precious metals for the business world. It is inevitable in a capitalist society that the credit system will turn into a monetary system, and that “The utmost sacrifice of real wealth is necessary at the critical moment in order to maintain the metal basis” (Marx 1981: 707).

Financial crisis in the Keynesian regime: how was the financial crisis defused after World War II?

Why did the financial crisis disappear from the capitalist world?

As Marx discusses in *Capital*, financial crises recurred cyclically in the capitalist world in the nineteenth century. However, they were defused and averted after World War II, in fact, the likes of the financial crisis discussed in the first section did not return until 1971–73. Why did they disappear from the capitalist world?

First, let us point out that the power of “the great financiers and stock-jobbers” – to which Marx alludes in Volume 3 of *Capital* – was successfully contained after World War II. In the United States, the power of stockholders was lost to big business, the power of bankers was also weakened, and the power of industrial management increased. Investment bankers were needed to provide external financing to large corporations; however, those large corporations gradually turned to internal financing, because they were able to earn considerable monopoly profits after World War II. Therefore, large corporations in the United States were independent of bankers and powerful stockholders and their business policies related to their own interests. In this way, the behavior of giant corporations was freed from the interests of financing institutions.¹

Second, we would like to point out that the power of international speculative capital was successfully contained after World War II. The international trade and monetary system just after World War II was created along with Keynesian policy. According to this policy, if all nations were able, through the development of fiscal and monetary policies, to independently encourage investment and consumption and thus achieve full-employment, world trade would expand and reduce worldwide unemployment with a concomitant increase in gross domestic product (GDP) levels worldwide. Keynes claims that

if nations can learn to provide themselves with full employment by their domestic policy (and, we must add, if they can also attain equilibrium in the trend of their population), there need be no important economic forces calculated to set the interest of one country against that of its neighbors. There would still be room for the international division of labor and for international lending in appropriate conditions. But there would no longer be a pressing motive why one country need force its wares on another or repulse the offerings of its neighbor, not because this was necessary to enable it to pay for what it wished to purchase, but with the express object of upsetting the equilibrium of payments so as to develop a balance of trade in its own favor.

For Keynes, such is an ideal world. It is for this reason that he rhetorically asks “Is the fulfillment of these ideas a visionary hope?” (Keynes 1953: 383).

The IMF and the idea of Keynes

Keynes might have been disappointed about the functions of the International Monetary Fund created by the Breton Wood Agreement in 1944, because it stymied his plans of creating an International Clearing Union based on the Bancor. However, we understand that the IMF had been constructed with the idea of strictly containing the behavior of international speculators. The IMF was very cautious about freeing the international transactions of capital, because so doing might lead to the acceptance of the speculative transfer of capital and of capital flight. Keynes distinguished between the transactions of short-term capital caused by the current-account balance and the transactions of capital that might accelerate an economy’s imbalance; he contends that the latter should be strictly regulated. Keynes’s idea was to accelerate international trade by freeing the transaction of the balance of the current account. The IMF is not based on a gold or gold-exchange standard.

Under the gold standard, currency is privately exchanged for gold coins; this exchange between currencies is ruled by the gold-parity. Exchange rates fluctuate between the gold-import point and gold-export point, which are in turn ruled by the gold-parity with a gold transfer cost. If our balance of payments moves and the exchange rate is in its favor, that exchange rate is up; if it is over the gold-import point, foreigners will send us gold instead of buying our currency. If our balance of payments moves and is against it, however, our exchange rate will be down; if it is under the gold-export point, we will send gold to foreigners instead of buying the foreign currency. These were the circumstances in Marx’s time, when the gold standard reigned.

The IMF, which was created on the basis of the Keynes’s theory, is not based on the gold standard; on the contrary, one of its original objectives was to create freedom from the rigidity of the gold standard. Various institutional schemes for currency systems existed, ranging from those that were completely free to more restricted ones; there were also various exchange-rate systems from floating to

fixed ones. The IMF decided that the members of Article 8 must not restrict transactions of the current account balance, in principle, and adopted a fixed rate exchange system; this is an effective way of preventing speculative capitalists from making extraordinary profits by partaking in international speculative activities. It is also an implemented scheme of Keynes', who insisted upon the containment of unscrupulous speculators; he wrote that

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.

(Keynes 1953: 159)

Financial crisis in the age of neo-liberalism: why do financial crises break out so frequently?

We have experienced financial crises very frequently: the U.S. crisis involving savings and loan associations, in 1991; the Asian Currency Crisis, in 1997; the Russian Rouble Crisis, in 1998; and the serious financial crisis of Japan in 1997–78. In addition, the U.S. stock market collapsed in June 2002 owing to unscrupulous account-rigging by large corporations in the United States. Most recently, of course, we have had an international financial crisis, which broke out in the summer of 2007 in Europe, and exploded into U.S. financial institutions and businesses in 2008–09. Each time a crisis has occurred, governments create policy to address it, and the economy recovers from these crises. However, as the saying goes, *Danger past, God forgotten*, another financial crisis is soon upon us. Why have we met with financial crises so frequently?

Domestic factors in the financial crisis

First, we would like to point out that “great financiers and stock jobbers” have recovered their powers quite rapidly, both politically and economically. If this is the case, how has recovery occurred so rapidly?

Regulations in the banking business

As Marx points out, Sir Robert Peel's Bank Acts of 1844–45 served the great financiers in the latter half of the nineteenth century in England. More recent financial crises, however, have been defused and averted on account of the successful containment of financiers' interests after World War II. It is therefore necessary to discuss how banking regulations established in the 1930s in the United States became more relaxed between the 1980s and the present. Historically, American banking regulations were carried out in the 1930s under the Roosevelt Administration. Henry Morgenthau, Jr., Secretary of Finance within the Roosevelt Administration, tried to construct a Keynesian financial system

based on the Ministry of Finance. One of the objectives of the New Deal policy was to change the role of finance capital from “Master of the Economy” to “Servant for the Economy.” This policy was carried out with the passage of the Glass-Steagall Act of 1933 and the Banking Act of 1935: the former separated investment banks from commercial banking institutions, and the latter strengthened the function of the Federal Reserve System and the relationship between the Ministry of Finance and the Federal Reserve Bank. The Roosevelt Administration brought U.S. financial institutions under the auspices of strict rules with regard to interest rates and their sphere of activity (Gardner 1969: 76).

Deregulations in the banking business

However, these aforementioned restrictions were dramatically undone in the 1980s. The Depository Institution Deregulation and Monetary Control Act of 1980 abolished strict rules relating to interest rates, permitted the issuance of checks on the savings accounts, and extended the business sphere of savings institutions. The Garn–St Germain Depository Institutions Act of 1982 also extended the business sphere of savings and loan associations, facilitating what could later only be termed as “risky business.” The collapse of U.S. savings and loan associations occurred in the late 1980s.

The Federal Deposit Insurance Corporation Improvement Act of 1991 was enacted after the financial crisis of the late 1980s; this legislation underpinned the reconstruction of the FDIC. This financial crisis of the late 1980s led to the FDIC’s bankruptcy, and considerable volumes of public funds were used to rescue it. According to this new rule of law, financial institutions whose ratio of net worth exceeds 10 percent are exceptionally permitted to undertake new business that resembles securities. The Financial Modernization Act – also known as the Gramm–Leach–Bliley Act – of 1999 finally completed the deregulation of the U.S. financial system; this law allows for the creation of financial holding companies that control the sphere of financial institutions. Securitization by U.S. financial institutions, particularly commercial banks, proceeded dramatically in the twenty-first century. When banks make a loan, they hold loan assets on their balance sheets until the term of lending has finished; however, securitization starts when they sell their loan assets to investors and earn fees from those sales.

The securitization of banking assets

The securitization of banking loans has typically proceeded in the home-loan business, but we can see that almost all of the loans for cars, leases on computers, trucks, and the like have been securitized. In former times, U.S. commercial banks bolstered profit margins by lending; however, a large proportion of their profits are now fed by fees from securitization business; in 1999, for example, over 43 percent of the revenues earned by U.S. commercial banks came from non-interest fees. Non-interest fees are charged on the credit cards, mortgage-service, refinance, mutual fund, and the securitized banking loans. In addition,

the securitization of consumer credits is rapidly expanding, and commercial banks have business linkage with securitized markets (Bassett and Zakrajsek 2000: 379–380).

The economic crisis – whose roots can be traced to Europe in 2007, and which worsened in 2008–09 – is predicated on the securitization of the economy in both the United States and the world system, following the break-down of the Keynesian regime. The nexus of this crisis in 2007 was defaults on subprime loan. In the United States, a subprime loan is a home-loan made to the lowest-income and most credit-risky citizens. Weakening housing markets led to a dramatic reduction in the prices of houses, and subprime loan-owners could not pay back their lending institutions, because the repayment cost of the debt was rapidly rising. The number of home foreclosures rose and eventually reached an all-time high.

The most recent financial crisis spread worldwide because many financial institutions in Europe and Japan invested in the mortgage-backed-securities (MBS) that were based on subprime loans. The value of MBS decreased rapidly, and several financial institutions worldwide were plunged into grave economic circumstances as a result. In the times of Marx, the world economic crises mostly started in England; the roots of those crises could generally be traced back to excessive international trade (i.e., both imports and exports); few economic crises occurred because of excessive international investments. Today, however, excessive international investments are now found to be the cause of financial crises, and they thus have a very serious effect on the real economic world.

International factors in the financial crisis

Formation of the worldwide financial hegemony

The contemporary financial crises spread worldwide because activity relating to international speculative capital has increased enormously, especially with the liberalization of international capital transactions. The Nixon Administration declared that the United State would cease to exchange the dollar for gold as of August 15, 1971, changing the fixed exchange system to a flexible one in 1973. The U.S. liberalization of international capital transactions led to the breakdown of the Bretton Woods System and started a period of neo-liberalism in the world economy. The U.S. role in the world economy has transformed from “bank of the world” into “investment bank of the world,” and liberalization dramatically increased the volume of international capital transactions. Vladimir Ilyich Lenin wrote that in the age of imperialism “the export of capital as distinguished from the export of commodities acquires exceptional importance” (Lenin 1970: 86). By analogy, we could also say that the export of capital – as distinguished from the export of commodities – has acquired exceptional importance in the age of neo-liberalism.

In the 1980s, the power of political economic hegemony in the United States was transferred from the *Keynesian coalition*, formed by large industrial

corporations and organized labor, into the *world-wide financial hegemony*, formed by multinational corporations and banks. The United States started to become a giant super-power of economic hegemony, through the liberalization of international capital flow; it insisted that other, foreign countries take part in the liberalization of international capital transactions. As a result, many countries liberalized their international capital accounts in the latter half of the 1980s and into the 1990s.

Liberalization of international capital transactions

This liberalization of international capital transactions could lead the world economy into a financial crisis because it will become an institutional factor that generates excessive investment and speculation in particular regions and countries. U.S. multinational corporations and banks, however, earn huge profits by moving capital internationally; in particular U.S. financial institutions gain considerable profits from the securitization of markets worldwide. In fact, world-wide securitization of finance has served as the basis of U.S. economic hegemony.

International asset transactions have become a crucial factor in determining the market price of foreign exchange. The demand and supply of currencies in the foreign exchange market are mainly created by international asset transactions; the volume of transactions born out of international trade is relatively small. We must pay attention to the fact that international asset transactions have strong ties with the development of the securitization of the U.S. economy. The excessive securitization of the U.S. economy has dramatically increased the status of U.S. securities markets; investment funds all over the world now concentrate in the U.S. securities markets, and the market price of securities has a serious effect on that of foreign exchange.

The behavior of professional investors and speculators

How do investors behave in securities markets? According to Keynes' theory, revaluations of existing investments are carried out according to convention. "Nevertheless" Keynes would say, "the above conventional method of calculation will be compatible with a considerable measure of continuity and stability in our affairs, so long as we can rely on the maintenance of the convention" (Keynes 1953: 152). At the same time, he highlights a weak point: "It is its precariousness which creates no small part of our contemporary problem of securing sufficient investment" (Keynes 1953: 153).

First, there has been a gradual increase in the proportion of the equity held by persons who do not manage and have no special knowledge of a community's aggregate capital investment circumstances; indeed, the element of real knowledge in the valuation of investments has seriously declined. Nowadays for example, investors sometimes buy government bonds with no special knowledge of the country's real situation because their yields are comparatively higher than

those of other securities. Second, day-to-day fluctuations in the profits of existing investments tend to have an altogether excessive, and even an absurd, influence on the market. Third, a conventional valuation that is established as the outcome of the mass psychology of a large number of ignorant individuals is liable to change violently, as the result of a sudden fluctuation of opinion due to factors that otherwise make little difference to the prospective yield. Nowadays, we are experiencing “a contagious effect” in the financial crisis, which has created a sequence of banking troubles in many countries.

What of the behavior of professional investors and speculators? Keynes writes that

For most of these persons are, in fact, largely concerned, not with making superior long-term forecasts of the probable yield of an investment over its whole life, but with forecasting changes in a conventional basis of valuation a short time ahead of the general public.

(Keynes 1953: 154)

“Thus” explains Keynes, “the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of the kind by which experience shows that the mass psychology of the market is most influenced” (Keynes 1953: 155). In essence, professional investors try to anticipate the basis of conventional valuation a few months hence, rather than the prospective yield of an investment over a longer term comprising several years.

Keynes writes that “As the organization of investment markets improves, the risk of the predominance of speculation does, however, increase” (Keynes 1953: 158). Today, as the internationally liberalized investment system continues to develop, speculative capital predominates in investment markets worldwide. The United States has been compelled to develop this system because the market price of its dollar must be maintained by investment funds entering U.S. securities markets. The United States exports enormous amounts of capital, but it also imports capital – much more than it exports, in fact. It is only for this reason that it has been able to maintain the dollar system since the 1980s.

The economic crisis of 2008–09

Fraudulent formation of fictitious capital: subprime mortgage loans

As discussed in the first section, the formation of fictitious capital has played a crucial role in financial crises. In the age of Marx, commercial and banking credit accelerated the economic growth process, created over-sensitiveness, and eventually led to a crisis. In the following examination of the recent subprime loan crisis in the United States, we focus on the role of fictitious capital that had been created after 2000 by the securitization of financing related to the housing boom.

Lehman Brothers announced its bankruptcy on September 15, 2008 and the U.S. plunged into a serious crisis with a breathtaking moment of economic free-fall. Not only the U.S. economy but also that of the entire world became stagnant, because of the rapid fall in U.S. imports. The economic crisis in the U.S. bottomed out in July 2009 and has been gradually recovering even at the time of writing.

Here, we will review the economic process that took place after the 2000–01 recession and led to the financial crisis of 2008. The U.S. economy entered a phase of economic recovery in mid-2003 due to tax reductions and monetary ease afforded by the Bush Administration. The Federal Reserve, which took on an easy monetary policy so as to get out of the 2000–01 recession, gradually changed and starting adhering to tighter policy. Since World War II, residential prices in the U.S. have continuously increased. However, the increases in housing prices gradually became more moderate, making it difficult for homeowners to take home equity loans or receive mortgage refinancing.

With the leveling off of prime loans, major financial institutions tended to provide subprime loans to borrowers who had little or no history of income and a Financing Corporation credit score below a certain threshold, typically below 620. Financial institutions that provided such subprime loan mortgage sold them to Fannie Mae, Freddie Mac, and private financial institutions; these institutions in turn pooled mortgages and issued MBS. Baily *et al.* write that

In this fashion, Wall Street investors were providing the credit to finance homebuyers on Main Street. Banks, thrifts, and a new industry of mortgage brokers originated the loans but no longer kept them; rather they sold the loans off their books to third parties who then pooled the loans to issue MBS, pocketing a fee along the way. Thus much more so than in the past, volume of fees they received, as they no longer had a financial stake in the ultimate outcome of the loan.

(Baily *et al.* 2010: 80)

In comparison to commercial credit, banking credit, and the joint-stock system, the formation of fictitious capital through securitization in the United States has occurred on a much larger scale. Originators loan to homebuyers, sell their mortgages to buyers, and have a big incentive to extend credit, while mortgage buyers – who try to create new securities like MBS – issue and sell these new securities to investors worldwide. Fictitious capital through securitization is thus increased two-or three-fold by virtue of financial institutions' fraudulent practices.

What are the limits of economic prosperity in relation to subprime mortgage loans? Eventually, the income of homebuyers must reach a limit; the amount of money that they should pay back on subprime loans will rise two or three years later in line with their contracts. If the housing price were rising, this paying-back would be possible, because homeowners could sell their houses immediately and easily pay back their debt; however, this is impossible if housing prices are leveling off or dropping. The number of foreclosures was rising and values

on the housing market started to decline by the end of 2006; by this time, sub-prime mortgages accounted for 20 percent of all mortgages, compared to only 6 percent in 2002 (Bardhan 2010: 18).

The collapse of Lehman Brothers and the near-collapse of AIG

The value of MBS fell, as did that of structured securities based on the MBS. Financial institutions borrowed more and more money to finance their purchases of mortgage-related securities, turning to short-term collateralized borrowing like asset-backed commercial paper. Investment banks were, on average, using overnight loans to roll over one-quarter of their balance sheet every night. However, uncertainty in relation to asset prices caused lenders to abruptly refuse to roll over their debts, and over-leveraged banks found themselves exposed to de-leveraging, i.e., the need to sell off their assets to raise money. Since many banks were forced to do this at the same time, it depressed the price of those assets, prompting more demands and margin calls by lenders; this created a vicious cycle (Baily *et al.* 2010: 81). This chain of events prompts one to think of the words of Marx who says that

The bourgeois, drunk with prosperity and arrogantly certain himself, has just declared that money is a purely imaginary creation. “Commodities alone are money,” he said. But now the opposite cry resounds over the markets of the world: only money is a commodity. As the hart pants after fresh water, so pants his soul after money, the only wealth. In a crisis, the antithesis between commodities and their value-form, money, is raised to the level of an absolute contradiction.

(Marx 1977: 236)

During the subprime loan crisis, the antithesis between securitized commodities and their money was raised to the level of an absolute contradiction. Bear Stearns, one of the major investment banks in the United States, declared bankruptcy in March 2008; Fannie Mae and Freddie Mac each lost its asset values relating to residential mortgages, fell under the control of the federal government, and received public funds from the Federal Reserve on September 7, 2008. Lehman Brothers, the fourth-largest investment bank in the United States, declared bankruptcy on September 15, 2008. American International Group (AIG), however, was barely rescued by the Federal Reserve.

Financial rescue and fiscal stimulus

Today, the world financial system is not based on the gold standard, as it has been suspended in the United States since 1934. The Federal Reserve and the Administration implemented an aggressive financial rescue plan and bailed out financial institutions that had been plunged into problems due to a severe lack of money, due in turn to holding many worthless financial assets.

The Federal Reserve aggressively used an interest-rate policy in 2007 because there were significant increases in the number of defaults and foreclosures, and a number of financial companies had started filing for bankruptcy. However, another policy was needed in 2008, because the Federal Reserve had cut the funds rate target and brought it to the level of 0 to 0.25 percent. The Federal Reserve started to undertake large-scale assets purchases – including the debt of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks – to reduce long-term interest rates. On September 16, 2008, the Federal Reserve extended AIG an \$85 billion line of credit. This unconventional move by the Federal Reserve wrought an enormous expansion of the Federal Reserve’s balance sheet. In the latter half of 2008, the assets of the Federal Reserve’s balance sheet rose to over \$2,000 billion; and this number has continued to grow (Council of Economic Advisers 2010: 47–49).

The Emergency Economic Stabilization Act of 2008 was passed by Congress and signed by President Bush on 3 October; it provided up to \$700 billion for the Troubled Asset Relief Program (TARP) for the purchase of distressed assets and for capital injections into financial institutions. These funds provided policy-makers with the critical resources needed to ensure financial stability. Eventually, these funds were used to restructure General Motors, which filed for bankruptcy on June 1, and Chrysler, which filed on April 30, 2009 (Council of Economic Advisers 2010: 49–51).

Fiscal stimulus was a crucial component of the Obama Administration’s tackling of the economic crisis of 2008–09. If there had not been effective policies, the downturn in the fall of 2008 and the winter of 2009 could have turned into a second Great Depression. During the Great Depression, the Hoover Administration had sought to establish a balanced budget during a deepening crisis, because a balanced budget was thought to be the keystone of the recovery (Kimmel 1959: 48). A balanced budget was sought in order to stabilize the dollar under the gold standard.

However, President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) on February 17, 2009, just 28 days after taking office. This Act was the largest countercyclical fiscal action taken in American history. The estimated cost of this Act was \$787 billion; it provided tax cuts and increases in government spending, together equivalent to roughly 2 percent of GDP in 2009 and 2.25 percent of GDP in 2010. The Council of Economic Advisers writes that

The fiscal stimulus was designed to fill part of the shortfall in aggregate demand caused by the collapse of private demand and the Federal Reserve’s inability to lower short-term interest rates further. It was part of a comprehensive package that included stabilizing the financial system, helping responsible homeowners avoid foreclosure, and aiding small business through tax relief and increasing lending. The President set as a goal for the fiscal stimulus that it raise employment by 3½ million relative to what it otherwise would have been.

(Council of Economic Advisers 2010: 52)

Conclusion

Economic circumstances are very different today when compared with those of the nineteenth century. However, the same conditions exist now as did then for creating a financial crisis, as discussed in Marx's *Capital*, chiefly because the political and economic power of "the great financiers and stock market jobbers" is increasing, and the gambling activities of international speculative capital continue to be rampant worldwide. However, there are two decisive conditions today that differentiate our age from that of Marx.

First, we do not live in an economic society based on the international gold standard. It is clear that rampant international speculative activities were reduced in the age of the IMF's fixed exchange system. However, speculative capital moves around the world today, given that we are now in an age that features a flexible exchange system, and this sometimes creates financial crises. Therefore, change from a credit system to a monetary system happens during the occurrence of financial crisis, as discussed by Marx. The U.S. central bank, however, can supply emergency monetary support to financial institutions, because it is free from the constraints inherent in the gold standard.

Second, we live now in an economic society whose budgetary scale is beyond comparison to anything in history. In the case of a financial emergency, the government – even if it is organized according to neo-liberalist thought – can invest huge amounts of public funds in troubled financial institutions. They may thus be saved, but financial instability never fully subsides, and a rapid and cyclical increase and decrease in the price of financial assets continues to recur forever. Today, oscillations in the price of financial assets can become very strong, thus bearing effects on the real economic sectors. A rapid increase in the price of financial assets can create remarkable profits, and a sudden decrease therein can create considerable loss in real sectors. We call this "an assets effect on real sectors;" typical examples involve the large U.S. automakers, General Motors and Chrysler, which were bankrupt in 2009 because of the financial crisis.

Worldwide, we should take a policy of containment with regard to speculative capital. Reckless activities involving speculative capital will prompt financial crises and lead the world economy into depression. We must understand that inefficient economic activities have taken place in liberalized international investment markets, following the breakdown of the Keynesian regime. By no means is it simple to change this system immediately; however, it *is* time that we move away from an inefficient and liberalized international investment system to construct instead a more stable one.

Note

- 1 See Baran and Sweezy (1996) for valuable insights into the characteristics of the giant corporations in the United States.

Bibliography

- Baily, M.N., Litan, R.E., and Johnson, M.S. (2010) "The origins of the financial crisis," in R.W. Kolb (ed.) *Lessons from the Financial Crisis*, London: John Wiley.
- Baran, P.A. and Sweezy, P.M. (1966) *Monopoly Capital*, New York: Monthly Review Press.
- Bardhan, A. (2010) "Of subprimes and Sunday symptoms: the political economy of the financial crisis," in R.W. Kolb (ed.) *Lessons from the Financial Crisis*, London: John Wiley.
- Bassett, W.F. and Zakrajsek, E. (2000) "Profits and balance sheet development at U.S. commercial banks in 1999," *Federal Reserve Bulletin*, Vol. 86, No. 6, Washington, D.C.
- Council of Economic Advisers (2010) *2010 Economic Report of the President*, Washington, D.C.: G.P.O.
- Gardner, R.N. (1969) *Sterling-Dollar Diplomacy: The Origins of Our International Economic Order*, New York: McGraw Hill.
- Keynes, J.M. (1953) *The General Theory of Employment, Interest and Money*, London: Harcourt Brace Javanovich.
- Kimmel, L.H. (1959) *Federal Budget and Fiscal Policy: 1789–1958*, Washington, D.C.: Brookings Institution.
- Lenin, V.I. (1970) *Imperialism, the Highest Stage of Capitalism*, Moscow: Progress.
- Marx, K. (1977) *Capital*, Vol. 1. trans. Ben Fowkes, New York: Vintage.
- Marx, K. (1981) *Capital*, Vol. 3. trans. David Fernbach, London: Penguin.

6 The 2008 economic crisis from the perspective of changes in prices movements

Akira Matsumoto

Introduction

Alan Greenspan, at a public hearing of the United States congress, described the financial crisis of 2008 as a “tsunami” (Greenspan 2008). According to him, the crisis was akin to an unexpected natural disaster witnessed once in a 100 years.

However, the economic meltdown of 2008 was not a natural disaster. The crisis, which was triggered by the bankruptcy of key American financial companies, had actually begun with the pricing-down of the housing market and the increased number of home loan defaulters citing bankruptcy. This exacerbated the collapse of the stock market, sending money-market interest rates skyrocketing, and further shrinking the U.S. economy. Thus, 2008 had all the characteristics of a classical economic crisis. Its severity and far-reaching impacts truly made it a “once in a hundred years” disaster (Itoh 2009).

What were the reasons behind the biggest economic crisis since World War II? Are there any differences between the 2008 crisis and the classical one? Why have we experienced the crisis like a classical one in spite of the managed currency system? This chapter attempts to answer these questions.

Characteristics of the economic crisis under the gold standard

What were the characteristics of the 2008 economic crisis? What are the implications of it occurring under a stable movement of prices, in spite of the managed currency system? To answer these critical questions, the following section surveys the characteristics of the economic crisis under the gold standard system.

In the gold standard system, the standard of prices was specified by law and fixed at parity. Since the value of the currency, substantiated by an amount of gold, was stable, so were prices. That is, prices moved marginally and, at the same time, their movement was connected to the existing business cycle (Jastram 2009). Generally, prices tend to rise during an economic boom and decline in a recession. Moreover, the crisis appeared in the form of the drastic shrinking of the economy, accompanied by rapidly declining prices.

By its very nature, capitalism involves an anarchic production system that mainly focuses on increasing profits for invested capital. Therefore, it runs the risk of overproduction, which generates a situation in which the economic boom is followed by a crisis. The gold standard was also tied to in- and outflows of gold, and prices tended to move within a narrow range. The economic boom caused by surging profits across the economy was characterized by expanded credit, increasing demand, and price jumps (above the value of commodities). However, the economy soon faced major sale slumps and widespread debt defaults. This brought about the monetary crisis; the central bank started releasing its gold reserves, and at the same time interest rates skyrocketed. Finally, the crisis initiated by economic overproduction spread to other sectors in general, resulting in the destruction of commodity values (that is, price write-downs and commodity-dumping). To adjust during recession, the economy went into a low-price period until its original levels of market activity and prices could be recovered.

As mentioned above, the contradiction between production and consumption in a capitalist system under the gold standard initially appeared as an economic boom with rising prices. When this contradiction led to crisis, the result was a period of urgent price adjustments, wherein prices were reduced artificially. In the process, excess capital was destroyed (destruction of values), bankruptcies occurred on a massive scale, and the unemployment rate soared. In other words, the crisis could be described as “a compulsory adjustment of price toward value.” In the gold standard system, adjustments to the failing economy saw the value of currency preserved at the cost of capital value. This process also meant a redistribution of income via increasing unemployment and declining wages.

Economic crisis and adjustments in the post-World War II period

After World War II, capitalist countries tried to overcome economic crises by implementing compulsory and serious adjustments that substantially altered these economies’ operations as they had been before the war. They attempted to do this by abandoning the gold standard system, because the fixed parity between gold and the currency was regarded as a critical cause of pre-war economic crises. After the war, a managed currency system replaced the gold standard in most of the advanced countries.

Under the managed currency system of the postwar period, inflation was built into the economic system. This was because of the suspension of gold conversion and the introduction of fiscal policy. From the perspective of Keynesian effective demand policy, the state began to intrude on the national economy by means of its fiscal policy. The policy created an effective demand to overcome the overproduction that had resulted from shortages in the aggregate demand to the aggregate supply ratio. Government spending was financed by deficit bonds, which were absorbed in the City or undertaken by the central bank through its market operations.

Moreover, the central bank was free from the restrictions of gold conversion and so it was able to supply additional money in the form of relief loans. Such loans offered temporary relief, offsetting the sudden tightness of the money market – that is, the monetary crisis – that often occurs as an economic crisis unfolds.

The additional government spending and the relief loans from the central bank further propped up prices, permitting them to remain at higher-than-par values. Most capitalist economies with a managed currency system seemed to no longer experience an economic crisis involving serious price declines and the destruction of commodity values, as they would have with classical crises under the gold standard.

The money supply, through the twin routes of state spending and bank loans, appeared to successfully prevent destructive deflation – that is, falling prices of commodities or capital, leading to the destruction of values. Instead of an economic crisis with a hard shrinking of the economy, however, this resulted in constant inflation in the postwar period. Note that for purposes of this chapter, the notion of a money supply that causes inflation refers to a ratio, with the denominator given by the quantity of money required in circulation, and the numerator given by the supply of excess money (money not required in circulation). Though the periodic economic contractions that formerly accompanied economic crisis appeared to have disappeared, the *de facto* standard price remained volatile, and the value of currency stayed vulnerable to depreciation. Overall, inflation – in lieu of a shrinking economy – appeared as the contradiction to the smooth growth of the modern capitalist economy. In other words, the economic adjustments to capitalistic overproduction that are made under the managed currency system appear to have the objective of preserving the value of capital, while destroying the value of currency and causing inflation at the same time (Yamada 1977).

State-monopolistic economic policies were not always able to resolve the basic contradictions of capitalist systems. The inevitable destruction of asset values by overproduction occurred in the process of inflation. This was because the effects of inflation spread sequentially, from big monopolistic companies supported by the government to ordinary households. The monopolistic company, which had been supplied with depreciated currency, in turn shifted this depreciation in worth onto its commodity price, thus earning back a part of the value and preventing a total loss. The destruction of value that appears as inflation, that is, depreciation of currency value, involves the redistribution process of income, by which the rising nominal price proceeds or spreads out, in order, from monopoly capital and the rich to the low-income class.

In the early 1970s, the United States gave up pegging the dollar value to gold prices and converting a dollar into a certain amount of gold. Other capitalist countries were subsequently forced to switch to the new floating rate system. As the United States was the key currency country and had no obligation to fixed parity, other countries could not continue to keep fixed exchange rates relative to the U.S. dollar. The floating rate system extinguished the rules of the game under

the IMF (International Monetary Fund) regime, which had followed a policy of price stability since World War II. Therefore, contradictions in postwar inflation policy began to appear, giving rise to hyperinflation after the mid-1970s. The turning point was the oil crisis.

Following this event, capitalist countries began to put deflationary pressures on their economies to reduce inflation by implementing monetary policy contradictions based on monetarist theory. Simultaneously, the state continued its expansionary spending policy, so as to avoid an economic crisis. Thus, capitalist countries were faced with two conflicting tasks: to hold inflation in check by maintaining the value of their currency and to support their economy by state interventions that preserved capital values. Due to the impossibility of doing both simultaneously, the period from the end of the 1970s to the early 1980s saw significant stagflation.

Problems observed in the 2008 economic crisis

The above section mentions the different characteristics of business cycles under both the gold standard and the managed systems. These can be summarized as follows. Under the gold standard system, the business cycle was clearly periodic and involved pro-cyclical price movements. But in the postwar period, inflation was built into the economy and then financial crisis accompanied by the sudden shrinking of the economy, as under the gold standard system, seemed to disappear. The inevitable contradictions that arise in a capitalist economy appeared in the form of a general increase of prices (inflation) rather than taking the form of economic crises. The manifestations of economic contradictions under the managed currency system stand in marked contrast to those under the gold standard system.

However, the 2008 crisis had a unique pattern. As can be seen in Figure 6.1, since the mid-1980s, prices in developed countries became stable. In spite of the managed currency system, the 2008 crisis occurred under stable price conditions. Moreover, in 2008, the countries hit by the crisis were also faced with rapid contractions of their economies, falling prices, increasing unemployment, decreasing production, and a slowdown of consumption. So although the managed currency system had been adopted, the 2008 crisis looked like a classical economic crisis under the gold standard system. The governments in the developed countries continued with their respective fiscal policies, and some were exposed to the dangers of a strict budget deficit. Yet this was not a source of inflation.¹ So why does an economic crisis with all the characteristics of a classical one occur in the managed currency system with stable price conditions?

It should be noted that, since the 1980s, the world has seen the rise and bust of many bubble economies. The 2008 economic crisis originated in the burst of the subprime bubble and its effects were felt worldwide. This gives rise to the next crucial issue: the conditions that link a bubble economy to stable price movements. Do the economic adjustments under the 2008 economic crisis have any theoretical implications? These issues are addressed in the following sections.

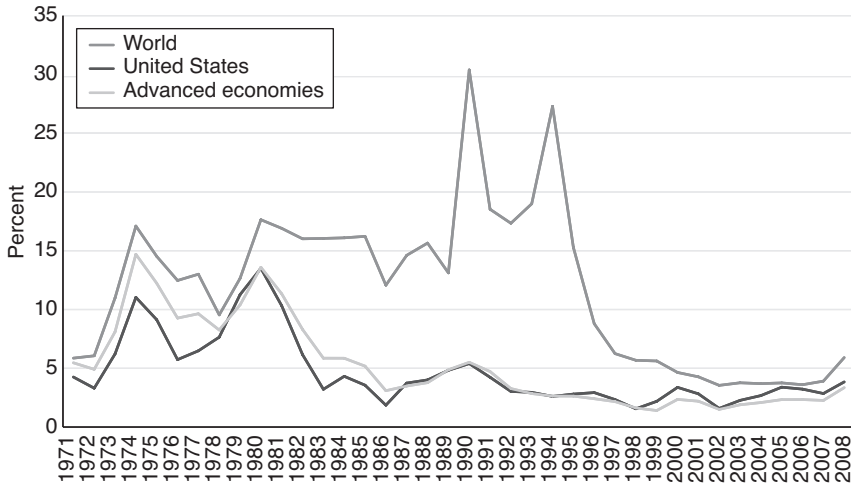


Figure 6.1 Price fluctuation, 1971–2008 (source: IMF, IFS Database).

The economic slowdown and fall in prices: the first characteristic feature of the 2008 economic crisis

The first characteristic feature of the 2008 crisis was that it occurred under stable price conditions with massive government spending and a critical budget deficit in place. The problem was not one of inflation but, in fact, deflation. What were the reasons for the coexistence of deflation and an inflationary fiscal policy at the same time?

To answer this question, it is important to review the fact that prices did not rise when government spending increased, and neither did the aggregate demand increase in spite of consecutive inflationary factors. The shrinking aggregate demand was the basic underlying reason that prices did not react to increased spending. One possible reason could be the economy's long-term tendency to stagnate, an issue that is considered below.

Figure 6.2 shows the production index of the developed countries with a relative growth rate based on data from the previous year and a linear trend. It is obvious from the figure that advanced countries have had a tendency to decrease their industrial production. The data presented is divided into two parts: the period up to 1970 and the period from 1970 to 2008. The first part shows an upward tendency, while the second part shows a tendency to decrease. Moreover, the factory-operating ratio for industries in the U.S. decreased since the 1970s: the average between 1960 and 1969 was 85 percent, compared with 79.8 percent after the 1960s.

This brings us back to the issue of the economy's long-term tendency to stagnate, especially in the period after 1980, as was demonstrated above. This topic is addressed in the next section.

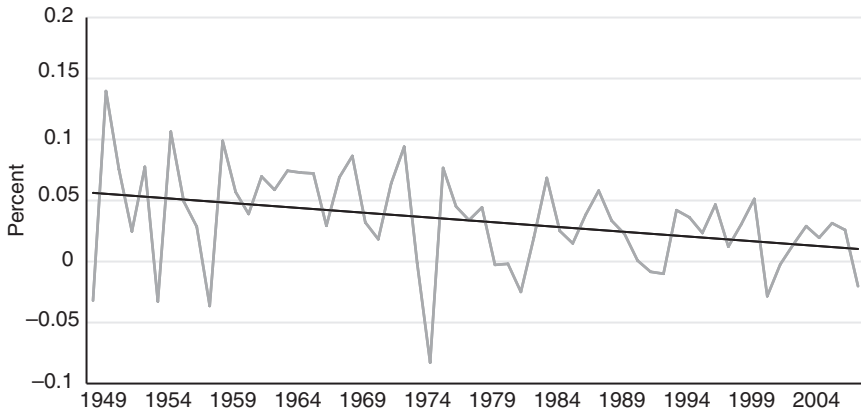


Figure 6.2 Increasing rate of industrial production index in the advanced country relative to previous year (source: IMF, IFS Database).

Tendency toward economic stagnation in monopolistic capitalism

The first factor behind the slowdown of the capitalist economy, especially since the 1970s, is the tendency toward stagnation in the stage of monopolistic capitalism. As an economy develops, so does its production power. A certain section of the population can come to produce more than before, so that the national economy enjoys a surplus. On the one hand, this situation implies that monopolistic capitalism is the highest stage of capitalism. Therefore, at this stage, the economy has the most surplus in its economic history. On the other hand, however, this means that capital has lost its opportunity for profitability and there is a shortage of investment opportunities in this stage of monopolistic capitalism (see Figure 6.3). Monopolistic capital is able to flood the market, as there is no room for expansion in the economy.

This situation typically finds expression in falling profits. Baran and Sweezy (1996) asserted that monopoly capitalism has a tendency toward economic slowdown. This stage lacks the investment opportunities that ensure enough profitability to absorb the surplus produced by increasing the productive forces. Actually, in the 1960s, channels other than capital accumulation – such as an expansion of the market and government spending – had prevented economic slackening. Historically, however, such channels had their limitations, and the overcapacity of monopolistic capital reduced the expected rate of earnings for new investments. This dampened the willingness to invest and initiated the long-term economic slowdown.

This theory found resonance with Brenner (2002: 40–41), who argued “the impasse of the international manufacturing sector at the end of the 1970s, resulting from the deepening of the crisis of profitability throughout the previous decade.” Moreover, the Japanese economist Mizuno (2008) also asserted the

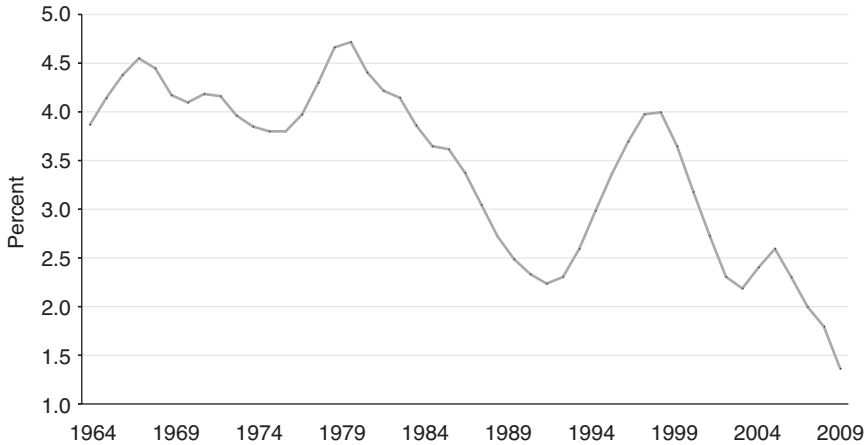


Figure 6.3 Net private non-residential fixed investment as percentage of GDP (source: Bureau of Economic Analysis, National Income and Product Accounts, “Gross and Net Domestic Investment by Major Type,” Last revised on August 8, 2011, Table 5–2–5; Economic Report of the President, 2011, “Gross Domestic Product, 1962–2010,” Table B).

same long-term trends of economic slackening and falling profit rate in developing countries. He demonstrated the tendency of the long-term interest rate (and of long-term bond yields) to fall, indicating a falling profit rate.

The tendency toward economic slackening and globalization: the worldwide investment movement and wage restraints

This section will discuss the second reason for economic slackening in developed countries: globalization, which has been observed especially since the mid-1970s, and which has occurred alongside the tendency toward falling profit rates.

In its White Paper on the International Economy 2005, the METI (Ministry of Economy, Trade, and Industry) of Japan described the relationship between the transfer of industries overseas and economic development, and the economic relevance of this relationship, in the following terms:

First, an industry which began in domestic supply takes advantage of cheap wages and gradually develops strength in the assembly area, shifting to an assembly production type structure in which intermediate goods are imported and final goods are exported. Next, the industry builds competitiveness in intermediate goods in addition to final goods by improving the level of its technology, which enables it to develop into a domestic overall production-type industry, which is internationally competitive for both types

of goods. Once the industry has passed the height of its maturity, however, it loses competitiveness in assembly due to factors such as increasing wage levels, at which point it begins to specialize in intermediate goods, which are more capital-intensive. Finally, the industry as a whole loses its comparative advantage, begins to import a surplus of intermediate goods, and is no longer shown as internationally competitive.

(METI 2005: 241)

To summarize the above points, in capitalist countries, especially in advanced countries that are faced with international competition in labor-intensive industries, labor-intensive sectors should be transferred abroad, while intermediate-good production sectors that are capital intensive remain in the country. As witnessed in emerging nations since the 1980s, such tendencies have also appeared in developed countries such as Japan. America has already turned into a nation that imports many of its consumer products because many industries have moved to overseas locations.

Then the problem is how the profit rate in these advanced countries has fared given this tendency. One approach suggests that the source of corporate profit is the new added value produced by wage workers (according to the labor value of theory). The volume of this added value is connected to the magnitude of the profit to some extent. At the same time, capital goods such as machinery and facilities do not produce any new value, but instead contribute to increasing the volume of commodities produced by labor. This should have a number of effects on corporate competition in the market. First, firms faced with competition in the market tend to reduce their commodity price, so as to sell more of the commodities they bring to market. Introducing new machines and technology allows workers to produce more than before in a given time: in this manner, the value of the commodity can be reduced. In the first stage of market competition, a company that is the first to introduce new machinery into its production process can gain extra profits or create special surplus value. Once all the companies competing in the market have introduced new machinery, the social value of the commodity declines. Moreover, even with competition, the total value of the commodities produced is never changed; that is, they never increase their total added value. Conversely, the ratio of valuation of capital goods that do not produce new values to the invested capital increases as a result of introducing new equipment. On the other hand, the amount of labor and the volume of work declines relative to that of capital goods. This decreases the amount of added values and surplus values. In this way, the profit rate declines because the added value decreases relative to expenses. This enhances the organic composition of capital and the tendency of the profit rate to fall.

Marx had predicted that such a situation would appear everywhere as a result of global competition. In advanced countries, investments in capital goods intended for global competitive markets increases. Such propensities make the profit rate fall as a result of the enhanced organic composition of capital (see Figure 6.4). Similarly, companies are (that is, capital is) faced with the option of transferring

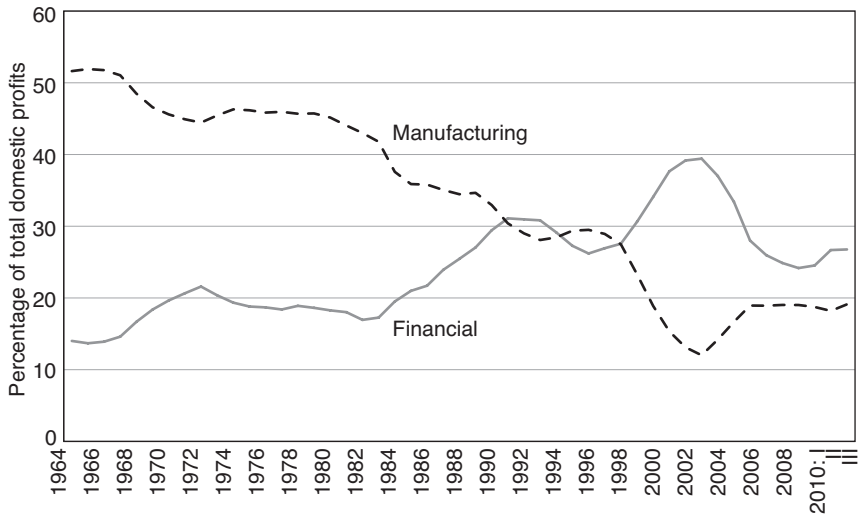


Figure 6.4 Five-year moving average of manufacturing and financial sectors as percentage of domestic profits (source: Economic Report of the President, 2011, Table B-91).

their (its) labor-intensive sectors overseas in pursuit of low-wage workers. Therefore, in advanced countries, the organic composition of capital should rise. After all, these countries appear to have a tendency toward falling profit rates.²

Companies in advanced countries cope with this tendency and simultaneously increase their capital goods' investment by restraining the wage level. Thus, in developing countries, the wage level, which labor can take from the total amount of added values, declines seriatim compared with the high growth period during which capital enjoyed high profitability, and the unequal distribution of income shifts toward capital and against labor. There is constant pressure toward lower levels of wages, in contrast to the movement of wages during the high growth era in developed countries.

We can capture this tendency in Figure 6.5, which shows the ratio of wages to GDP in the U.S. Moreover, the labor share of income in Japan has shown a tendency to decline since the 1970s (see Figure 6.6). This, along with a decreasing consumption demand and narrowing domestic markets, has brought about deflation and economic slowdown.

The bubble economy and widening income disparity in society: the second characteristic feature of the 2008 economic crisis

The second characteristic feature of the 2008 economic crisis is that the crisis occurred in the bubble economy, which has appeared since the 1980s

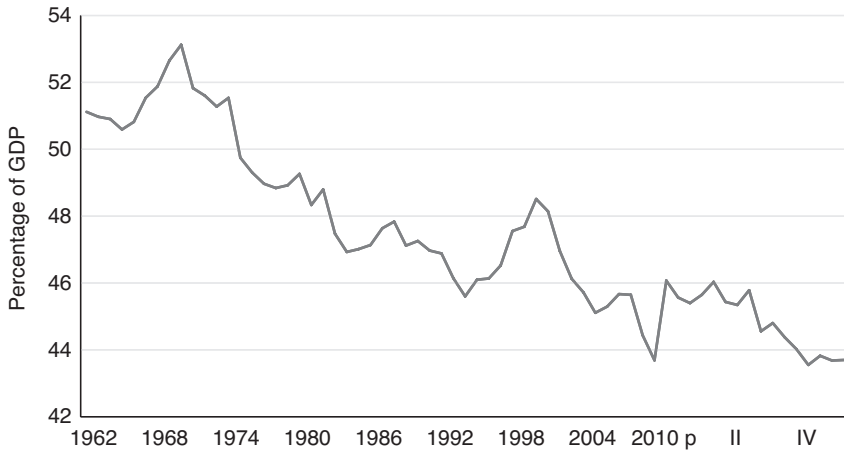


Figure 6.5 Ratio of wage and salary to GDP, U.S. (source: Economic Report of the President, 2011, “Gross Domestic Product, 1962–2010,” Table B-1 and “Sources of personal income, 1962–2010,” Table B-29).

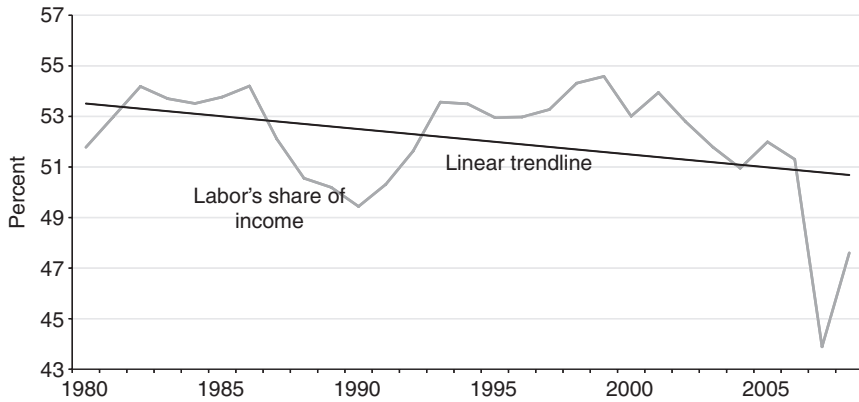


Figure 6.6 Labor share of income in Japan (source: Ministry of Finance, Financial Statements Statistics of Corporations by Industry).

(Yamaguchi 2009). Why did the modern capitalist economy support a bubble economy? The reason is that monopoly capital has changed its inherent form as the real economy has slackened (especially given the tendency of the profit rate to fall in the manufacturing industry).

In the twentieth century, the capitalist economy entered the stage of monopolistic capitalism. The systematic analyses of monopolistic capitalism developed over several years. Economic theorists from Marx to Hilferding and Lenin have proven that free market competition brought forth the concentration of production, and this concentration developed into monopolistic capitalism.³ In other

words, they confirmed that monopolistic capital was established out of industrial or productive capital.

Their analyses also focused on the important role played by banks, because banking capital was connected to industrial capital, which had already moved into the stage of monopolistic capital.⁴ Banking capital tends to concentrate its business and centralize money capital. This capital is also connected to industrial capital. It would be safe to say that capital which combines both monopolistic and banking capital is called “financial capital” and represents the highest stage of monopolistic capitalism.⁵ In other words, financial capital is banking capital that is connected and adheres to industrial capital owing to the dominant profits produced by industrial capital.

Regarding this matter, Sweezy (1956: 166) wrote:

Hence the centralization of capital in the industrial capital in the industrial sphere finds a counterpart in the growth of larger and larger banking units. On this basis, there arises that inner personal union of inter-locking directorates and communities of interest, which binds together the most important banking and industrial magnates in all the advanced countries.

Sweezy captured the characteristics of monopolistic capital from the same perspective as did Lenin and others. According to these authors, until the 1960s, monopolistic capital growth emphasized industrial capital; banking capital, whose profits were based on earnings in the real economy, enjoyed a cozy relationship with industrial capital. As long as banking capital remained parasitic on the profits of industrial capital, monopolistic capital was connected to the production of value in the economy.

However, as mentioned above, the profit rate of the industrial capital in modern capitalist countries has reduced, and monopolistic capitalism has fallen into a pattern of long-term economic slackening. Investment opportunities have diminished and, as a result, the excess capital has spilled over to the financial sectors. The financial capital that has had a parasitic relationship with industrial capital in the monopolistic capital stage has been earning profits independently from industrial capital (Sweezy 1994). That is, financial capital has changed from being linked to the real economy to becoming autonomous speculative financial capital. This means that capitalism has moved to the stage of financial hypertrophy (Foster and Magdoff 2009).

The section below itemizes the features of an economic society where financial capital moves autonomously and accumulates its capital independent of the movement of industrial capitals.

- 1 The core economy becomes stagnant. The profit rate of industrial capital decreases and investment opportunities are insufficient.
- 2 New industries do not need to be created from scratch. New businesses emerge as a kind of simple reproduction of existing patterns. Funds can be raised from accumulated depreciation.

- 3 New industries, originally spotlighted in the 1990s, become fewer with the maturity of the economy. The information technology (IT) industry was less efficient from the point of view of creating a broad new industrial base than previous new industries had been in previous decades.
- 4 Money capitalists still intend to preserve their capital in money markets. Thus, capitalists still invest their money capital in the financial market in order to magnify it, resulting in financial hypertrophy.
- 5 Accordingly, inequalities in income and wealth continue. At the bottom of the economy, the rate of unemployment increases and workers face low wages because of the economic slackening. Even as consumption declines, the wealthy increase their speculative investments.
- 6 Debts are increased by the activation of financial investments. Their rate of increase doubles because debts also grow when financial assets expand.

Globally, in the 1980s, both market fundamentalism and deregulation grew rapidly and became prevalent in the world economy. Underlining this was the fact that monopolistic capital had metamorphosed and financial capital had gained power. Money capital seeks a free environment in which it can move between markets to earn speculative profits, since it has a qualitative identity without any border restrictions. Therefore, it seeks the liberalization of capital markets and the removal of financial restrictions.⁶ After liberalization, it moves to those financial markets where it can most efficiently expand its sphere of activity, producing various special financial instruments to make money. In this way, the transfiguration of monopolistic capital along with the prominence and autonomy of financial capital constitute the primary reasons why the bubble economy evolved with post-1980 changes in price movements under the managed currency system.

The important role of the international currency system: the third characteristic of the economic crisis of 2008

Fully understanding the characteristics of the 2008 crisis also requires that we observe the role of the international currency system – and specifically, the role of the U.S. dollar as the key currency. This section thus presents the international currency system as the third characteristic feature of the 2008 economic crisis.

The bubble economy mentioned in the previous sections had temporarily propped up the capitalist economy, which had been stuck in an economic slow-down since the 1980s. In fact, that is the role of a bubble economy in modern capitalism. The bubble economy, which was born from financial capital, gained power in the 1980s as debts accumulated. This was due to the fact that a bubble economy accrues earnings as a result of the loan transactions of financial capital, especially those involving credit creation. However, no country can consistently accumulate financial debt while keeping its production equilibrium intact, because countries have restrictions on their balance of international payments and foreign reserves. Even as the movement of financial capital in a country

becomes brisk and domestic demand is stimulated, financial debt is accumulated, leading to a deficit in the balance of international payments, a shortage of foreign reserves, and a sudden fall in the value of its own currency. These are all results of a bubble economy. At such times, the government should tighten its financial policies, thereby decelerating the economy and encouraging industrial overproduction. Then the country is faced with an export-dependent policy. It seeks a foreign outlet for the overproduction.

Only the United States of America has proven to be an exception to this rule. The U.S., as the key currency country, has been exempt from the restriction of balancing its international payments, since it can fulfill its obligations by using its own currency. This means that the U.S. can settle deficits of its own current balance with its own currency, the dollar; this is the seigniorage of the key-currency country. It should be noted that the substance of the dollars in international currency flows consists of the deposits of financial institutions in the U.S. financial market. That is, the international currency dollar is the debt of the U.S. Thus, the U.S. can settle its own deficits by means of its own debt, which originates in credit creation. Therefore, as long as the U.S. dollar is the key currency, the dollar as debt will be accepted by all countries, and the U.S. can continue to import products and consume them to any degree. This reveals a pattern whereby the key-currency country becomes the debtor, consumer, and, at the same time, the outlet for the overproduction of other countries (Akiyama and Yoshida 2008).

As long as the U.S. continues to be a debtor nation on this basis, dollar-debt is accumulated in other countries. What will be the impact of this phenomenon? The dollar, which originates in deficits in the U.S. international balance, is a form of American debt. This is an asset for other countries. As an asset should not be left lying idle, private capital sources and foreign governments must invest it in the American financial markets.⁷ This movement then becomes a basic condition for the expansion of the financial markets.

The countries that have a surplus in their current balances and hold a large amount of dollars have invested them in assets such as U.S. government bonds. Therefore, they want to avoid a collapse in the dollar due to the huge deficit in the U.S. balance of payments. Accordingly, these governments have been faced with the choice of sustaining the dollar exchange rate, or trying to make a soft landing. This was the background for both the Plaza Agreement (1985) and the Louvre Accord (1987), in which international coordinating policies were adopted to control the fall of the dollar and stabilize it.

This shows that peripheral countries in the international currency system, which own large dollar assets, must adopt a cooperative international policy to maintain the dollar and protect the value of their own assets against the dollar. These countries have been conscious of the relation between their own currency and the dollar, both before the 1980s and following the recent shifts in U.S. monetary policy. After all, this process recognizes the necessity of foreign exchange reserves and the stability of the exchange rate even in the floating exchange rate system. In 1980, countries such as those in the European Union

aimed at price stability and fiscal discipline, while Japan and others aimed for external equilibrium, and especially for the stability of the dollar. The cooperative financial policy adopted by these countries can be regarded as a quasi, or de facto, equilibrium exchange rate policy with international cooperation in stabilizing exchange rates relative to the dollar and to price movements (Table 6.1). The question that arises here is this: what is the relevance of this foreign exchange policy and cooperative international monetary policy for price stability since the 1980s?

The dollar, which was born from the deficit in the U.S. balance of payments, has returned to its home country. In other words, the dollar as a debt has been reinvested in the U.S. financial markets. This was a condition for credit creation in the American financial markets. The dollar was born as debt on the balance sheets of banks when banks made loans to firms. Dollar deposits – as banks' debt – originate when banks make loans – as banks' assets. This is the process of credit creation. This process explains the origins of the dollars that have prevailed as a financial capital resource, and permitted the dollar to maintain its position as a global money capital instrument. At the same time, as the value of currency stabilized with the decline in the worldwide rate of price inflation, financial capital has moved freely between the global financial markets, facilitating the performance of their speculative function. The structure mentioned above has been a condition for the global frequency of bubble economies since the 1980s.

Concluding remarks

Contradictions in the modern capitalist system have appeared as stagflation since the late 1970s. In the 1980s, the contradictions appeared to be resolved. But in reality, old contradictions were being transformed into new ones. The excessive money capital, born from deficits in the U.S. balance of payments, was rerouted to “the confined space” of the asset market. It became a condition for credit creation, expanding loan transactions, and producing excess demand, which led to the huge deficit in the U.S. balance of payments. This excess demand appeared

Table 6.1 Average fluctuation rate of price (percent)

	1951–70	1971–89	1990–2008	1971–85	1986–2008
World	5.40	13.51	10.07	13.41	10.73
Eurozone	–	–	2.07	–	2.07
Japan	4.93	5.71	0.57	6.99	0.63
Germany	–	–	2.03	–	2.03
France	4.91	8.27	1.90	9.67	2.09
United Kingdom	3.72	10.23	3.35	11.60	3.65
United States	2.44	6.35	2.95	7.08	3.07
Advanced Economies	–	7.81	2.61	8.87	2.82

Source: IMF, IFS Database.

to be tied to the overproduction inherent in modern capitalism; that is, it resulted from a bubble economy. However, the cost of a bubble economy has to be borne, because abnormal price speculation in the asset market and the excessive demand based on this speculation are actually demands for capital gains without any substance. Price increases in a bubble economy are essentially price hikes over products' parity values, created by fictitious demand. Thus, prices have to be adjusted forcibly at some point of time. Such adjustments appear during financial-market collapse, leading to the bankruptcy of many financial institutions. The situation also sees an injection of public funds for the settlement of bad loans and an overall contraction in the real economy. This was the contradiction of capital that formed the substance of the 2008 economic crisis which originated in the United States of America.

Notes

- 1 The government and the central bank have been increasing spending and relief financing since the 2008 crisis. However, this does not appear to cause inflation. On the contrary, many advocates have argued against the possibility of inflation. For example, P. Volker, the former president of the FRB, pointed out the similarity of the 2008 situation with the inflation of the 1970s in an address on April 8, 2008. Moreover, the president of the ECB, Jean-Claude Trichet, also urged caution that the inflation would go on the same way as in the 1970s (see also Kato 2008).
- 2 According to Karl Marx,

if capitals in different spheres of production . . . , i.e., capitals of equal magnitude, produce unequal profits in consequence of their different organic composition, then it follows that the profits of unequal capitals in different spheres of production cannot be proportional to their respective magnitudes.

This is particularly important in comparing rates of profit in different countries. Let us assume that the rate of surplus-value in one European country is 100 percent . . . the rate of profit in an Asian country is 25 percent. . . . Let $84c+16v$ be the composition of the national capital in the European country, and $16c+84v$ in the Asian country. . . . Then we have the following calculation:

In the European country the value of the product $=84c+16v+16s=116$; rate of profit $=16/100=16\%$.

In the Asian country the value of the product $=16c+84v+21s=121$; rate of profit $=21/100=21\%$.

The rate of profit in the Asian country is thus more than 25 percent higher than in the European country, although the rate of surplus-value in the former is one-fourth that of the latter.

(Marx 1967: 148–151)

- 3 For example, Lenin wrote about the monopoly capital in the following manner:

Official science tried, by a conspiracy of silence, to kill the works of Marx, who by a theoretical and historical analysis of capitalism had proved that free competition gives rise to the concentration of production, which, in turn, at a certain stage of development, leads to monopoly. Today, monopoly has become a fact.

(Lenin 1964: 200)

- 4 Lenin indicated the following about the importance of banks in the monopolistic capital:

As banking develops and becomes concentrated in a small number of establishments, the banks grow from modest middlemen into powerful monopolies having at their command almost the whole of the money capital of all the capitalists and small businessmen and also the larger part of the means of production and sources of raw materials in any country and in a number of countries.

(Lenin 1964: 210)

- 5 The banks have to invest an ever-increasing part of their capital in industry, and in this way they become to a greater and greater extent industrial capitalists. I call bank capital, that is, capital in money form which is actually transformed in this way into industrial capital, finance capital (Hilferding 1981: 225).
- 6 In response to the impasse of the international manufacturing sector at the end of 1970s ... governments across the advanced capitalist economies sought to ease into financial activities and pave the way for higher returns. To do so, they initiated not only a permanent war against inflation, but also a far-reaching process of financial deregulation (Brenner 2002: 40–41).
- 7 See the Bank for International Settlements reports on the transaction of foreign exchange market.

References

- Akiyama, S. and Yoshida, M. (2008) *The Dollar System and Globalization*, Tokyo: Surugadai Syuppansya, in Japanese.
- BIS (Bank for International Settlements), *Triennial Central Survey of Foreign Exchange and Derivatives Market Activity*, www.bis.org/publ/rpfxfl10t.htm (latest version) (accessed October 1, 2011).
- Baran, P.A. and Sweezy, P.M. (1996) *Monopoly Capital: An Essay in the American Economic and Social Order*, U.S.: Penguin.
- Brenner, R. (2002) *The Boom and the Bubble: The U.S. in the World Economy*, London: Verso.
- Foster, B. and Magdoff, F. (2009) “Monopoly-Finance Capital,” *The Great Financial Crisis*, Monthly Review Press.
- Greenspan, A. (2008) “Greenspan Testimony on Sources of Financial Crisis,” *Wall Street Journal*, October 23.
- Hilferding, R. (1981) *Finance Capital: A Study of the Latest Phase of Capitalist Development*, edited with an Introduction by Tom Bottomore, Routledge & Kegan Paul.
- Itoh, M. (2009) “A Crisis Once in a Hundred Years: 1929 and 2008,” in *Subprime to the World Economic Crisis: The End of Neoliberalism and the Future World*, Tokyo: Seidosya (in Japanese).
- Jastram, R.W. (2009) *The Golden Constant: The English and American Experience 1560–2007*, 2nd edn, with updated material by J. Leyland (1st edn, 1977), London: Edward Elgar.
- Kato, I. (2008) “What Can Be Learned from the ’70s? Lessons from the Oil Crisis and Inflation: ‘An Expectation of Inflation’ Warned by the Central Bank,” *Weekly Diamond*, July 19, Tokyo: Diamond (in Japanese).
- Lenin, V. I. (1964) *Imperialism: The Highest Stage of Capitalism*, Vol. 22, *Collected Works*, Moscow: Progress Publishers.
- Marx, K. (1967) *Das Kapital III*, New York: International Publisher.
- METI (Ministry of Economy, Trade and Industry) (2005) *White Paper on International Economy and Trade*, Tokyo, www.meti.go.jp/english/report/data/gIT05maine.html (accessed August 26, 2011).

- Mizuno, K. (2008) *The Financial Large Collapse: The End of "America as the Financial Empire,"* Tokyo: NHK Syupan (in Japanese).
- Sweezy, P.M. (1956) *The Theory of Capitalist Development: Principles of Marxian Political Economy,* New York: Monthly Review Press.
- Sweezy, P.M. (1994) "The Triumph of Financial Capital," *Monthly Review*, 46(2).
- Yamada, K. (1977) *On the Contemporary Inflation Crisis and Gold Prices,* Tokyo: Ohtsuki Syoten (in Japanese).
- Yamaguchi, Y. (2009) *The Bubble Relay: The Event That Brought on the Worldwide Economic Crisis in the 21st Century,* Tokyo: Iwanami Syoten (in Japanese).

Part II

Regimes of capitalism

7 Cyclical crisis, structural crisis, systemic crisis, and future of capitalism

*Nobuharu Yokokawa*¹

Introduction

This paper attempts to rehabilitate a historical and theoretical method of political economy. I consider a conceptual “marriage” between Marx’s historical and theoretical political economy and Veblen’s institutional and evolutionary economics possible and most promising as a framework of political economy.² Since Marx’s original intention to dedicate *Capital* to Darwin,³ the two schools have a long history in integrating with each other. Bernstein (1911) attempted to revise Marx’s theory by replacing Marx’s neo-Hegelian dialectics with Darwinism; Veblen (2007) had a strong interest in Marx’s theory and he was very sympathetic to Bernstein’s attempt; Hilferding (1980) and Lenin (1996) attempted to elaborate the historical part of Marx’s theory. Kozo Uno integrated those attempts in his three-level economic analysis of capitalism.⁴

Uno’s three-level economic analysis has solved two pending issues of historical political economy: a general theory functions as the foundation of historical analysis, and a stage theory of capitalist world system functions as the foundation for empirical analysis. On the other hand, Uno’s stage theory is still affected by teleology consisting of his prophecy regarding socialism and Hegelian three-phase dialectics. Uno considered the end of imperialism to be the end of capitalism itself. However, capitalism revived again after World War II in a new form, and it enjoyed its highest and most continuous growth in its 200-year history between the mid-1950s and the 1960s. Uno’s prophecy has not come true, just as Marx’s did not.

In this chapter, I propose a new framework for historical and theoretical political economy, institutional Marxian political economy which consists of the basic theory of capitalism, the intermediate theory of specific types of capitalist world systems, and empirical analysis. Then I introduce a dynamic theory of comparative advantage and build the most basic part of the intermediate theory, namely accumulation of capital and the law of value (or the self-regulating character of capital accumulation). The law of value works in the established stage of each capitalist world system with supporting social institutions. We investigate cyclical crises that reinforced the law of value in the established stage of the post-World War II capitalist world system (i.e., bureaucratic capitalism),

structural crisis that changed the accumulation regime of bureaucratic capitalism in the 1970s, business cycles after structural crisis, and finally we investigate whether the subprime loan crisis is a systemic crisis that destroys bureaucratic capitalism.

Institutional Marxian political economy

The intermediate theory of institutional Marxian political economy is based on the concept of the capitalist world system. During the evolutionary process of capitalism, numerous varieties of capitalist economies have appeared. While most of them have failed to establish a new world system, the British variety in the nineteenth century and the U.S. variety in the twentieth century have been able to establish respective capitalist world systems with complementary institutions.

Each capitalist world system had its stages of development, and, most importantly, its stages of establishment (Table 7.1). Each stage has leading or dynamic industries, agriculture and wool in mercantilism, cotton and railways in liberalism, heavy and chemical in imperialism, machinery in interregnum, machinery in welfare state, IT in neo-liberalism.

The capitalist world system was first established when the British variety of capitalism created complementary institutions, including cotton and railway industries, as the dynamic industries in the period of liberalism. I call it “market capitalism” because it was characterized by the coordination of the economy by the market such as free trade and the gold standard. Dynamic comparative advantages of cotton and railway industries were fully developed in this capital accumulation regime with foreign demand as the engine of demand growth. It created the first golden age of capitalism. Cyclical crises reinforced the self-regulating nature of capitalist economy by solving conflicts between workers and capital over income distribution.

After the structural crisis of the capital accumulation regime of liberalism in the late nineteenth century, dynamic industries shifted to heavy and chemical industries and the centre of economic growth shifted from the UK to the U.S. and Germany. A new capital accumulation regime, imperialism, was created with two challengers and one old hegemon. The dynamic advantage of heavy and chemical industries was not fully developed under imperialism due to

Table 7.1 Periodization of capitalist world systems

	<i>Formation</i>	<i>Establishment (golden age)</i>	<i>Diversification (globalization)</i>	<i>Systemic crisis</i>
Market Capitalism	Mercantilism (1750s–1810s)	Liberalism (1820s–70s)	Imperialism (1870s–1910s)	Interregnum (1920s–40s)
Bureaucratic Capitalism	Interregnum (1920s–40s)	Welfare State (1950s–70s)	Neo-Liberalism (1980s–90s)	2000–

demand constraints. Market capitalism finally collapsed under the systemic crisis of the great depression in the 1930s, and was replaced by “bureaucratic capitalism” after World War II.

The second capitalist world system was established when the U.S. created complementary institutions, including the welfare state with mass production and mass consumption system, with machinery as the dynamic industry. A dynamic comparative advantage of machinery industries was fully developed in this capital accumulation regime, which successfully replaced foreign demand by domestic demand, and which involved wages as the engine of demand growth. This created the second golden age of capitalism. I call it “bureaucratic capitalism” because it was characterized by the coordination of economies by well structured bureaucratic systems of oligopolistic corporations, big governments and Bretton Woods international institutions. Mild business cycles reinforced the self-regulating character of capitalist economy by solving conflicts between workers and capital over income distribution.

After the structural crisis of capital accumulation regime in the 1970s, a new capital accumulation regime, neo-liberalism, was created which destroyed the link between wages and productivity growth. The dynamic advantage of IT has not fully developed in the neo-liberalism accumulation regime due to demand constraints.

The new methodology of institutional Marxian political economy differs from Uno’s three-level economic analysis in the following three respects.

- 1 We emphasize the importance of building a new stage theory which covers the development of capitalism after World War I. We cannot presuppose the end of imperialism to be the end of capitalism itself as Uno predicted. Intermediate theories must be free from teleology.
- 2 While Uno’s stage theory provides only a historical analysis of stages of capitalist development, intermediate theory is both a historical and theoretical analysis of a particular type of capitalist world system. I argue that the self-regulating character of capital accumulation (the law of value) operated in the established period of bureaucratic capitalism as well as in the established period of market capitalism. Basic theories of market capitalism and of bureaucratic capitalism explain more concrete economic laws in these capitalist world systems than the basic theory of capitalism, and they give reference points for analyzing historical developments of each capitalist world system. Historical analyses of intermediate theory provide analyses of the stages of development of these respective capitalist world systems.
- 3 In multilevel analyses, analysis at a lower level of abstraction must be guided by more abstract analysis, while more abstract analyses must be reinforced by factual findings in less abstract analyses. In my opinion, not only factual findings by intermediate theory but also theoretical findings in basic theories of particular types of capitalist world systems must be reflected in the basic theory of capitalism. The basic theory of capitalism is formulated with windows that accommodate plural sets of complementary institutions.

In contrast to Uno's general theory, which is a complete and closed theory based on his model of pure capitalism, and has no space to accommodate theoretical findings in non-pure capitalism, the basic theory of capitalism can accommodate theoretical findings with different sets of complementary institutions. For example, Marx (1976 and 1981) criticized Say's law in his theory of money and in his theory of crisis. But his theory was not as clearly formulated as Keynes' theory of effective demand (Keynes, 1936), which can be usefully introduced into the basic theory of capitalism. Similarly, Marx (1981) drew a distinction between the accumulation of money capital and real capital in his theory of crisis, but it was not clearly formulated. Introducing Minsky's financial instability hypothesis into the basic theory of capitalism helps clarify the monetary aspect of capitalist crises (Minsky, 1982).

Three new concepts in the intermediate theory

In this section we introduce three concepts to institutional Marxian political economy: dynamic comparative advantage, structuralist macroeconomics, and the financial instability hypothesis.

1 Dynamic comparative advantage

In order to analyze the historical development of leading industries, I build a dynamic theory of comparative advantage introducing a concept of dynamic industries and value added per unit of labor (VAL). A dynamic industry is one in which productivity growth is the fastest. It is also a leading industry and an engine of economic growth. The sectors that have played the role of dynamic industry have changed historically (Figure 7.1). VAL is amount of value-added which is produced by one hour's labor. It is decomposed by the number or volume of commodities produced by one hour's labor and value-added per unit of product. The value added per unit of product is large when a new product is exclusively supplied by a limited number of firms. It is called by many terms, such as extra profits, super profits, monopoly rents, and technological rents. In dynamic industries, VAL increases with the increase in productivity and eventually decreases, since the volume of product increases with productivity growth, but value-added per product eventually decreases with the diffusion of technology. When the technology is fully diffused, one hour of labor produces one unit of VAL.

Dynamic comparative advantage depends on the difference between VAL and wages. Wages increase at first in dynamic industries, which is compensated by productivity growth that arises from replacing old fixed capital with new and more productive fixed capital. In golden ages, long-lasting capital accumulation eventually exhausts the available industrial reserve army. To secure workers, large wage increases in the dynamic sectors spill over to the lagging sectors, and are mostly passed on to consumers in the form of higher prices. This is Baumol's

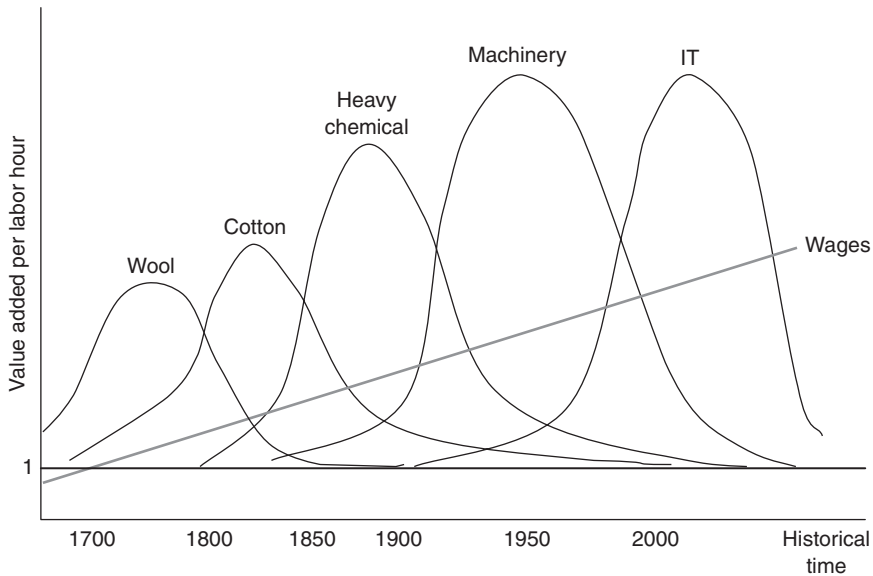


Figure 7.1 Dynamic industries and VAL.

cost disease (Baumol, 1967). With decreasing VAL and rising wages, dynamic comparative advantage starts to decline. A serious structural crisis is generated when wages nearly surpass VAL and destroys existing regimes of capital accumulation, as occurred at the end of the nineteenth century and in the 1970s.

There are two strategies of escape from reduced dynamic comparative advantage. The first strategy is sophistication of industrial structure, shifting leading industries to new dynamic industries. Catching-up countries usually take this strategy, and follow a linear development path. It is more difficult for the most advanced country to develop a new dynamic industry, because of the high risk and cost involved. The second strategic choice is to face the uncertainty that stems from a changing industrial structure, keeping capital in more liquid form and increasing capital investment in less developed countries, where wages are lower and the rates of profit are higher. It may be easier for ambitious catching-up countries to develop a new dynamic industry. First, the difference between the VAL of the current and new dynamic industries is less than that of the most advanced countries. Second, their wages are lower than that of the most advanced country. Third, they usually favour interventionist industrial, technology, and trade policy (ITT policy) to catch up with and to challenge the top countries. When catching-up countries take this strategy, they can unfold a new development path.

2 *A structuralist macroeconomics model of capital accumulation*

We introduce a structuralist macroeconomic model to our institutional Marxian political economy. In the golden age of bureaucratic capitalism we observe two modes of the accumulation of capital: profit-led accumulation in prosperity, and wage-led accumulation in depression. We build a formal structuralist macroeconomic model to investigate the significance of the accumulation structure in bureaucratic capitalism (see a formal model of capital accumulation regime given in the Appendix to this chapter). In this formal model, we integrate a Kaleckian wage-led capital accumulation model below full capacity and a Kaldorian profit-led accumulation model at full capacity, following Rowthorn (1982).

3 *A basic Minsky cycle and a super Minsky cycle*

We introduce Minsky's financial instability hypothesis to our institutional Marxian political economy. Minsky's basic theory may be reconstructed paying more attention to the accumulation of real capital, as follows (Figure 7.2). The demand price of investment is determined by the expected profit flows of the investment divided by present interest rate (demand price curve 1). The supply price of investment is determined by the prices of production of the capital goods (supply price curve). As long as the demand prices of investment are expected to exceed the supply prices of investment, investment continues (A). With an increase of profit flows both borrowers and lenders' expectation become

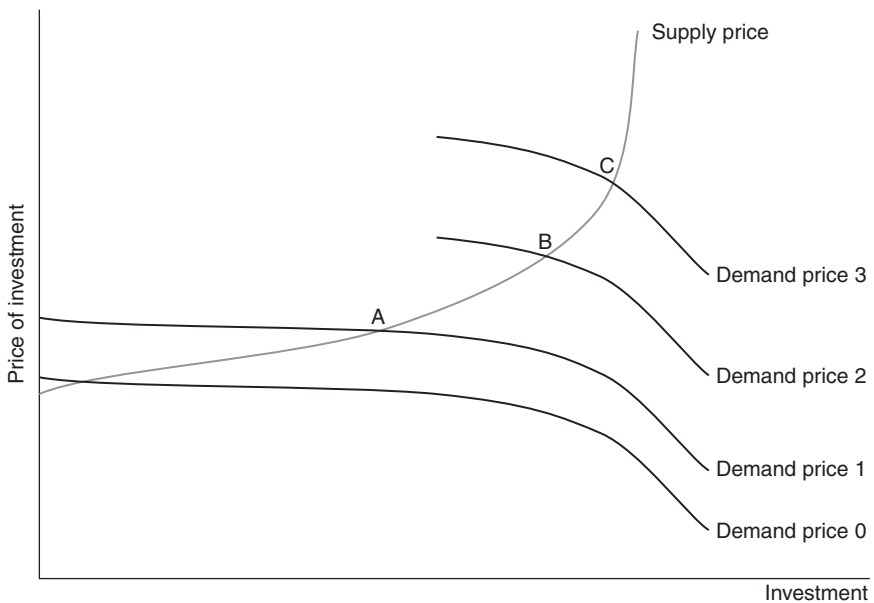


Figure 7.2 Basic Minsky cycle.

progressively more optimistic, and the demand price curve shifts from 1 to 2, and then 2 to 3. Financial arrangements change from hedge finance, wherein borrowers expect revenues cover to repay interest and loan principal, to speculative finance, wherein revenues cover only interest, then to Ponzi finance, wherein revenues are insufficient to cover interest. Investment overshoots to B and then C. When monetary authority tightens credit due to inflation, the boom collapses (the demand price curve 3 to 0).

Minsky's original theory does not explain the rise and fall of an accumulation regime. We introduce a concept of the super Minsky cycle that works over a period of several business cycles (Palley 2011). In the period of increasing dynamic comparative advantage, the supply price curve shifts down with higher productivity (supply price curve 2 to 1 in Figure 7.3), and the demand price curve shifts up with higher expectations of profits (demand price curve 1 to 2); so the theoretical equilibrium shifts from E_1 to E_2 . The economy becomes very dynamic. In the period of decreasing dynamic productivity, the supply price curve eventually shifts up with a higher cost of production such as wages and imported raw materials (supply price curve 1 to 2), and with a lower expectation of profits, the demand price shifts down (demand price curve 2 to 1). The theoretical equilibrium shifts from E_2 to E_1 . Then the economy loses dynamism. When the supply price curve shifts further up (supply price curve 2 to 3), or the demand price curve shifts further down, the demand price of investment is lower than the supply price of investment at any investment level.⁵ In this case capitalists do not invest since they cannot expect profit from investment. I call it a structural crisis, while Minsky (1982, p. 108) called this "present value reversal." According to Minsky this is a reinterpretation of Keynes's "liquidity trap," where money hoarding increases infinitely.

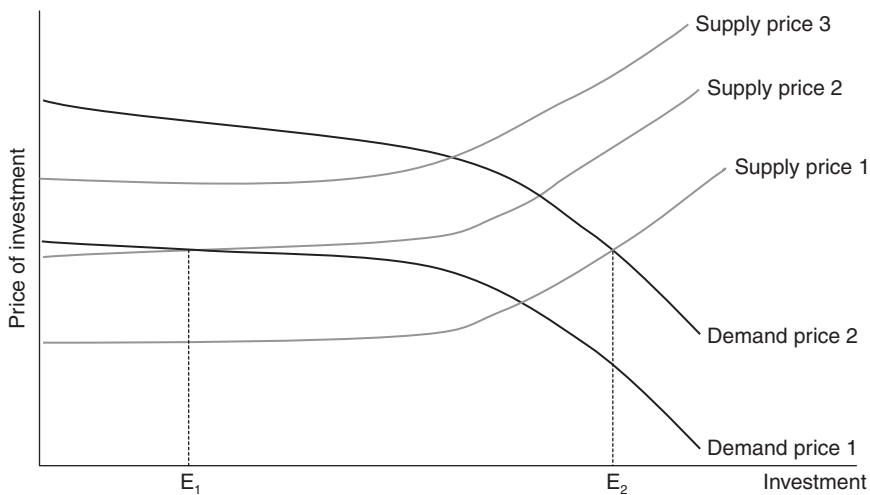


Figure 7.3 Super Minsky cycle.

Capital accumulation regime in the golden age of bureaucratic capitalism

In this section we will investigate the economic policies and historical institutions which build the capital accumulation regime in the golden age of bureaucratic capitalism. The experience of the Great Depression and the war economy established large, well organized bureaucratic governments, and created a managed currency system in advanced capitalist countries. This experience proved that full employment and stable price levels are achievable with government intervention within a broadly capitalist regime. After World War II, competition between capitalism and socialism became systemic; both sought superiority in both economic and military power. The economic systems in both capitalism and socialism were designed to maximize economic performance. The capitalist countries reindustrialized with the strong support of the U.S. and with well designed international and domestic institutions after World War II.

Dynamic industry

The dynamic industries shifted from heavy and chemical industries to the machinery and electronics industries in the 1920s and 1930s, and the mass production system of consumer durable known as “Fordism” was established by the early 1950s in the U.S., which was introduced in the 1950s and 1960s in Europe. In Japan, the dynamic industries shifted from light industries to heavy and chemical industries in the 1950s and 1960s, and then to the machinery and electronics industries in the 1970s. All countries, especially catching up countries, benefited from increasing VAL. Total factor productivity growth was proportional to investment, which was called the dynamic economy of scale.

Government policy (the welfare state)

Welfare state policy was the result of the requirements of bureaucratic (or oligopolistic) firms and states. First, many advanced countries had lost colonies. Bureaucratic firms could not rely upon foreign demand and domestic demand had to replace it. Second, the success of socialist planned economies undermined the superiority of capitalist ones. Bureaucratic government had to achieve full employment and higher living standards. For these reasons, although there were huge surplus populations in many developed countries in the 1950s and early 1960s, wage rates increased in proportion to average productivity.

The welfare state policy was constructed by means of two principal policies. First, Keynesian macro policy addressed the absolute gain of national wealth such as GDP growth and price stability. Bureaucratic governments had powerful institutions with which to achieve these ends, such as fiscal and monetary policy, and the sheer size of government stabilized economic fluctuations. Second, social policy addressed the relative gains among the different classes of the state.

Bureaucratic government also had institutions for more direct intervention, such as ITT policy.⁶ Some countries such as Japan and Germany favored more direct government intervention and sophisticated ITT policy to catch up to the U.S.

Industrial relations

Experience in the Great Depression and the war economy also strongly influenced postwar capital-labour accords. In order to win the total war, capital had to compromise with workers, and capital-labour accords were established during World War II. After World War II, labour unions eventually accepted the introduction of more productive methods in exchange for relatively long and secure employment contracts with productivity-indexed money wages. Productivity growth is the key factor for the success of the postwar capital labour accord, since firms can pay higher real wages and secure profits only with steady productivity growth.

Monetary system

In the case of the gold exchange standard, the supply of currency was limited by gold and foreign exchange reserves. In the new managed currency system, there was no such gold fetters. The central banks could create currency to meet the liquidity needs of the expanding domestic economy. To avoid bank crises, monetary institutions were strengthened by such regulations as central bank controls, close supervision of banks, and the separation of commercial and investment banking, and by such remedies as account insurance and lender-of-last-resort policy.

The Bretton Woods system was designed to decrease the external constraint that the gold exchange standard imposed on national economies by creating an international lender of last resort. Keynes's proposal for the international clearing union aimed to establish an international central bank which issued international credit money, the *bancor*. International balances of payment were to be settled on the accounts of the international clearing union. If this system had materialized, a managed currency system would have been established on an international level.

The U.S. opposition, which aimed at attaining its own hegemony in the international monetary system, reduced the transnational and public character of the international monetary system. This union materialized as the International Monetary Fund, which does not create credit money. Instead the U.S. dollar, fixed at the rate of 35 dollars per gold ounce, was chosen as the key currency. All member countries were obliged to fix their exchange rate to the dollar. International balances of payments were to be settled by multilateral payment systems of private banks and central banks.

At first, the Bretton Woods regime was intended to be an egalitarian and symmetric international monetary regime, with all currencies ultimately pegged to

gold, and with international organizations such as the IMF and World Bank performing coordinating roles. However, the multilateral international payment system did not function in the postwar era, since no currencies except the dollar were convertible. It was the commitment of the U.S. as the hegemon of the capitalist world system that sustained the Bretton Wood regime, offering international means of payment by public capital export such as the Marshall Plan (Panic, 1988, p. 280). Thus the Bretton Woods system had to depend on an abundant supply of U.S. dollars, and changed into a hierarchical and asymmetric international monetary regime – the fixed dollar standard system – during the Cold War.

International trade

To accelerate the re-industrialization of the capitalist economies, the U.S. changed its trade policy from protectionism to liberalism, opening its market to other capitalist countries and enhanced technological transfers, while it tolerated these countries' protectionist ITT policies. The U.S. also controlled supplies and prices of raw materials and fuel so that capitalist economies would not suffer from supply constraints. The smooth expansion of international trade under the free and multilateral trade regime (GATT) and the abundant availability of international currency accelerated the growth of international trade, which in turn accelerated capitalist countries' catching-up and GDP growth.

Cyclical crises and the law of value in bureaucratic capitalism

With strong support from the state and international institutions, bureaucratic capitalism successfully reversed the pattern of capital accumulation from dependence on foreign demand to dependence on domestic demand, with wages as the engine of demand growth; and it established the mutually reinforcing mechanism between productivity growth and domestic economic growth, resulting in the long-lasting prosperity of the 1950s–1960s with occasional recessions. There were six business cycles with mild recessions in the U.S. (recessions in 1949, 1954, 1958, 1961, 1970, and 1973), and among catching-up countries (for example, in Japan), there were seven business cycles (recessions in 1949, 1954, 1958, 1962, 1965, 1971, and 1973). In the golden age we observe two modes of accumulation of capital: profit-led accumulation in prosperity and wage-led accumulation in depression.⁷

Prosperity

Prosperity started mainly with the increase of investment and consumption, raising both employment and the rate of profit. Accumulation of capital increased both wages and profit, and thus consumption demand and investment demand. With the progress of prosperity, firms maximized investment, utilizing credit in

order to take advantage of economies of scale and dynamic economies of scale, which further increased profits and investment demand. At full capacity utilization, a Kaldorian profit-led accumulation mechanism worked. The increase of investment raised the price level, which increased profits with sticky money wages.⁸ Labour unions tolerated higher prices because the increase in investment increased demand for labor, and increased productivity, which eventually increased real wages.

Boom

Acceleration in the accumulation of capital by credit expansion, and the collapse of the boom by tightening credit, took different forms according to the levels of savings. Minsky's financial instability hypothesis explains boom and bust in current account surplus countries via money market psychology.⁹ As long as the demand prices of investment were expected to exceed the supply prices of investment, investment continued. With inflation and increased profit flows, both borrowers' and lenders' expectation became progressively more optimistic, and investment overshot. Financial arrangements changed from hedge finance to speculative finance in the boom, and then to Ponzi finance. When the monetary authority tightened credit due to inflation, the boom collapsed.

In current account deficit countries, the accumulation of capital was restricted by the balance of payments. Full employment was reached by expansionary monetary policy and capital inflow, which tended to increase inflation. As long as the rate of inflation was kept equal to or less than the U.S. rate of inflation, the balance of payments did not deteriorate. But once the financial system accelerated inflation beyond that level, the balance of payment was degraded and the exchange rate was strained. When the exchange rate dropped below the predetermined rate, the IMF fixed-rate system forced the monetary authority to tighten credit.

Recession

In all countries, monetary authority tightened credit before the crisis actually erupted. It reduced investment, and recession started. However, recession was a temporary problem, since economies had been cooled down before crisis actually started. Once inflation was reduced, credit was loosened again.

Depression

In the depression-period, a Kaleckian wage-led accumulation mechanism was at work.¹⁰ Sticky money wages and a lower price-levels increased real wages. Increase of real wages together with automatic stabilizers increased aggregate demand. The positive effect of demand via increased real wages depended on the price level. The more the prices of wage goods decreased, the more consumption demand increased with the same money wages. Productivity growth in

wage goods industries allowed a reduction in the prices of wage goods in the depression in the golden age without reducing average profits. The supply price of investment also dropped quickly and then the demand price of investment curve was higher than the supply price of investment curve again in our model. Oligopolistic firms responded to the increased demand by increasing output. In an oligopolistic market, investment increased with higher utilization rates (i.e., the acceleration principle).¹¹ As the result of the acceleration principle, the increase of production more than compensated for the increase in wages, and increased both profits and the rate of utilization. Then prosperity started again.

The law of value

Thus cyclical crisis automatically solved the conflicts between workers and capital over income distribution, and reinforced the self-regulating character of capitalist economy, or the law of value, with the help of complementary international and domestic institutions. The long-lasting high rate of capital accumulation fully developed dynamic comparative advantage.

Structural crisis of bureaucratic capitalism

The long-lasting high rate of capital accumulation itself made further accumulation difficult in the 1970s. The social institutions that supported the law of value in bureaucratic capitalism declined. With the destruction of these supporting social institutions, the conflict between workers and capital over income distribution became more severe.

Structural change

Uneven development and disorganizing influence on international relations

The long boom of the 1950s and 1960s was much stronger in Japan and Europe than in the U.S. The rapid growth of the capital stock, encouraged by plentiful supplies of relatively cheap labor, and by new technologies and management practices developed in the U.S. over the previous decades, eroded the productivity gap of European and Japanese manufacturing with the U.S.

A first disorganizing influence of the uneven development on international economic relations arose because of changes in international competitiveness. Higher productivity growth and lower wage levels kept European and Japanese manufacturing export highly competitive. This increased competition in international trade, and decreased the relative strength of U.S. trade, put strong stress on the free trade regime under the GATT.

A second disorganizing influence was the loss of confidence in the U.S. dollar. In spite of the decline in its current account surplus, the U.S. could not decrease both its capital exports and its government deficit so as to keep its

dominant status in the world economy and to simultaneously stabilize its domestic economy. The result was an increased U.S. deficit and an increased supply of U.S. dollars abroad, undermining confidence in the U.S. dollar, and heightening concern about the U.S. gold reserves. As the result, the U.S. had to stop conversion in 1971.

A third disorganizing influence was the splitting apart of the fixed exchange rate system. The combination of diverging productivity growth and inflation rates generated persistent payments imbalances which undermined the fixed exchange-rate system. As the result of the second and third disorganizing influences, the Bretton Woods system was abandoned.

A fourth disorganizing influence was supply constraints. High demand for energy and other materials put pressure on available supplies. The rise in food, raw material, and fuel prices in the early 1970s, a response to high demand and which was topped up by speculation, exacerbated domestic inflationary pressure.

Staggering productivity growth and disorganizing influence on the domestic economic relations

The long-lasting high rate of capital accumulation eventually reduced productivity growth. First, "Fordism" reached the saturation stage in many advanced countries by the early 1970s. One aspect of hitting this limit was the erosion of factory discipline. Second, part of the productivity slowdown stemmed from slower output growth in industries characterized by economies of scale. The decline in accumulation reflected business anxieties about the decline in profitability, the rise in inflation and the other indicators of instability. Third, in Europe the scope for catching up with U.S. productivity levels had declined. Fourth, the relative backwardness of productivity growth in the service sector forced de-industrialization.¹² Productivity growth in the service sector was difficult with available technology.

A first disorganizing influence of the staggering productivity growth on the domestic economic relations was a reduction in VAL. Diffusion of technology increased competition both domestically and internationally and reduced the price of products and value added. And because of reduced productivity growth, the decrease in value added per product was not compensated by an increase in the number or volume of commodities produced by one hour's labor.

A second disorganizing influence was Baumol's cost disease. Long-lasting capital accumulation eventually exhausted the available industrial reserve army. Large wage increases in the dynamic sectors spilled over into the lagging sectors and were mostly passed on to consumers in the form of higher prices, which further increased wages. Increases in wages under a declining VAL reduced the dynamic comparative advantage.

A third disorganizing influence was conflictual industrial relations. With the over-accumulation of capital with respect to available labor, labor unions became militant, and wage bargaining changed from Keynesian with sticky money wages to Marxist with sticky real wages (Epstein and Schor, 1990, p. 130).

When demand for higher real wages surpassed stumbling productivity growth, wage pressure contributed to a squeeze on profitability. Thus conflict over income distribution changed co-ordinated capital/labor relations into conflictual capital/labor relations.

A fourth disorganizing influence was the paralysis of Keynesian policy. Keynesian effective demand policy is effective for overcoming demand-side constraints but not for supply-side constraints. Keynes envisaged that a government spending boost would increase demand and the price levels, and prime the pump of private investment by increasing profits. Under supply constraints, government spending increased money wages (due to sticky real wages) and exacerbated inflation without increasing profits and investment.

Structural crisis

The 1970s started with stagflation with decreasing dynamic comparative advantage. Keynesian effective demand policies were ineffective in addressing supply side constraints, and worsened inflation. The effect of the abandonment of the Bretton Woods system was similar to that of the abandonment of gold exchange standard in the 1930s. The new floating exchange regime increased uncertainty in the world economy. However, it also removed balance of payments fetters, and enabled the pursuit of aggressive monetary and fiscal policies which shifted demand price of investment curve up and re-ignited investment. When the economies recovered, the oil shock attacked accelerating inflation. The supply price of investment curve shifted further up. Governments tightened both monetary and fiscal policies to reduce inflation, which shifted the demand price of investment curve down. Prices of investment were reversed and the structural crisis started.

With the start of severe crisis, monetary and fiscal policies were relaxed. But even with aggressive monetary and fiscal policies, the economy did not recover for the next five years. In this environment of low productivity growth and supply constraints, both the wage-led and the profit-led accumulation mechanisms of the golden age did not work.

The Kaleckian wage-led accumulation mechanism did not work. First, slower productivity growth in wage goods industries, the high cost of raw materials and fuels, and Baumol's cost disease did not allow a reduction in the prices of wage goods in depression as much as before. If prices of wage goods rise in depression, the Kaleckian wage-led effect would be lost completely. Second, increased competition between capitals under staggering demand growth kept idle fixed capital to a minimum. Thus the acceleration principle stopped working.

Neither did a Kaldorian profit-led accumulation mechanism work. First, when firms increased investment and product prices rose, the sticky real wages soon squeezed profits, and firms lost any incentive to invest more. Second, business anxiety reduced investment in fixed capital. The slower accumulation of fixed capital further reduced productivity growth. Third, conflictual capital-labor relations made capital cautious about increasing employment. Investments focused mainly on labor-saving investment, which did not increase employment.

The U.S. and Japanese economies bottomed out in 1975, while those in Europe finally bottomed out in 1977. Then the second oil shock attacked the OECD countries, and tight fiscal and monetary policies caused structural crisis again.

The rise and fall of the neo-liberal capital accumulation regime

Neo-liberal accumulation regime

Without a complementary combination of the capital-labor relation with the production method, the accumulation of capital cannot start again. There were three successful attempts to recover dynamic comparative advantage by reducing wages in the 1980s. Centralized bargaining in corporatist and social democrat nations rehabilitated co-operative relations, and workers agreed to reduce wages in order to increase employment. Japanese mini-corporatism combined labor loyalty and the flexible production system. Anglo-American neo-liberal economies demolished labor union power. In these countries, the conflict between workers and capital over income distribution was thus solved by reducing wage levels.

It was the Anglo-American neo-liberal accumulation regime that reshaped the capitalist world system after the structural crisis. The decisive policy shift from welfare state to neo-liberalism came in 1979. The UK government and the U.S. Federal Reserve pushed up interest rates to unprecedented heights to cut inflation, which increased unemployment. At the same time they demolished labor unions' power. This re-established a sound exploitation condition by reducing wages and creating a relative surplus population of the industrial reserve army in the U.S. and Britain.

The neo-liberal accumulation regime may be summarized as follows. It faced two demand-side constraints. First, when the economy is in a liquidity trap (or in a present value reversal), an increase of the supply of money does not reduce the interest rate. Consequently, monetary policy lost effectiveness. Second, it destroyed the link between wages and productivity growth. Wages are both a cost of production and a source of demand. If wages do not increase in proportion to average productivity, a new source of effective demand is required. It was neo-liberal financial relaxation that solved both problems. It included regulatory capture, such as Wall Street's lobbying efforts to decrease regulations, regulatory relapse, such as memory loss regarding the lessons of the great depression, and regulatory escape, such as financial innovation.¹³

The processes of financial relaxation are accompanied by increased risk-taking by borrowers and lenders both for investment and consumption. Neo-liberal financial relaxation increased asset prices and reduced the rate of interest, which worked both on consumption demand and on investment demand. It increased consumption demand by increasing income from capital gains and the availability of many kinds of loans. At the same time, decreased interest rates

increased investment demand by increasing the demand price of investment, shifting the demand price of investment curve upward in our Minsky model.

The neo-liberal accumulation regime worked well, especially in the 1990s, when new dynamic industries recovered dynamic comparative advantage. The information technology industry in the U.S. and finance in Britain were dynamic industries and engines of growth in this period.

Globalization

As discussed, there are two strategies to avoid the loss of dynamic comparative advantage. Facing the structural crisis the U.S. (after the 1980s) took the second strategy, as Britain did in the late nineteenth century, and changed its international policy to neo-liberalism and forced catching-up countries to adopt this policy. The U.S. also promoted the second phase of globalization by increasing Foreign Direct Investment. U.S. companies transferred industries which had lost their dynamic comparative advantage to countries with low wages. The U.S. globalization model also encouraged the transfer of manufacturing know-how to developing countries through the global value chain. The U.S. monetary authority kept a strong dollar policy to encourage capital inflow, as Britain did in the 1920s. Developing countries happily accepted the U.S. model of globalization with a strong dollar policy, since it allowed them to pursue export-led industrialization policies (Palley, 2010). However, U.S. strategy was different from the British strategy in an important respect. The U.S. protected and promoted IT industries through massive military spending; these became the next dynamic industries in the 1990s.

The Bretton Woods System was effectively replaced by a market-led international financial system, namely the Eurodollar markets. This neo-liberal international monetary regime made economies extremely vulnerable to short-term capital flows both in the advanced and developing economies as in the 1920s.

Business cycles after structural crises

In the neo-liberal accumulation regime, borrowing and asset price inflation became the engines of aggregate demand growth in place of wage growth in the golden age. In prosperity, a profit-led accumulation mechanism worked. The increases in investment raised price levels, which increased profits with constant money wages. With an increase of profit flows, both borrowers' and lenders' expectations become progressively more optimistic. The demand price of investment curve shifted upwards, and financial arrangements changed from hedge finance to speculative, then to Ponzi finance. When the monetary authority tightened credit due to inflation (or due to asset price bubble), the boom collapsed.

Tight monetary policy stopped investment and the crisis began. Both investment and consumption had been heavily dependent on credit; so tight monetary policy made many borrowers bankrupt. In this process, banking crises often started, and this developed into industrial crisis. Once depression started, it did

not recover automatically, since a wage-led accumulation mechanism did not work. The economy fell into a liquidity trap again (or into a reversal of present value, in our Minsky model). It requires further neo-liberal financial relaxation to start prosperity again. Thus policy-led bubble and bust replaced the self-regulating character of the capitalist economy.

Industrialization of China and East Asia in the neo-liberal accumulation regime

When Japan lost dynamic comparative advantage in the heavy and chemical industries, it shifted its dynamic industry to machinery industry from the mid-1970s. Japan adopted an export-led industrialization strategy, increasing its trade dependency from 10 percent of GDP in the golden age to 15 percent from the mid-1970s to mid-1985. It became the engine of demand growth. The development of Japanese industries left room for less-developed East Asian NIEs to industrialize in the flying-geese pattern (namely with declining industries in leading countries allowing following countries to develop sequentially, as per Akamatsu 1962).

In the first half of the 1980s, the U.S. dollar was hugely overvalued against the Japanese, Korean and Taiwanese currency. After the Plaza accord of 1985, these currencies appreciated rapidly, and Japanese trade dependency reduced to 10 percent of its GDP between 1985 and 2003. These economies had to replace foreign demand by domestic demand. Japan did not restore the link between wages and productivity growth. Instead these three countries adopted a neo-liberal accumulation regime. First, they increased foreign direct investment initially to ASEAN and then to China to reallocate lower value added section of the value chain. Second, they compensated for the reduction in the domestic production of tradable by increasing the domestic production of non-tradable, such as services and construction. Third, these nations – especially Japan – chose neo-liberal financial relaxation to increase investment and consumption demand. The Japanese bubble in the late 1980s, which burst in the early 1990s, was a typical boom-and-bust pattern in the neo-liberal accumulation regime, and the first serious one.

The Japanese share of world commodity exports peaked in 1990 (Glyn 2006). In this period, Japan built a Pacific Rim triangle trade regime whereby Japan (later Korea and Taiwan) exported capital goods to the ASEAN and China, and the ASEAN and China exported completed products to the U.S. Japanese FDI to the ASEAN4 and China for these nations' cheap wages, followed by Korean and Taiwan FDI, accelerated industrialization in the ASEAN4 and China. In this process Chinese wages have been increasing dramatically in yuan, but the devaluation of the yuan from 1.5 yuan to U.S.\$1 in 1980 to 8.6 yuan to U.S.\$1 in 1994 concealed wage increases, and kept Chinese wage levels at 5 percent of U.S. levels at current exchange rates for the 20 years of its catching-up process. Therefore, the Chinese industrial structure was not upgraded sufficiently in the 1990s. It blocked the flying-geese-type industrialization of less developed countries.

After China became a member of the WTO, its share of international trade skyrocketed. Japanese goods exports to China and imports from China increased dramatically, raising Japanese trade dependency to 15 percent between 2002 and 2007. This enabled Japan to adopt an export-led growth strategy again and to recover from the decade long depression. However, Japan could not keep pace with China, and its share in China's international trade was reduced both in exports and imports.

Now China imports capital goods from Japan, Korea, and Taiwan, food and raw material from less developed countries, and exports completed products to the EU, U.S., Asia, and other areas. The cross-border division of work and trade in East Asia has been completely rebuilt by China, and the Japan-led Pacific Rim triangle trade regime has been replaced by a China-centric East Asian production network. In this process, the rapid rise in Chinese wages was finally reflected in its dynamic comparative advantage, since its market exchange rate and real effective exchange rate had been stable since the mid-1990s. Specialization in light industries such as textiles, toys, and electrical appliances peaked in the late 1990s, and specialization in machinery such as electrical and general machinery increased rapidly from the mid-1990s onwards (RIETY-TID 2010).

Structural change

As the success of the golden age accumulation regime itself undermined the institutions that supported it and caused structural crisis, the long lasting neo-liberal accumulation regime itself has undermined its complementary institutions.

- 1 The effect of neo-liberal financial relaxation is losing momentum. First, although aggregate demand depends on higher risk-taking by borrowers, unprecedented levels of household debt makes further increases difficult. Second, neo-liberal financial relaxation destroyed the robustness of the financial structure; so further relaxation undermines the safety of the financial system. Third, neo-liberal monetary policy to decrease interest rate reached its limit at the zero interest rate. Further reduction is difficult. Furthermore, unprecedented levels of government debt and increasing social spending have made further tax cuts difficult. These factors have increased demand-side constraints and made shifting the demand price of investment curve upward difficult.
- 2 Neo-liberal globalization shifted the centre of capital accumulation to developing economies such as China and India. Their industrialization are very successful. However, this has increased the demand for raw materials, energy, and food. Higher international commodity prices have raised the supply price of investment. These factors have increased supply-side constraints and shifted the supply price of investment curve upward.
- 3 The engine of demand growth in the U.S. neo-liberal accumulation regime has shifted from domestic financial relaxation to foreign debt since the East

Asian Economic Crisis in 1997, increasing international imbalance. Most significant are the Chinese and German current balance surpluses, which increased significantly after 2002, surpassing Japan in 2005 and 2006 respectively. The total surpluses of these three countries peaked at \$837 billion in 2007. On the other hand, the current account deficit of the U.S. (and Britain and other southern EU countries) increased rapidly after the 2000s, and the U.S. deficit peaked at 788 billion dollars in 2006. Prosperity in the U.S. (and Britain and southern EU countries) in the early 2000s was made possible by borrowing from foreign countries. The borrowed money was spent on the consumption of imported goods and residential fixed investment rather than on investment (i.e., on non-residential fixed investment.)

The subprime loan crisis and the future of capitalism

The subprime loan crisis is the most severe world crisis since the structural crisis in the 1970s. The historical process of the crisis may be summarized as follows. A housing market bubble began in the late 1990s and accelerated in the early 2000s. Banks earned large fees by securitizing mortgages and selling them to capital markets. Institutional investors all over the world bought these securities because they had higher returns than equivalently rated corporate bonds. Banks began to offer mortgages to those who could not afford them when the housing price bubble evaporated and/or interest rates rose. Home sales peaked in late 2005, and housing prices peaked in early 2006. Then the subprime loan crisis erupted in mid-2007. The crisis began in the U.S., and spread all over the world.

The question is what kind of crisis is the subprime loan crisis. Is it a cyclical crisis, a structural crisis, or an even more serious crisis that may abolish the present capitalist world system, as did the 1929 world crisis and the following great depression – that is, a systemic crisis? We have three scenarios.

First scenario

This is not a structural crisis in a capital accumulation regime but financial excess. Minskyians argue that financial excess was the only problem, and normal growth with cyclical crises will return once the financial excess has been remedied (Kregel, 2008, p. 20). In my opinion, neo-liberal financial relaxation was introduced to solve demand constraints. It is necessary to reconstruct robust financial systems. However it does not solve demand constraints, and the economy does not recover.

Second scenario

This is a structural crisis in the neo-liberal capital accumulation regime, but not a systemic crisis of the present capitalist world system. Structural Keynesians

argue that the ultimate cause of the crisis is the disconnection of the link between wages and productivity growth. Solving the problem requires reversing neo-liberalism and restoring the link between wages and productivity growth (Palley, 2010). In my opinion, it requires reconstruction of the Bretton Woods regime internationally, and of the welfare state domestically. Without overwhelming economic power, international cooperation is required to rebuild the international monetary system. This rebuilt system should be more transnational and public than the U.S. dollar standard system. Keynes' international clearing union may be rehabilitated. Reconstruction of welfare society requires productivity growth and an egalitarian income distribution mechanism. It seems to be more possible now than in the 1980s, since dynamic comparative advantage has recovered due to the take-off of new dynamic industries, namely IT and knowledge-intensive industries.

Third scenario

This is the beginning of a systemic crisis of bureaucratic capitalism that will destroy the current capitalist world system. Neo-liberalism enabled the U.S. to enjoy prosperity in the 1990s and 2000s. Neo-liberalism has remained the dominant ideology even in the face of the structural crisis of neo-liberal capital accumulation regime after 2007. If the U.S. wants full development of IT industries, it requires solving demand constraints by rebuilding the link between productivity growth and wages and keeping most advanced knowledge within the country by controlling transnational corporations. The neo-liberal ideology makes these policies impossible.

On the other hand we see the possibility that the further industrialization of China may re-establish a flying-geese pattern of development on a global level among developing countries. Facing the collapse of the U.S. neo-liberal capital accumulation regime, pressure to reverse the Chinese current-account surplus has increased since 2008. China has changed policies from export-led industrialization to domestic-demand-led industrialization, which may re-establish the link between wages and production growth. This will increase Chinese wage rates and China's real exchange rates, and reduce China's competitiveness in less sophisticated labour-intensive industries. It will allow less developed countries to industrialize in a flying-geese pattern. Furthermore, if transnational corporations choose China as their centers to promote IT industries to maximize profit, China may develop a new development path.

I agree with the second and third scenario, since I believe that rebuilding the link between wages and productivity both in advanced and developing countries is necessary to recover from this most serious crisis of the capitalist world system, and to develop productivity of the new dynamic industry fully.

Appendix

Let us build a formal structuralist macroeconomic model to investigate the significance of the accumulation structure in bureaucratic capitalism. In this formal model, we integrate a Kaleckian capital accumulation model below full capacity and a Kaldorian accumulation model at full capacity, following Rowthorn (1982).

Take the capacity utilization rate u on the x-axis, and the rate of profit r on the y-axis as in (Figure 7.A1). The profit curve, which shows equilibrium on the supply side, is given by the following equations. The net rate of profit r is given by the following equation normalized by fixed capital K :

$$r = (R/K) - (D/K) - (T/K) \tag{1}$$

where R represent gross profits, D depreciation, and T tax. Let us denote the national income by Y , the full utilization national income by \underline{Y} , the full utilization capital coefficient by \underline{k} . Since $R/K = (R/Y)(Y/\underline{Y})(\underline{Y}/K)$, the profit curve is defined thus:

$$r = (p/\underline{k})u - d - t \tag{2a}$$

where p is the share of profit (R/Y) determined externally by the degree of monopoly, $d = D/K$, and $t = T/K$. When u rises, r also rises, because the fixed

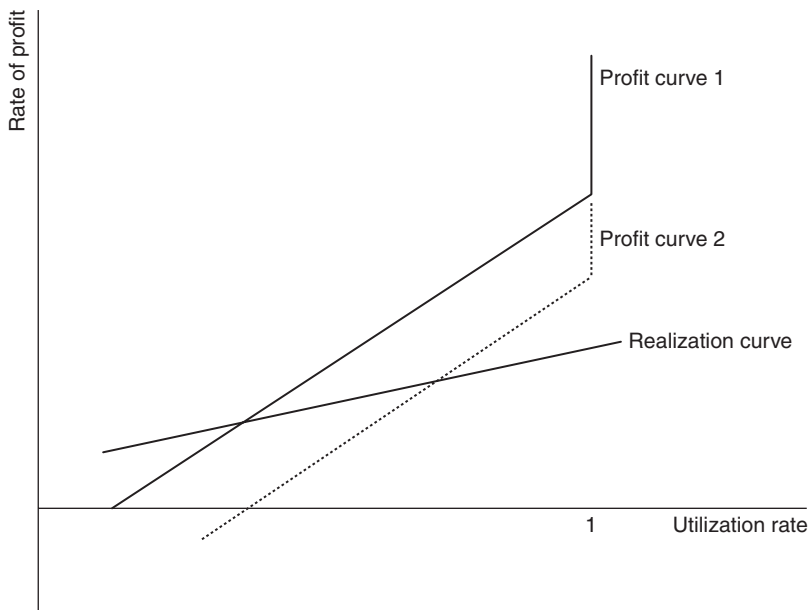


Figure 7.A1 Formal model of accumulation structure in bureaucratic capitalism

capital K is used more efficiently. Let us suppose that the gap between supply and demand is covered by quantity adjustment under full utilization (Kaleckian adjustment), and by price adjustment at full utilization (Kaldorian adjustment). At full utilization, the price level may rise, and the rate of profit is given by the following equation:

$$r \geq (p/\underline{k})u - d - t \quad (2b)$$

The profit curve has a positive slope of p/\underline{k} below full capacity and is vertical at full capacity itself.

The realization curve, which shows the equilibrium of saving and investment, is given by the following equations. Let us suppose that workers do not save, and that a constant fraction s_r is saved from the net profits. The net saving normalized by the fixed capital g^s is given by the following equation:

$$\text{Saving function: } g^s = s_r r - b - x \quad (3)$$

where b is the budget deficit and x the net export, both normalized by the fixed capital.

We suppose that the current rate of profit and the capacity utilization influence investment. We denote the investment propensity to the rate of profit with i_r , and that to the utilization rate with i_u . The ratio of investment to the fixed capital g^i is given by the following equation:

$$\text{Investment function: } g^i = i_0 + i_r r + i_u u \quad (4)$$

where i_0 is the absolute term of investment.

The realization curve is obtained from (3), (4), and the equilibrium condition ($g^i = g^s$):

$$r = \{i_u / (s_r - i_r)\} u + (i_0 + b + x) / (s_r - i_r) \quad (5)$$

The economy must lie on the profit curve and the realization curve to be in equilibrium. Changes in parameters concerned with savings and investment (i_u , s_r , i_r , b , and x) shift the slope and position of the realization curve. A Kaldorian profit-led accumulation mechanism is explained as follows. Larger i_u , i_r , b , x and smaller s_r , shift the realization curve upwards, which “will increase the equilibrium rate of profit and cause the economy to grow faster” (*ibid.*, p. 22).

Changes in parameters concerned with the cost structure of firms (p , \underline{k} , d , t) shift the profits curve. A Kaleckian wage-led accumulation mechanism is explained as follows. Larger \underline{k} , d , t , and smaller p increase the costs of firms (profit curve 1 to 2), and initially reduce the rate of profit. In the case of a stable economy, since $i_r < s_r$, this reduction in profits will cause excess demand. At full capacity, firms will raise their prices, and the economy will return to its previous equilibrium. Below full capacity, firms respond to greater demand by producing

more output. “If there is no accelerator effect ($i_u=0$), expansion will come to a halt once profits have reached their old level . . . if the accelerator effect is positive ($i_u>0$) . . . both profits and investment will be higher in the new equilibrium than they were in the old” (Rowthorn, 1982, pp. 24–25).

Notes

- 1 I am grateful to Bob Rowthorn, Gary Dymski, Jayati Ghosh, Ha-Joon Chang, Mica Panic, Jan Kregel, Tom Palley, and members of JSPE for discussion and comments. I am grateful to Musashi University for sabbatical leave in 2011.
- 2 For a contrasting view see Hodgson (2001) and Hodgson *et al.* (2001).
- 3 Gay (1970, p. 87) wrote “Marx originally wanted to dedicate *Capital* to Darwin.”
- 4 See Sekine (1975) and Uno (1980).
- 5 In our formal model, the profit curve is lower than the realization curve at any utilization level.
- 6 For ITT policies, see Chang 2002.
- 7 For formal presentation, see Appendix.
- 8 Kaldor (1960) and Rowthorn (1982).
- 9 See Minsky (1978, 1982).
- 10 Kalecki (1954, 1971) and Rowthorn (1982).
- 11 In my formal model, the investment propensity to the utilization rate (i_u) is positive.
- 12 Rowthorn and Wells (1987).
- 13 Financial innovation includes the shadow banking system, derivatives, options, home equity loans, and securitization and tranching of securities (Palley, 2010).

References

- Akamatsu, K. (1962) “A Historical Pattern of Economic Growth in Developing Countries,” *The Developing Economies*, Institute of Asian Economic Affairs, Preliminary Issue No. 1, pp. 3–25.
- Baumol, W.J. (1967) “Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis,” *American Economic Review*, Vol. 57, pp. 426–451.
- Bernstein, E. (1911) *Evolutionary Socialism: Criticism and Affirmation*, New York: B.W. Huebsch.
- Chang, Ha-Joon (2002) *Kicking away the Ladder: Development Strategy in Historical Perspective*, Anthem Press.
- Epstein, G. and Schor, J. (1990) “Macro Policy in the Rise and Fall of the Golden Age,” in Marglin, S. and Schor, J. (eds), *The Golden Age of Capitalism*, Oxford: Clarendon.
- Gay, Peter (1970) *The Dilemma of Democratic Socialism*, London: Collier-Macmillan.
- Glyn, A. (2006) *Capitalism Unleashed*, Oxford: Oxford University Press.
- Hilferding, R. (1980) *Finance Capital*, translated by Morris Watnick and Sam Gordon, London: Routledge.
- Hodgson, Geoff (2001) *How Economics Forgot History: The Problem of Historical Specificity in Social Science*, London: Routledge.
- Hodgson G.M., Itoh, M. and Yokokawa, N., (eds) (2001) *Capitalism in Evolution: Global Contentions – East and West*, Cheltenham: Edward Elgar.
- Kaldor, N. (1960) *Essays on Economic Stability and Growth*, London: Duckworth.
- Kalecki, M. (1954) *Theory of Economic Dynamics*, London: George Allen and Unwin.
- Kalecki, M. (1971) *Selected Essays on the Dynamics of the Capitalist Economy*, Cambridge: Cambridge University Press.

- Keynes, J.M. (1936) *The General Theory of Employment, Interest and Money*, London: Macmillan.
- Kregel, Jan (2008) "Using Minsky's Cushion of Safety to Analyze the Crisis in the U.S. Subprime Mortgage Market," *International Journal of Political Economy*, Vol. 37, no. 1.
- Lenin, V.I. (1996) *Imperialism: The Highest Stage of Capitalism*, London: Pluto.
- Marx, Karl (1976) *Capital*, Vol. 1, translated by Ben Fowkes from fourth German edition of 1890, Harmondsworth: Pelican.
- Marx, Karl (1981) *Capital*, Vol. 3, translated by David Fernbach from German edition of 1894, Harmondsworth: Pelican.
- Minsky, H.P. (1978) *The Financial Instability Hypothesis: A Restatement*, London: Thames Polytechnic.
- Minsky, H.P. (1982) *Can It Happen Again?* New York: M.E. Sharpe.
- Palley, Thomas (2010) "The Limits of Minsky's Financial Instability Hypothesis as an Explanation of the Crisis," *Monthly Review*, 61(11).
- Palley, Thomas (2011) "A Theory of Minsky Super-Cycles and Financial Crises," *Contributions to Political Economy*, 30(1), pp. 31–46.
- Panic, M. (1988) *National Management of the International Economy*, London: Macmillan.
- RIETI (Research Institute of Economy, Trade and Industry) (2011) RIETI-TID (www.rieti-tid.com/).
- Rowthorn, R.E. (1982) "Demand, Real Wages and Economic Growth," *Studi economici*, No. 18.
- Rowthorn, R.E. and Wells, J.R. (1987), *De-industrialisation and Foreign Trade*, Cambridge: Cambridge University Press.
- Sekine, Thomas T. (1975) Uno-Riron: "A Japanese Contribution to Marxian Political Economy," *Journal of Economic Literature*, 8, pp. 847–877.
- Uno, K. (1980) *Principles of Political Economy*, translated by Thomas T. Sekine, Brighton: Harvester.
- Veblen, Thorstein B. (2007) "The Socialist Economics of Karl Marx and His followers," in *The Place of Science in Modern Civilization*, originally published 1919, New York: Cosimo.

8 Financial innovations, growth and crisis

The subprime collapse in perspective

Robert Boyer

Introduction

Most analysts were astonished and bewildered by the crisis that emerged in the summer of 2007. Yet this crisis is perfectly in keeping with theories that study growth and its disruptions from a historical perspective. Financial innovations are the “great forgotten” of traditional economic analyses. And yet there is no reason why they should be treated any differently from technical, organizational, institutional, or medical innovations. On paper, finance can contribute to growth through several different mechanisms: via the transfer of savings from lenders to borrowers, the smoothing over time of investment and consumption profiles, or the transfer of risks. What is particular about financial innovations is that they result from private profit-seeking strategies, and the new financial products diffuse all the more quickly because their process of production is immaterial. This diffusion can have major repercussions on macroeconomic stability, because of the externalities¹ that characterize it.

The same specialists who had warned against the risks of irrational exuberance in relation to the new economy also championed the idea that sophisticated financial products would be capable of surmounting most of the obstacles to growth, by funding education, providing a guarantee against the risks of change, solving the problem of underdevelopment and helping to eradicate poverty. The dream of all-powerful finance was, in particular, given fresh expression in the United States in the financing of home loans for households who did not have the necessary financial resources. The securitization of these mortgages led to the beginning of the crisis that emerged in the summer of 2007 and gradually became systemic. The consequences of this phenomenon were exacerbated in 2008, amplified by the introduction of fair-value accounting (Bignon *et al.* 2004).

Previous studies have used the methodology and concepts of *régulation theory* (Boyer 2009, 2010, 2011) in order to characterize the crisis opened in 2008 as systemic (the failure of a financial organization), structural (the end of the complementarity between the five institutional forms at the origin of the American finance-led accumulation regime), and global (the consequence of large and long-lasting external trade and capital flows imbalances).

The present contribution focuses upon the first component of the so-called subprime crisis. It is built around a central but too often neglected issue: what is the contribution of financial innovations (Box 8.1) to the frequency and severity of economic crises, and is the large cost of these crises the price to be paid for promoting growth and better standards of living? It is first argued that financial innovations have ambivalent outcomes, contrary to the naive hypothesis that they necessarily enhance market efficiency (section 1). It is then possible to detect a typical sequence that links private innovations, crises (section 2) and, finally, public interventions in order to prevent the

Box 8.1 Status and evolution of financial innovations

The present analysis attributes a decisive role to innovations, considered simultaneously as a possible engine not only of growth but also of crisis.

- 1 We owe this general interpretation to Joseph Schumpeter's work on the theory of development, published in 1911. According to his extended conception of innovation, it denotes the emergence of a new product, a new process, or a new organization in a given economic entity. The process of development was therefore characterized by long waves marked first by a phase of growth linked to the diffusion of this innovation through competition, and then by a depressive period of adjustment of the whole economy through the disappearance of oligopolistic rents linked to the innovation.
- 2 It was Charles Kindleberger (1978) who proposed a history of financial crises based on an analogous hypothesis applied to finance: a financier invents a new financing and/or risk-coverage instrument, whose high initial profitability provokes a process of diffusion and imitation; this leads to a speculative phase which, in every case, leads to a crisis that may be more or less serious depending on whether it remains local (tulip mania) or transforms the very conditions of economic dynamics (securitization).
- 3 The analysis that follows does not deal with one sole innovation, but with the succession and subsequent combined effect of different innovations that have been made possible and favored by financial liberalization: models of risk management, models of share valuation, the securitization of a huge set of financial assets, the subprime mortgage market, and the organizational models of the big Wall Street investment banks.
- 4 A perverse and unprecedented complementarity appeared between these diverse innovations, causing a massive transfer of risk onto almost every agent in the financial market. The set of mechanisms that was intended to cover risk actually intensified excessive risk-taking, because of the rupture of the links of responsibility in loan contracts. The collapse of this pyramid, the freezing of interbank lending and the drastic tightening of credit conditions for non-financial agents are direct consequences of this new configuration of the financial system in the United States. In this sense, it is perfectly legitimate to characterize the situation that emerged in September 2008 as a systemic financial crisis.

negative externalities that have been associated to the previous wave of financial innovations (section 3). In the light of this analytical framework and historical analysis, it is easier to point out simultaneously the commonalities and the novelties of the subprime crisis (section 4). All these developments converge toward a plea that public control of financial innovations should be part of any strategy for constructing more resilient financial systems and economies (section 5).

The uncertain consequences of financial innovations

Growth is classically a question of technical and organizational changes, as Joseph Schumpeter (1911) observed. It is therefore in the realm of finance theory that we should seek the mechanisms linking growth with the diffusion of new financial products.

Studies of the contributions of finance to economic activity go back a long way. In particular, they examine the role of finance in the adjustment of savings and investment (Gurley and Shaw 1956). The process of transferring savings from households to companies or of reallocating profits between mature industries and strong-growth industries is essential. In theory, the quality of the financial system therefore plays a decisive role in the process of growth.

- In the Soviet regime, capital was allocated according to political criteria: inefficiency in the use of capital led to the gradual exhaustion of the sources of growth (Sapir 1989).
- In the Fordist growth regime, the regulatory supervision of banks and financial markets did not prevent the reallocation of profits towards sectors and firms creating productivity gains and new standards of production and consumption. During this period, the mixed economy showed itself to be superior to a typical market economy (Shonfield 1965).
- In the finance-led growth regime, the allocation of capital was governed by the financial community's anticipation of promising sectors. At the end of the 1990s, this led to the diversion of capital from companies in mature, highly profitable sectors towards start-ups, most of which destroyed their start-up capital through their failure to find a market for their potential innovations (Perkins and Perkins 1999). The mimicry associated with what we have called the "Internet convention" led to an ultimately inefficient allocation, as demonstrated by the destruction of capital when the bubble burst (Boyer 2004).

This observation is in keeping with the main conclusion of a review of the literature published in 2003: financial innovations can favor improvements in technologies and organizations, and therefore in growth, but they can equally well result in speculative movements that are unfavorable to the stability of long-term growth (see Table 8.1).

Table 8.1 Financial innovations: sources of growth or of crisis

Function	Impact on:	
	Growth	Crises
1 Transfer of wealth over time	Favors investment by eliminating the irreversibility of choice	Makes possible the creation of rights in excess of future wealth
2 Risk management	Allows investment through the separation of financing and risk	Accentuates risk, because of poor evaluation resulting from the division of labor among financial actors
3 Pooling wealth	Better allocation of capital	Favors the emergence of bubbles and poor allocation of capital because of liquidity
4 Creation and dissemination of information	Socializes views of the future	Nurtures mimicry, however rational it may be
5 Organization of payments	An efficient banking system favors growth	Constitutes a resonance chamber, amplifying the financial disorders at the heart of systemic crises

Source: after Rajan and Zingales (2003).

We can cite various examples of this ambivalence:

- The *socialization of information* about agents' expectations is organized by the financial markets, for want of complete futures markets for all transactions. Any new futures market therefore enriches the information available and, a priori, facilitates investment choices. On the other hand, the convention that emerges from the functioning of this market may provoke widespread *mimetic behavior*, because the actors are dissuaded from carrying out their own analysis of the value of financial assets. Because of this, when there is a high level of uncertainty, the market is divided between two equilibriums, one pessimistic, the other optimistic, compared to what an estimation of the fundamental value would give (Orléan 1990). Good dissemination of information does not necessarily entail, therefore, the efficient allocation of capital.
- The separation between financing and risk, which has made possible derivatives and notably certain credit derivatives such as credit default swaps, should enable agents to *cover themselves against a risk* by transferring it to a third party more capable of assuming it. This opening up of bilateral credit relations to third parties encourages the two actors concerned to take greater risks, because they can transfer those risks and because they possess better information about their scale. There is therefore a strong probability that

once established, this mechanism will incite *excessive risk-taking* that increases the probability of entering a zone of financial fragility. The development of derivatives in the mortgage market of the United States provides a good example of such a process.

- The *liquidity of the economy* increases when deep, liquid markets develop, quite independently of money creation, giving financial actors the illusion that they can in fact do without banks and money creation. Many actors have used very high leverage to obtain exceptional levels of profitability. If they lose the corresponding gamble, they resort to bank credit. If the commercial banks are themselves the victims of mistaken expectations, the liquidity of the financial markets suddenly dries up. This is the mechanism that triggered the collapse of the subprime mortgage market and precipitated a systemic crisis. Financial agents cannot rely on either the market or their models to evaluate their assets and liabilities.

Private innovations, crises and then regulations in finance

On the financial markets, some agents seek to evaluate future returns by analyzing the information provided by the most recent data on company results, the movement of short-term interest rates, exchange rate trends, prospects of technical change, tax policy, etc. The mechanism is organized according to expectations and analysis that projects into the future. Other agents on the financial markets content themselves with retrospective analysis, as the chartists do with stock market prices. A number of models have shown that the behavior of chartists and “followers” amplifies the upward movement initiated by those agents who are best-informed and equipped to analyze the impact of an innovation capable of raising the rate of return on capital in a company, in a sector or even in the economy as a whole (Tadjeddine 2006).

The problems of uncertainty that weigh on the use of all financial instruments are heightened by the launch of a new financial product. The actors must form an opinion based on beliefs, for want of past observations. Just to take one example, the financial community believed in the new economy, although there were few elements to justify the almost doubling of rates of return on capital. The very novelty of the financial technique, product, or instrument may suggest the dawn of an unprecedented period in which past regularities will fade away. Financial history, on the contrary, provides hypotheses for the trajectory of technical and financial innovations that have been supposed to herald a new era.

The horizon of the actors involved does not exceed a few years, while the effort of information search and analysis focuses on the most recent developments. Thus, through the formation of the market price, a belief emerges in the dawning of a new epoch marked by returns without precedent in terms of their magnitude and/or stability. Financial history has the great merit of detecting the repetition of the same sequence of speculative fervor. Such works are numerous: isolated to begin with (Kindleberger 1978), they have increased with the growing

frequency of crises since the mid-1980s (Garber 2000; Eichengreen 2003; Roubini 2008). The novelty is that macroeconomic and financial theorists themselves refer to the series of phases of runaway speculation when constructing models to explain the inefficiency of markets, by means of more or less substantial modifications to either the hypothesis of rationality (Shiller 2000), or the organization of markets.

Adopting this perspective helps to shed light on the current situation: it is not the first time that a technical innovation has been considered radical and capable of permanently raising profit levels. So, for instance, the restructuring of firms and changes in the frontiers between sectors under the impact of information and communication technologies in the 1990s were compared to advances in the scientific organization of labor in the United States in the 1920s. The fast rise in liquidity on the stock market itself provoked a rash of mergers and acquisitions that corresponded in its own way to the increase in liquidity observed during the 1960s in the United States (Shleifer 2002: 170–171).

A chain of events leading to the return of public control

At the origin of such a chain of events lies an impetus given by a new technique (new methods of producing tulips ... mass production methods), by finance (creation of shares in a navigation company), a political discontinuity (the railway boom after the American Civil War), consumption (the emergence of customers for new services, such as holidays in Florida thanks to their rental or purchase of apartments there), or by an unprecedented new financial situation (a rush of liquidity to the stock market allowing a rise in the number of takeover bids). The adoption by informed economic agents of a selective strategy guarantees them the reality of expected returns. They carry out purchases justified by their technical expertise (how to grow the new tulips? what real estate to build in Florida?) or by the privileged information they possess (which is generally the case for financial innovations). Their behavior is rational in the economic sense of the term, and does not in itself lead to a speculative boom.

The rise in the price of products and consequently in the financial assets of the companies that produce them endorses the strategy of these informed agents. In reaction to these price signals, other agents enter the market, unaware of the nature of the innovation and trusting simply on an extrapolation of the rising prices. A new shareholder unacquainted with the functioning of the stock market transfers a large part of his portfolio into this financial instrument. In this third step, “followers” and credit play a decisive role in the speculative surge.

The endorsement of expectations by an indisputable authority accentuates the boom. In the Mississippi Bubble, the French government gave John Law its official support. In the United States in the 1920s, Irving Fisher declared that share prices had reached a “permanently high plateau,” a diagnosis that he maintained up until the eve of the stock market crash. In the modern period, the position of Alan Greenspan, who had originally warned against irrational exuberance, marked a watershed in the Internet bubble when he came over to the opinion of

the markets (“private agents know better than the central banker what share prices ought to be”).

The appearance of a gap between returns obtained and returns expected marks the climax of the sequence and the imminence of the forthcoming downturn. This occurs either as a result of the endogenous erosion of returns because of over-accumulation or in response to a piece of apparently minor bad news, which triggers a change in opinions about future prospects. In other cases, the best informed agent judges that, given the height attained by asset prices, now would be the best time to get out by selling them.

Lastly, intervention by the political authorities, faced with the gravity of the social and political consequences of the crash, signals the search for blame and the reintroduction of rules and reforms both to avoid repetition of such episodes and to re-establish confidence, without which the markets cannot operate. In most cases, these measures are successful in getting the crisis forgotten. A new cycle can then begin (see Figure 8.1). This diagram sheds fresh light on the history of the last decade in terms of financial innovations.

The subprime crisis in perspective

The movement of financial liberalization, both internal and external, made it much easier to experiment with new financial products. As they have grown in number, we now possess a sufficiently large sample of innovations and crises to be able to make an overall judgement: in the absence of adequate public

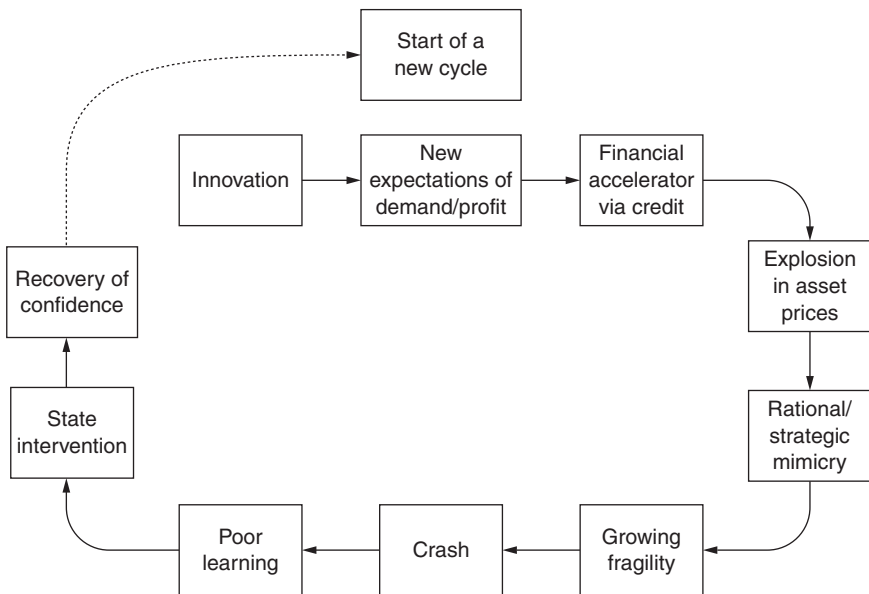


Figure 8.1 The cycle from major innovation to crash.

regulation and control, there is a great risk that financial innovations will lead to a local, sector level, financial and, in certain cases, macroeconomic crisis. The last decade can be likened to the race between the tortoise and the hare: financial agents, in the role of the hare, launch the process, and it is up to the public authorities, in the role of the tortoise, to absorb the costs of the resulting financial crises and to try to prevent their repetition by adopting a new strategy and, perhaps, new regulations. The financial markets that were supposed to be self-regulating are in fact the source of crises that often have dramatic consequences for the economy and society as a whole.

The stock market crash of October 19th, 1987: the ghost of October 24, 1929 soon forgotten

The sequence of events started with the collapse of the Dow Jones in the New York stock market, on a scale equivalent to that which marked the beginning of the 1929 crisis. Analysts asked themselves the question that provided the title of Hyman Minsky's book: *Can it happen again?* According to a view of the economy affirming the concept of the long-term equilibrium and invariance of the fundamental economic mechanisms, this heralded a depression comparable to that of the 1930s. This forecast turned out to be mistaken, for two main reasons (see Table 8.2).

- The two crises had different origins. In one case, stock market speculation simply amplified an imbalance in the regime of accumulation, which explains the scale of the economic and social costs of the 1930s in the United States. In the crisis of 1987, there was sustained growth, although it took place in an international context troubled by the uncertainty of exchange rates and their evolution. The imbalance was essentially within the financial sphere.
- The U.S. central bankers learnt from the errors their predecessors had committed in the 1930s. Instead of allowing a chain reaction of bankruptcies to develop among the financial actors, Alan Greenspan supplied abundant liquidity to the endangered financial operators. After the event, continued growth and slight inflation were observed, instead of depression and deflation.

Thus, stock market crises follow but do not resemble each other. It was the conjunction of financial products that emerged at the beginning of the 1980s that lay at the origin of the crisis. At that time, a new method of portfolio management started to develop, in which each transaction was associated with the writing of options with the aim of guarding against errors of anticipation. Simultaneously, all the actors in the market equipped themselves with software allowing them to directly place the orders entailed by this program of optimization. A sharp downturn in stock market prices sparks off a depression spiral: nearly everyone wants to sell and no one wants to buy.

- The widespread adoption of the strategy of *risk coverage* precipitated the event against which the agents had sought to protect themselves on a micro-economic level: the conjunction of rational microeconomic strategies blocked the market. This feature can be found in most other crises, including that of subprime mortgages.
- The central role of the Fed was confirmed by this episode: faced with a liquidity crisis, and whatever the responsibilities of the other actors or the risks of moral hazard, the central bank is the lender of last resort with the task of restoring continuity in the system of payments. This characteristic is present in most of the crises mentioned in this text.
- The institution of circuit breakers, by request of the political authorities – but not by the professionals, who think that the mechanisms of the market should be allowed to operate freely – suspends trading in the event of prices moving too far, too fast. Thus, the financial markets record the sedimentation of rules instituted to prevent the repetition of past crises. When the political authorities go back on some of these rules, such as the separation between commercial banks and investment banks, a return to old forms of crisis becomes possible, as certain of the developments in the 2008 crisis have shown.

The first of these lessons, though not the other two, was demonstrated in the United States in the following crisis.

A first crisis forewarning of the danger of derivatives: the collapse of LTCM in 1998

The theories of market finance have seen many developments since the beginning of liberalization. Statistical and mathematical techniques have become more sophisticated and theorists have proposed new methods for evaluating risk and setting a price on derivatives. The contributions of Black and Scholes (1973) and Merton (1973) opened up a wide domain for the invention of new derivatives. Far from observing the regularities resulting from the functioning of the markets, they invented a method of evaluation. They proposed this to the financial community, which adopted it to the point of making the regularities postulated by the theoretical model appear in the market prices. The “performative” nature of the financial theory is a novelty for standard theories, both micro- and macroeconomic (MacKenzie and Millo 2003).

This mastery of the measurement of risk led many to believe that all possibility of a major financial crisis had been eliminated. The collapse of Long Term Capital Management (LTCM) is interesting precisely because it shows that financial crises do not necessarily derive from irrationality on the part of ill-informed agents or from the mimetic behaviour of crowds (Kindleberger 1978, 1994; Shefrin 2000). They may stem from the implementation of a new rationale for the optimization of financial return, so vigorous that it destabilizes the macroeconomic regularities, all the more so when an event occurs that is supposed to happen only once a century, in the light of retrospective analysis (see Figure 8.2).

Table 8.2 Comparison of four crises in the United States and the crisis in Japan: the decisive role of banks

	<i>United States 1929–39</i>	<i>United States 1987</i>	<i>Japan 1991–2003</i>	<i>United States 2000–03</i>	<i>United States 2007–...</i>
<i>“Real” origin of the bubble</i>	Method of mass production	Recovery of growth No financial bubble	An original production model	Boom in ICT and the new economy	Speculative boom in the housing market and easy access to credit
<i>Pre-crisis economic situation</i>	Strong growth	Period of structural adjustments	Regime of growth tending to decelerate	Strong, non-inflationary growth	Sustained growth with a few inflationary tensions
<i>Type of crisis</i>	*	*	*	*	Not initially, then contamination by subprimes
• Stock market crisis					Yes, for investment banks
• Banking crisis	*	No	*	No, remarkable resilience due to securitization	
• Real estate crisis	No	No	*	Weak and localized	Yes, significant
<i>Manifestation of the crisis</i>	*				
• Depression and deflation followed by late recovery					
• Growth and inflation		*	*		
• Quasi-stagnation then deflation				*	*
• Recession without deflation					

<i>Policy</i>	<i>Follow the orthodox line</i>	<i>Not to repeat 1929</i>	<i>Go with the flow</i>	<i>Guard against deflation</i>	<i>Pull out of a systemic crisis</i>
	<ul style="list-style-type: none"> Initially laissez-faire Then an attempt at institutional reconfiguration (New Deal) 	<ul style="list-style-type: none"> Rapid reaction of the Fed Supply of liquidities to the financial market 	<ul style="list-style-type: none"> Tardy action by the Bank of Japan and the Ministry of Finance No restructuring of banks 	<ul style="list-style-type: none"> Quick cut in interest rates Budget stimulus, including the consequences of the 9/11 attacks 	<ul style="list-style-type: none"> Quick cut in interest rates and lender of last resort, even for investment banks Budget stimulus Take over control or nationalize numerous financial institutions Creation of an institution of defeasance and plans for new regulations
<i>Link</i>					
<ul style="list-style-type: none"> Gravity of the crisis/fragility of banks 	*	No	*	No	Initial resilience of commercial banks, collapse of investment banks
<ul style="list-style-type: none"> Absence of crisis/resilience of banks 	No	*	No	*	Systemic and structural financial crisis

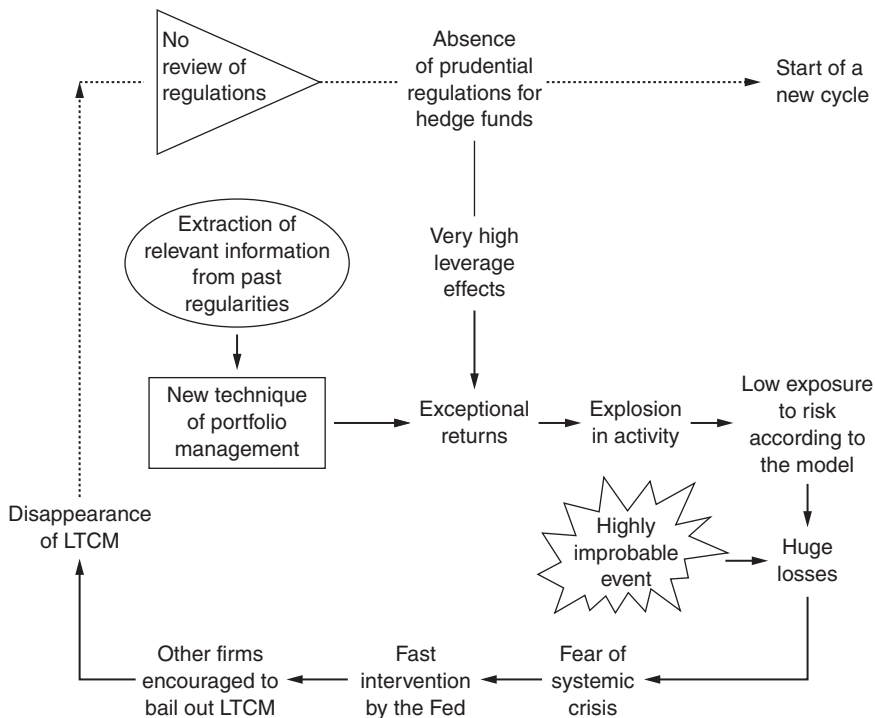


Figure 8.2 The collapse of long term capital management: an ad hoc solution brokered by the Fed, with no review of public control.

The substantial losses incurred by one financial institution, initially of modest size, raised two areas of concern for the public authorities responsible for financial stability.

- *Derivatives*, supposed to cover the risk of certain agents, expose others to a risk that is all the greater as they become the regular, if not exclusive suppliers of this type of product. This result, drawn from observation of the LTCM crisis, is also confirmed by modeling that takes into account the specificities of the current organization of the financial market. The creation of a futures market and a derivative can push the economy into a zone of financial fragility, under conditions characteristic of existing markets (Artus 1990; Li and Barkley 2001; Brock *et al.* 2006).
- This contradicts the intuition that can be drawn from the last chapter of *La Théorie de la valeur* [*Theory of Value*] by Gérard Debreu (1959): if all the futures markets are open, an equilibrium can exist under the usual conditions. As we draw closer to this ideal, we should therefore move towards financial stabilization. The recent financial literature belies this fairly

essential conjecture, as it forms the basis for strategies of creation and multiplication of derivatives.

- The sudden appearance of losses on the order of billions of dollars is the direct consequence of the use of extremely high leverage, with factors of 30 to 50. Then it only takes a fall of 3.3 or even 2 percent for the losses to exceed the equity capital. This is the entire problem with hedge funds or even the management of an experienced firm like Lehman Brothers: it only had one billion dollars in equity to cover derivative positions of more than 30 billion dollars.

The various regulatory authorities were not worried by these risks, and imposed no rules on the most dynamic managers of Wall Street. *Self-organization* by market players was the solution favored by the governor of the Fed, who organized the taking over of LTCM by other, healthier investment banks. This elegant and economical solution helped to conceal the dangers of derivatives and of hedge fund strategies.

The Enron episode: a second lost opportunity (December 2001)

Setting aside the exact characteristics of the derivative, the same sequence can be observed, *mutatis mutandis*, for the energy derivatives proposed by Enron. This was the epoch of the “new economy,” and of hopes for a dematerialization of economic activity: why invest irreversibly in facilities to produce and transport energy when one can organize the futures market of the corresponding contracts to make substantial profits, from a modest capital investment, guaranteeing greater flexibility in its allocation? Just as with LTCM, Enron was so successful, the returns it posed so exceptional, that it became the flagship to which many others aspired.

In 2000, it turned out that these results were obtained essentially through legal accounting practices, consisting of discounting its existing contracts to present value(s). The corresponding costs were hidden away in satellite accounts that were not consolidated with those of the parent company (Mistral *et al.* 2003). Essentially, this was therefore a problem of the information available to the financial market. It was followed by calls for greater transparency and for the accountability, including penal, of CEOs and financial directors, which gave rise to the Sarbanes–Oxley Act (see Figure 8.3).

Other problems remain, despite the new legislation:

- Enron used its political connections to dissuade the financial supervisory authorities from establishing any control or regulation of derivatives, under the two pretexts of a complexity that only they could master, and the principle of freedom of enterprise. An equivalent mechanism can be observed in the subprime case during the second half of the 2000s.
- Accounting practices oriented towards the financial community, implementing the principle of fair value, imposed serious risks on the stability of finance.

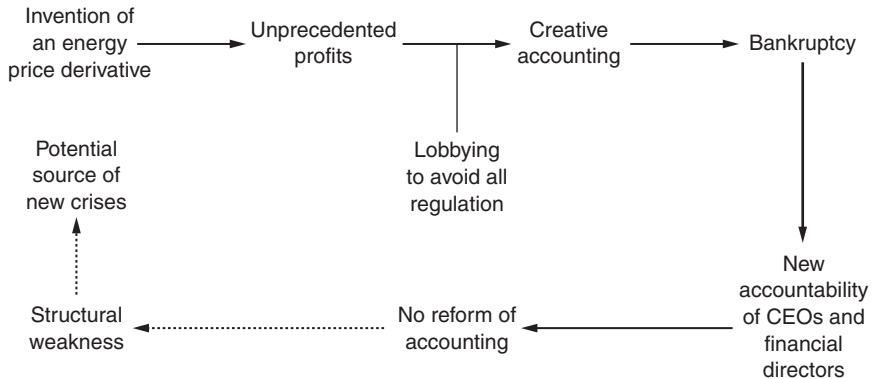


Figure 8.3 The fall of Enron: increase in accountability of senior managers, without reform of accounting practices or supervision of new derivatives.

It introduced strong procyclicality in the results posted, which remained virtual (Boyer 2007). As much as the actors involved were satisfied during periods of speculative boom, they also suffered through the *sudden risk of bankruptcy* during periods of adjustment. We need look no further for the reason behind the bankruptcy of Lehman Brothers, or the absorption of Merrill Lynch by Bank of America. As the products became ever more sophisticated and the volumes concerned continued to grow, the sums involved became enormous during the second half of the 2000s, to the point of *threatening the financial stability* of the United States and world financial system as a whole.

- Finally, as a last paradox, securitization also led to the specialization of certain investment banks or insurance companies in certain segments of the market; and whereas securitization is meant to *spread the risk*, this was only partly accomplished via this specialization. The resulting *concentration of risks* increased the probability and violence of financial crises when private firms were forced to reveal to the market the extent of their losses, information that was kept private as long as possible. The disarray of the public authorities became apparent when they were obliged to ask other private financial bodies to verify the accounting situation of those firms that they were thinking of taking over, as was the case for Bear Stearns.

The mortgage derivatives crisis: silence from the regulatory authorities followed by massive intervention

The role played by the central bank in fixing low interest rates is another factor in the genesis of bubbles associated with financial innovations. One illustration can be found in the United States after the bursting of the Internet bubble, when the Fed kept interest rates down to relieve financial institutions and indebted households, and to accompany a program of fiscal stimulus. The Republican

administration also announced a program of access to home ownership for minorities and disadvantaged groups. Mortgage establishments leapt at the new opportunities for profit that this opened up: they offered loans without bothering to make any request for collateral or for information about income, in the hope that the continuing surge in real estate prices would be the best guarantee. Thanks to particularly active lobbying of public authorities by the financial companies, the corresponding financial products and their securitization were not covered by any regulation. Thus, all the ingredients were brought together for the typical development of a high-risk financial innovation (see Figure 8.4).

There was a sharp downturn in the market. The classification of tranches of credit proved to be hopelessly over-optimistic when the rate of defaults started to rise and the price of real estate started to fall in 2007. The subprime market disappeared. As it figured prominently in the books of a number of banks, this triggered a liquidity crisis, to which the Fed responded initially by providing easier access to liquidity, at modest levels. Given the scale of the assets involved – a sum in the order of 3,000 billion dollars – it soon became apparent that defaults were still rising and that the banks were incapable of evaluating a growing number of assets. Since the subprime market was closed, and since the ad hoc models drawn up by each bank assumed constant access to liquidity and low correlations among risks, no longer provided any relevant information. The systemic crisis had started, and it was the very principle of the valuation of assets that was the root of discord. Interbank credit, in particular, dried up completely.

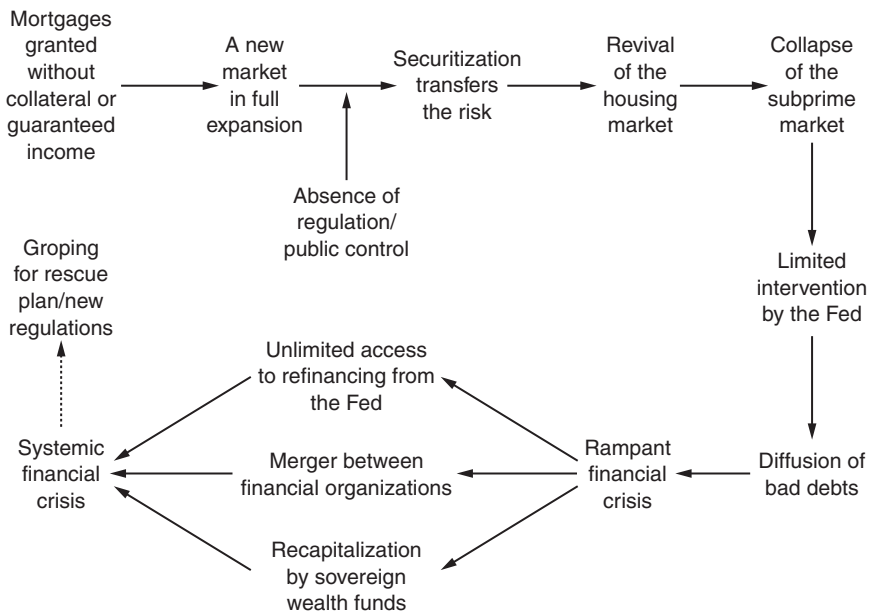


Figure 8.4 An innovation that was a priori dangerous but in line with policy of widening access to home ownership.

A new stage in the crisis was reached in 2008, when the Fed guaranteed unlimited access to liquidity, encouraged mergers between financial establishments, and accepted recapitalization by sovereign funds, which, not long before, had been denounced for their lack of transparency and the threat they posed to the stability of the world financial system! The most remarkable phenomenon was surely the fumbling nature of United States policy. The Treasury Secretary minimized the scale of the crisis, the Fed granted facilities of access to credit, and both called for responsible action from Wall Street ... without really taking full measure of the origins and depth of the crisis: the whole system of valuation of assets and liabilities had seized up. Monetary policy is an indirect and crude tool, under these conditions, for resolving a crisis of a largely new nature.

In fact, the process triggered by the subprime crisis combined the consequences of most of the innovations that had accumulated during financial liberalization: the massive transfer of uncontrollable risks to third parties, confidence in models estimated over a relatively short time, certainty of permanent access to liquidity, the race for leverage to obtain higher returns on equity, lobbying to prevent the intrusion of supervisory authorities into particularly profitable markets. The crisis is of an unprecedented scale, because it condenses all the problems and imbalances that have been denied or postponed throughout the last decade (see Figure 8.5).

For public control of financial innovation

Prevent the outsourcing of risks to agents incapable of assuming them

The scale of the current crisis caught the directors of Lehman Brothers and Merrill Lynch unawares, as it did the former Wall Street CEO who was then U.S. Treasury secretary. It was not so much of a surprise to researchers, including Ben Bernanke, specialist in the 1929 crisis, or to international organizations such as the Bank for International Settlements (BIS).

- From the beginning of the 2000s, the BIS expressed concerns about the *explosion* in derivatives, more and more differentiated and held by *agents not covered by the usual prudential regulations*, who exploited this fact to use huge leverage (BIS 2000, 2003). In the United States, for example, the total volume of securitization rose from 685 billion dollars in 1996 to 1,355 billion dollars in 1999, and then 3,187 billion dollars in 2006. Furtherance of this phenomenon was, of course, problematic (Erturk *et al.* 2008).
- From the start, some experts had stressed the danger of selling risky assets to agents or individuals incapable of evaluating their risks and taking precautions against them. Symmetrically, mortgage banks took advantage of the fact that they could palm off the risk of default to increase their activity by writing ever more risky loans. The process reached the point where financial organizations made loans to families who they knew would be unable to pay them off.

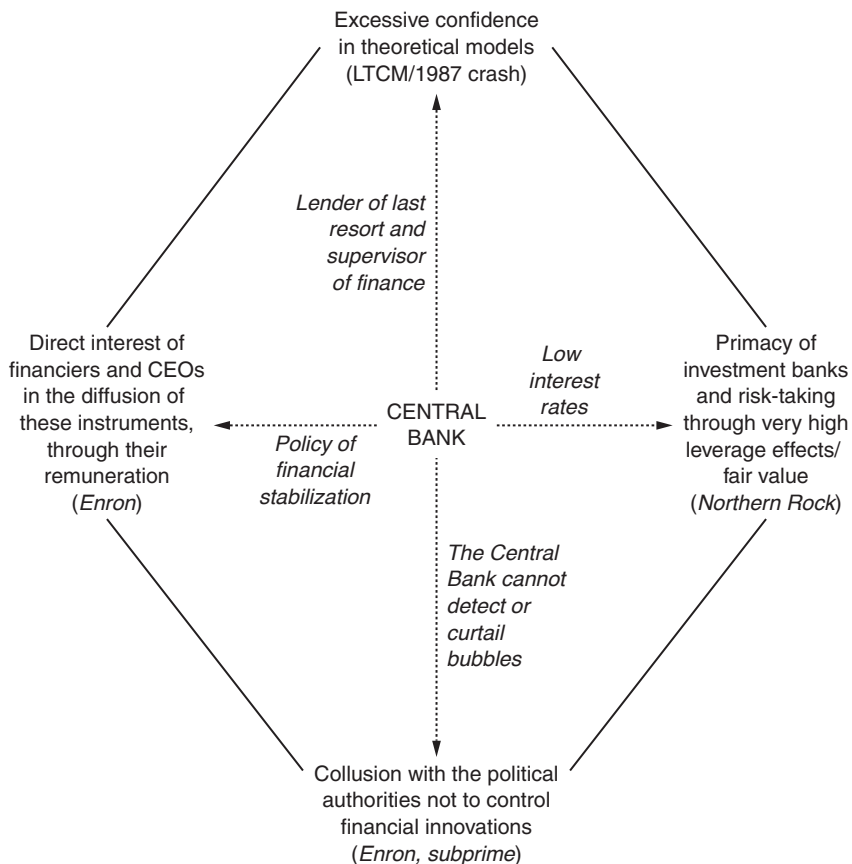


Figure 8.5 The subprime crisis results from conjunction of financial innovations since the 1980s: widespread underestimation and transfer of risk.

It is the conjunction of these two mechanisms that explains the scale and gravity of the subprime crisis. It only needed an increase in late payments and defaults and a downturn in the housing market for the virtuous circle to turn into a spiral destroying the value of assets (Figure 8.6).

Among the many different derivatives, becoming ever more varied, derivatives of derivatives appeared, the risk evaluation of which was extremely difficult, even for the issuers. What can we say about the people who bought them without understanding the risk? This outsourcing of risk was particularly dangerous and could not result in a viable system, because of the combination of two effects.

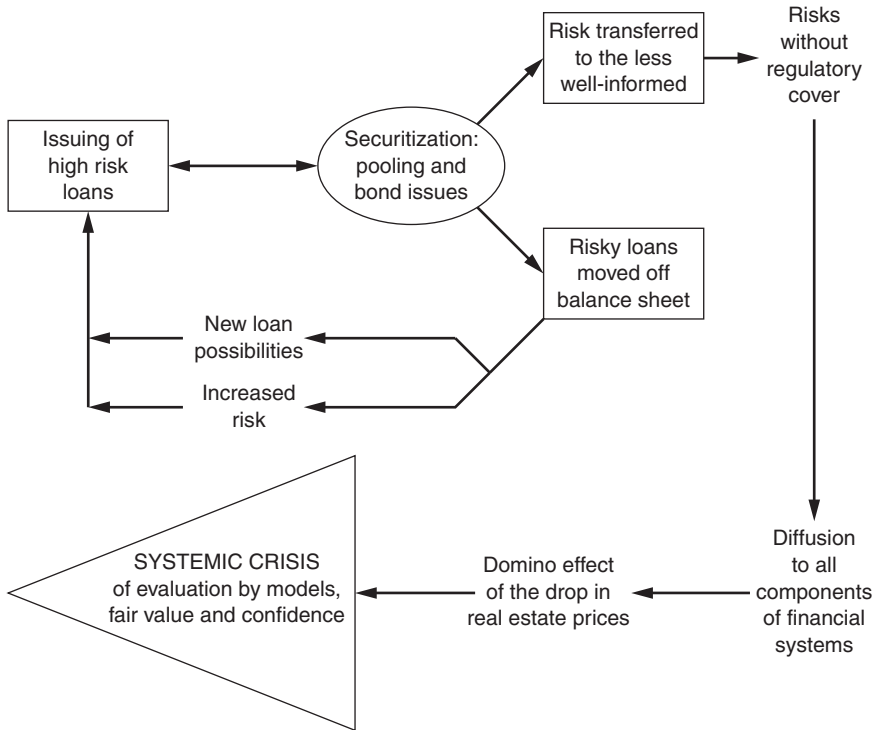


Figure 8.6 Chronicle of a crisis foretold: the subprime episode.

Insert finance into the theory of innovations

In fact, financial innovations occupy a singular place in the dynamic of growth: they have the property of destabilizing the existing growth regime before facilitating the emergence of a new one (Table 8.3). That is not the case for innovations resulting from scientific progress or technological know-how. Nor should we overlook organizational innovations, since some of them – e.g., manufacturing, assembly chains, clusters – end up shaping the institutional configuration and the implementation of technological advances, as was the case in the Fordist model of growth. The institutional innovation of the collective agreement linking wages to productivity, for example, played a decisive role in the viability of that macroeconomic regime. At the end of the 1930s depression and after World War II, moreover, finance was strictly regulated by state intervention and yet the allocation of capital was relatively efficient and favorable to growth.

Table 8.3 Financial innovations are one of the components of the process of growth

<i>Type of innovation</i>	<i>Characteristics</i>	<i>Impact on growth</i>	<i>Type of crisis</i>	<i>Reaction to crises and means of control</i>
Scientific	Pure public good	Potentially high	<ul style="list-style-type: none"> Abandonment of an outdated paradigm 	<ul style="list-style-type: none"> Validation by a community Public character of basic research
Technological	Appropriable but strong externalities	Important	<ul style="list-style-type: none"> Fall in return on R&D Gradual erosion of rents from innovation 	<ul style="list-style-type: none"> Technical and environmental standards Public control of certain facilities
Organizational	Initially private, weak externalities	Slow and marginal except for epoch-making breakthroughs	Growing inaptness in relation to changes in the environment	<ul style="list-style-type: none"> Role of consultants, management schools ISO standards
Institutional	Interface between the individual and the collective	A priori modest, except in the case of a change in paradigm	Inability to reproduce the basic socio-economic relations	<ul style="list-style-type: none"> Struggle to search for alternatives Role of collective authorities (policy)
Financial	Most often of private origin, but probability of strong externalities, positive and negative	Impetus to growth followed by crises	<ul style="list-style-type: none"> Bursting of a speculative bubble Inability to evaluate financial assets 	<ul style="list-style-type: none"> Restriction on entry to the profession Supervisory authorities Accounting and prudential standards
Public health	Pronounced collective impact (e.g., epidemics)	Indirect on growth but strong on well-being	<ul style="list-style-type: none"> Pandemics Exclusion of social groups 	<ul style="list-style-type: none"> Authorization of doctors and drugs Deontology

In every other domain, innovation is subject to collective rules

Under the pretext that the origin of innovations lies essentially in the private sector and that they must therefore be favored, is it reasonable to exclude all public control over the conditions and consequences of these innovations? A brief comparison of different types of innovation refutes this hypothesis (Table 8.4).

In every domain, there are rules to regulate innovation. Scientists share the methods that are common to their discipline, and in certain cases they must respect a deontology imposed by society. Technical innovation is vigorous and multiform, but the corresponding product or process cannot be brought onto the market or into practice unless it satisfies safety standards defined at the society level. We do not wait for a growing number of accidents to occur before imposing these standards from the design process on. This is no obstacle to economic dynamism.

Likewise, the law forbids certain contracts (which could, however, be mutually beneficial) and transactions involving goods that are considered to be of a non-commercial nature. Organizational inventiveness is reduced, in favor of greater social acceptability of innovations that satisfy the rules of law or, more generally, of the prevailing ethics of the society involved. The domain of health is exemplary of the multiplicity of state interventions governing access to the medical profession, the conditions of approval for drugs, daily medical practice, etc. The transition from innovation to market is slowed down and made more expensive, and yet the dynamism of the biotech industries cannot be denied.

Table 8.4 Most innovations are regulated collectively

<i>Innovation</i>	<i>Type of control</i>
Scientific	<ul style="list-style-type: none"> • Methodology specific to each discipline • Deontology
Technical	<ul style="list-style-type: none"> • Multiple safety standards, prior to marketing • Quality certification by agencies
Organizational	<ul style="list-style-type: none"> • Banning of certain forms of organization (forced labour) • ... and transactions (organs)
Institutional	<ul style="list-style-type: none"> • Political control • Control by law, citizenship
Finance	
• Traditional products	<ul style="list-style-type: none"> • Rules governing issuing, disclosure of information, prevention of insider trading, accounting
• New products	<ul style="list-style-type: none"> • None, to begin with
Health	<ul style="list-style-type: none"> • Ex ante on the effects of drugs • Ex ante via professional specialization • Deontology • Public approval of care establishments

Conclusion: some steps toward more resilient financial systems

The above developments have tested a core hypothesis, largely confirmed by the comparative historical analysis, that financial crises are not inevitable, and that governments could take measures to reduce their frequency and/or gravity (Table 8.5).

Among a multiplicity of possible strategies in order to prevent the repetition of major financial crises, the present analysis puts a strong emphasis upon the following measures.

- 1 It is important to draw lessons from the history of past crises so as to anticipate the next one.
- 2 To avoid repetition of the subprime crisis, we must implement integrated supervision of commercial banks, investment banks, and insurance companies.
- 3 It is not enough to make the risk associated with derivatives more transparent, we must maintain the link of responsibility between borrowers and lenders.
- 4 Prohibit new financial products involving the transfer of risk from the better informed to the less well informed.
- 5 Institute procedures of approval for new financial products incorporating clauses guaranteeing the absence of major negative macroeconomic externalities.
- 6 Recruit the best financiers for financial supervisory agencies, to reduce the asymmetry between private and public sectors in terms of market finance skills.

Table 8.5 Reducing gravity of financial crises, instead of simply surmounting them

<i>Approach</i>	<i>Ex post</i>	<i>Ex ante</i>
Advantages	<ul style="list-style-type: none"> • Legitimacy due to need to restore financial stability • No interference during the boom period 	<ul style="list-style-type: none"> • Reduction in the cost of a possible residual crisis • Less volatility favorable to growth and the reduction of inequalities
Disadvantages	<ul style="list-style-type: none"> • Gravity of the crisis proportional to prior inaction • Cost in terms of growth and living standards • Moral hazard 	<ul style="list-style-type: none"> • Interference with private initiative • Possible errors of diagnosis • Lack of instruments
Methods	<ul style="list-style-type: none"> • Lender of last resort • Defeasance structure using public funds • Nationalizations • Restructuring on the initiative of the profession 	<ul style="list-style-type: none"> • Monetary policy taking into account the objective of financial stability • Uniform regulations, limitation of leverage • Banning of certain innovations that are dangerous for stability

- 7 Reaffirm, following Károly Polanyi (1944), that the role of finance is not to control and organize society to its own benefit; instead, it is up to collective processes, essentially of a political nature, to align the direction and intensity of innovation, including financial innovation, with the pursuit of society's well-being.

Note

- 1 The inventors of new financial products act solely with a view to the profits they can capture, without taking into account the unfavorable consequences for macroeconomic stability – in this case, the outbreak of a financial crisis directly linked to the very success these new instruments.

References

- Artus, P. (1990), "Quand la création d'un marché à terme peut-elle déstabiliser le cours au comptant?" *Revue Économique*, Vol. 41, No. 1, pp. 71–93.
- BIS (Bank for International Settlements) (2002), *72nd Annual Report*, Basel.
- BIS (Bank for International Settlements) (2003), *73rd Annual Report*, Basel.
- Bignon, V., Y. Biondi, and X. Ragot (2004), *An Economic Analysis of Fair Value: The Evolution of Accounting Principles in European Legislation*, Prisme No. 4, March, Cournot Centre for Economic Research, Paris.
- Black, F. and M. Scholes (1973), "The pricing of options and corporate liabilities," *Journal of Political Economy*, Vol. 81, pp. 637–654.
- Boyer, R. (2004), *The Future of Economic Growth*, Edward Elgar Publishing, Cheltenham, UK.
- Boyer, R. (2007), "Assessing the impact of fair value upon financial crisis," *Socio Economic Review*, Vol. 5, No. 4, October, pp. 779–807.
- Boyer, R. (2009) "Feu le régime d'accumulation tiré par la finance: La crise des subprimes en perspective historique," *Revue de la régulation*, No. 5, 1st semester 2009, <http://regulation.revues.org/index7367.html>.
- Boyer, R. (2010) "The rise of CEO pay and the contemporary social structure of accumulation in the United States," in Terrence McDonough, Michael Reich, and David M. Kotz, *Contemporary Capitalism and Its Crises: Social structure of accumulation theory for the 21st century*, Cambridge University Press, New York, 2010, pp. 215–238.
- Boyer, R. (2011) *Les capitalismes face à la financiarisation et sa crise*, Fujiwara Shoten, Tokyo (in Japanese). See also "Les financiers détruiront-ils le capitalisme", Editions Economica, Paris.
- Brock, W., C. Hommes, and F. Wagener (2006), "More hedging instruments may destabilize markets," Tinbergen Institute Discussion Paper, 080/1.
- Debreu, G. (1959), *Théorie de la valeur*, 2nd edition, Dunod, Paris.
- Eichengreen, B. (2003), "Les crises récentes en Turquie et en Argentine sont-elles les dernières d'une espèce en voie de disparition?" *Revue d'économie financière*, No. 70, January, pp. 51–64.
- Erturk, I., J. Froud, S. Johal, A. Leaver, and K. Williams (2008), *Financialization at work*, Routledge, London.
- Garber, P. (2000), *Famous First Bubbles: The Fundamental of Early Mania*, MIT Press, Cambridge.

- Gurley, J. and E. Shaw (1956), "Financial intermediaries and the saving-investment process," in M. Lewis (ed.), *Financial Intermediaries*, Edward Elgar, Reference Collection, Aldershot, UK and Brookfield, U.S., pp. 28–47.
- Kindleberger, C. (1978), *Manias, Panics and Crashes*, Basic Books, New York.
- Kindleberger, C. (1994), *Histoire mondiale de la spéculation financière*, Éditions P.A.U., Paris.
- Li, H. and B. Rosser (2001), "Emergent volatility in asset markets with heterogeneous agents," *Discrete Dynamics in Nature and Society*, Vol. 6, No. 3, pp. 171–180.
- MacKenzie, D. and Y. Millo (2003), "Constructing a market, performing theory: the historical sociology of a financial derivatives exchange," *American Journal of Sociology*, Vol. 109, pp. 107–145.
- Merton, R. (1973), "Theory of rational option pricing," *Bell Journal of Economics and Management Science*, Vol. 4, pp. 141–183.
- Mistral, J., C. de Boissieu, and J.-H. Lorenzi (2003), "Les normes comptables et le monde post-Enron," *Rapport du Conseil d'Analyse Economique*, No. 42, Documentation Française, Paris.
- Orléan, A. (1990), "Le rôle des influences interpersonnelles dans la détermination des cours boursiers," *Revue économique*, Vol. 41, pp. 839–868.
- Perkins, A. and M. Perkins (1999), *The Internet Bubble*, Harper Business, New York.
- Polanyi, K. (1944), *The Great Transformation*, Beacon Press, Boston.
- Rajan, R. and L. Zingales (2003), *Saving Capitalism from the Capitalists*, Random House, London.
- Roubini, N., (2008), "Les déséquilibres planétaires précurseurs d'une nouvelle crise financière: une saga *Rashomon* contemporaine," in J.-P. Touffut (ed.), *Les banques centrales sont-elles légitimes?* Albin Michel.
- Sapir, J. (1989), *Les fluctuations économiques en URSS, 1941–1985*, L'Ecole des hautes études en sciences sociales, Paris.
- Schumpeter, J. (1911), *Théorie de l'évolution économique. Recherche sur le profit, le crédit, l'intérêt et le cycle de la conjoncture*, French translation (1983), Dalloz, Paris.
- Shefrin, H. (2000), *Beyond Greed and Fear: Understanding behavioral finance and the psychology of investing*, Boston, Harvard Business School Press.
- Shiller, R. (2000), *Irrational Exuberance*, Princeton University Press, Princeton, NJ.
- Shleifer, A. (2002), *Inefficient Markets*, Oxford University Press, Oxford.
- Shonfield, A. (1965), *Modern Capitalism: The changing balance of public and private power*, Oxford University Press, Oxford. French translation: *Le capitalisme d'aujourd'hui. L'État et l'entreprise*, Gallimard, Paris, 1967.
- Tadjeddine, Y. (2006), "Les gérants d'actifs en action: l'importance des constructions sociales dans la décision financière," in F. Eymard-Duvernay (ed.), *L'économie des conventions, méthodes et résultats*, La Découverte, Paris.

9 The crisis of 2008 and the dynamics of capitalism in time and space

Toshio Yamada

A “once-in-a century” crisis?

The global financial crisis of 2008, partially triggered by the unexpected bankruptcy of Lehman Brothers, soon developed into a global economic crisis involving the manufacturing sector, and also brought about a social crisis that affected employment and all other aspects of life. Nearly four years after the initial shock, we may believe that the days of panic have gone. However, the pace of economic recovery is very slow, especially in the advanced capitalist economies. In addition, not only in European countries but also in the U.S., the economic crisis has morphed into another crisis: a sovereign crisis.

In the midst of the crisis, we saw a breakdown of the American model of financial capitalism headed by the investment banks. However, what type of capitalism was the collapsed financial capitalism or the finance-led growth model? Before the U.S. became a finance-led model, what type of capitalism prevailed there? In the near future, what type of socio-economic system will replace the finance-led one? These questions presuppose historical changes of American capitalism itself. Thus, we are faced with a question of *historical change* or *dynamics in time* of capitalism.

What about other countries? Japan and Germany, for example, have also suffered from changes brought about by the financial crisis. These two countries, however, did not adopt the finance-led model *à l'américain*; rather, they followed an export-led or industry-led capitalism model. They were not on the market-led trajectory but on the state-led or firm-led one. What about the Nordic, Mediterranean, East Asian, and emerging countries such as BRICs? We can never identify these countries with the American model, no matter how much one cries regarding “globalization” and “convergence across the world” of growth models. This is a problem of *national diversity* or *dynamics in space* of capitalism.

Capitalism is variable and various both in time and space. The 2008 crisis has posed anew a question of “variability of economic and social dynamics in time and space” (Boyer 1990). Capitalism historically varies its growth models through structural crises; at the same time, capitalist economies coexist and confront each other as various growth models in a contemporary world, leading to new dynamics. Capitalism always proceeds in the dynamics of time and space.

From this point of view, we must express criticism of the opinion that the 2008 crisis was an exceptional event, as was stated by Alan Greenspan: “a once-in-a-century credit tsunami” (CNN Money 2008). Great crises are not at all exceptional for capitalism: over the past 100 years, there have been at least three. Capitalism has transformed itself through those great structural crises, giving rise to new configurations in time and space. The world financial and economic crisis of this era will also mark an important moment for a new configuration in the time and space of capitalism. This chapter aims at providing an outline of this new configuration through the lens of the French *régulation* approach.

World history of structural crises

Concept of structural crisis

In order to properly contextualize the crisis of 2008 in the history of capitalism, the concept of “structural crisis” must be understood.

When we use the word “crisis” to indicate all sorts of difficult phases in the capitalist economy, we can identify at least two types of crisis according to their degree and character. One is the *cyclical crisis*, which corresponds to the troughs of Kitchin cycles or Juglar cycles. This type of crisis is a temporary downswing phase where tensions and disequilibria accumulated during periods of expansion are wiped out. After a period of reckoning, the economy will recover quasi-automatically, and soon re-enter the prosperity phase.

Another type is the *structural crisis*. In contrast with the cyclical crisis, this type of crisis imposes structural changes on the conventional economy. It is a crisis in which an economy encounters difficulties in its fundamental structure and cannot re-establish a stable growth trajectory unless the old socio-economic structure is transformed into a new one. The crisis emerges as a dysfunction of the preceding macroeconomic framework (growth regime) and/or the ensemble of complementary institutions (mode of *régulation*). The economy cannot heal itself or recover by the so-called logic of the market, and it requires a radical reformation of existing institutions and policies. In the history of capitalism, we typically observe structural crises of 10–20 years after sustainable growth of 20–30 years.

Thus, we can identify two types of crisis: cyclical and structural. The latter is far more important for the comprehension of historical dynamics of capitalism. In fact, capitalism has changed its growth regime and mode of *régulation* repeatedly through structural crises; it could be posited that structural crises determine the historical changes of capitalism. Unfortunately, traditional economics does not address the structural crisis at all, even if it does address the cyclical crisis.

World history of growth and crisis

The Great Depression of the 1930s is often juxtaposed with the financial crisis of 2008. Taking these two events into account, one may say that major crises

occurred twice in the past 100 years. This account, however, would not be complete, in that modern capitalism also suffered from another major crisis: the Stagflation Crisis in the 1970s. Capitalism has thus experienced three major crises in a century. Major and structural crises are never exceptional. We must therefore properly situate the contemporary crisis in the historical context of the succession of structural crises. Or, we must grasp the world history of capitalism as the alternation of growth and crisis, which will lead to a clear schematization of the historical dynamics of capitalism.

Figure 9.1 focuses on “hegemonic powers” in the history of capitalism during the most recent 150–200 years, divided into four periods (Yamada 2011). Hegemonic power refers to the UK in the nineteenth century and the U.S. since the second half of the twentieth century. The first half of the twentieth century reflects a period of hegemonic transition from the UK to the U.S. (represented by U.S. in Figure 9.1). If we mention Kondratieff’s long waves, each period has an upswing wave (period of durable growth) followed by a downswing wave (period of structural crisis). There are four periods of durable growth: the Victorian Prosperity (UK, in the middle of the nineteenth century), the Roaring Twenties (U.S., in the 1920s), the Golden Age of Capitalism (U.S., after World War II), and the New Economy (U.S., since the 1990s). In turn, the four periods of structural crisis are called the Great Depression *fin de siècle*, the Great Depression in the 1930s, the Stagflation Crisis in the 1970s, and the World Financial Crisis of 2008.

Interpreting history through the lens of *régulation* theory, the four periods represent four development models (growth regimes and modes of *régulation*), upswing and downswing waves corresponding to the rising and declining periods of each development model. The four development models can be labeled in

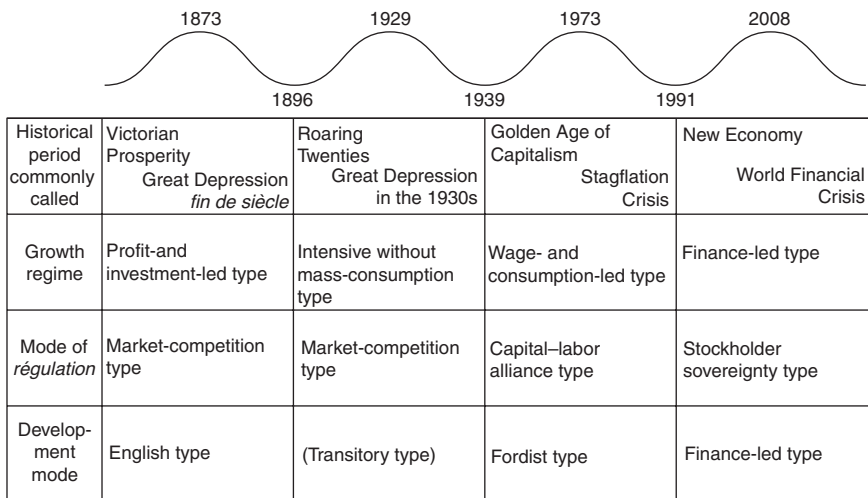


Figure 9.1 World history of growth and crisis.

chronological order: the English, Transitory, Fordist, and Finance-led Type. In short, capitalism has developed by changing its growth regime and mode of *régulation* almost every half a century. This forms the essence of the historical dynamics of capitalism.

In this chapter, we focus only on the periods after World War II; discussions about the English Type and Transitory Period are skipped (cf. Boyer 1979, 2004). As shown in Figure 9.1, during the postwar period in the U.S., an economy called Fordism with mass production–mass consumption was established under a wage (and consumption)-led growth regime and a mode of *régulation* based on the capital-labor compromise. Under the new growth regime, high productivity gains in the manufacturing sector were the driving force of the economy (Figure 9.2). Productivity gains were distributed not only as profits but also in the form of real wage hikes. Real wage hikes, in turn, stimulate individual consumption demand for products such as electrical appliances, cars, and houses. Increased levels of consumption also lead to more investment. The increased level of investment, coupled with consumption, leads to an increase in aggregate demand, that is, to economic growth on the one hand and productivity gains on the other. The resulting growth of GDP leads to further productivity gains via improved economies of scale. This chain of events, often referred to as a macroeconomic virtuous causation circle (productivity–wages–consumption–investment–demand–productivity), codified a growth regime characterized by mass production–mass consumption. A growth regime that is led not by profit and investment but by wages and consumption was established for the first time in the history of capitalism. This growth model not only continued for nearly 30 years in the U.S. but also spread, more or less, to other advanced capitalist countries. This macroeconomic configuration of postwar durable growth is often referred to as “Fordism” (Aglietta 1979) or the “Golden Age of Capitalism” (Marglin and Schor 1990).

This growth regime could continue by setting up new institutions and a new mode of *régulation*. In the postwar era, many new institutions were set up:

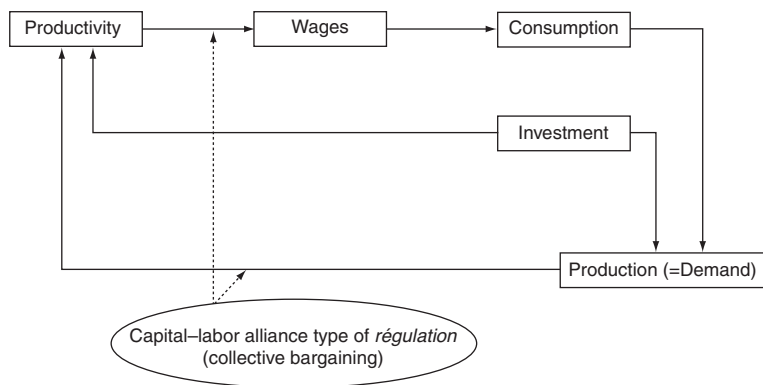


Figure 9.2 Fordist type of capitalism.

collective bargaining system, minimum wage system, social security system, managed currency system, consumer loan system, and stable international economic system like the IMF and GATT. Among these institutions, the most decisive moment was the establishment of a capital-labor compromise through collective bargaining: a compromise between the acceptance of Taylorist simple labor by workers and the provision of productivity-indexed wages by managers. Capital and labor, even if traditionally antagonistic in nature, became allies on this crucial point. Workers accepted Taylorism to embrace the Fordist mass production system; in exchange, managers did not monopolize productivity gains but allocated them to wage hikes. Thus, the capital-labor alliance consisted of *the acceptance of Taylorism in exchange for the provision of productivity-indexed wages* coordinated and navigated an economy led by wages and consumption. This “grand bargain” between labor and management piloted a new development model called Fordism.

Fordism, however, soon found itself embroiled in a structural crisis. After the onset of numerous events – the Nixon Shock (Nixon’s decision to take the U.S. off the gold standard), oil shocks, and Stagflation in the 1970s – governments began to adopt neo-liberal policies in the 1980s. Behind those events, there was a falling down of the Fordist growth regime and mode of *régulation*. First, the workers no longer accepted the Taylorist production method that imposed on them an increased intensification and fragmentation of labor. Workers, having gained access to mass production goods, demanded more diversified consumption goods and services. These are impossible to produce under the Fordist technology that focuses on a single kind of product. This resulted in a dysfunction of the productivity gain mechanism. Second, the success of Fordist industries catalyzed higher levels of urbanization; that, in turn, drove higher demand for services and benefits in education, medical care, retirement, etc., that were impossible to cope with via Fordist wages indexed to productivity. This represented a dysfunction of the productivity distribution mechanism. The mode of *régulation* based on the capital-labor alliance collapsed, as did the growth regime led by wages and consumption.

Growth and crisis of the finance-led model

In the midst of the Fordist crisis since the 1970s, the U.S. initially adopted a strategy of internationalization, giving priority to a firm’s level of competitiveness. On the one hand, this led to wage austerity and a degradation of employment in lieu of the Fordist capital-labor compromise. On the other hand, American consumers enjoyed access to low-price imported goods. The U.S. also proceeded to liberalize the finance sector, giving the sector an elevated position of importance in the economy. The superiority of finance even spread among workers as, for instance, pension funds became more common. In addition, under the neo-liberal project, finance has effectively been transformed into a magic wand that would substitute for the social security system, increase access to educational opportunities, medical care, and housing, ultimately wiping out

poverty (Boyer 2011). The U.S. had intended to survive the crisis through two strategies: internationalization and, perhaps more pronounced, financialization. In the 1990s, the revived U.S. was no longer an industry-led economy but transformed into a finance-led one.

Figure 9.3 shows a stylized schematization of the finance-led development model (Aglietta 1998; Boyer 2000; Yamada 2008). As a growth regime, the model's driving force is the increase of asset prices (stock and housing prices) that leads to an increase of financial returns (income and capital gains). Increased financial returns, through the asset effect and facilitated with easy accessibility to credit by households (e.g., subprime loans), stimulate consumption. Firm investment is driven by decreased financing costs that follow from high stock prices. At the same time, it must be noted that the high return requirements of financial circles may lead to limited investment. If aggregate demand consists of only two components, consumption and investment, the increase of consumption and investment means that of aggregate demand (i.e., economic growth), and it leads to higher profits for firms. Higher profit levels bring a self-fulfilling expectation of further profits that drives higher asset prices.

By thus establishing a virtuous loop (asset prices – financial returns/investment – consumption – demand – profits – asset prices), the American economy experienced a revival for about 20 years centered on the year 2000. In this finance-led model, compared with the previous Fordist one, higher asset prices served as the main driving force rather than productivity gains. The growth regime is no longer led by wages, but by financial returns.

A new macroeconomic loop requires an original mode of *régulation* that has to navigate and coordinate the loop. In Figures 9.1 and 9.3, the new mode of *régulation* is marked as “stockholder sovereignty type.” It is equivalent to so-called corporate governance, particularly by stockholders. Under this keyword “corporate governance,” one has established an institutional apparatus that connects the increase of asset prices to the increase of financial returns, leading to a domination of management by finance. Moreover, the formation of a stock

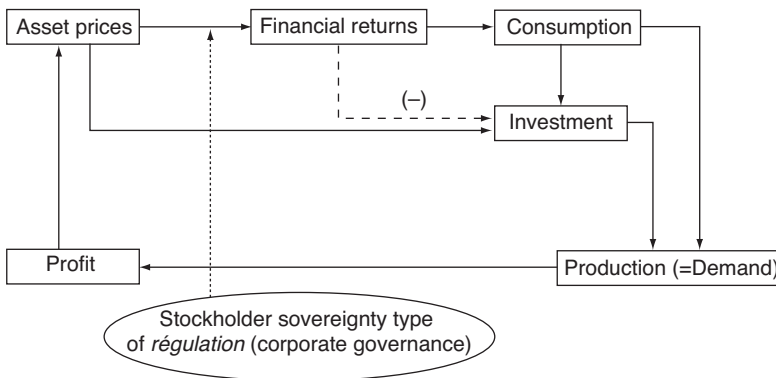


Figure 9.3 Finance-led type of capitalism.

option system shows an establishment of compromise between management and finance; this new compromise occupies a superior position among all the institutions. The stockholder sovereignty type of *régulation* in place of the capital-labor alliance one, and the finance-management compromise in place of the Fordist capital-labor one, have assumed a central position in the social economy (Yamada 2008).

Unlike the case of Fordism, the finance-led model is characterized by non-universality and non-stability. Regarding non-universality, we can point out that this model could be adopted only in the U.S. and UK. In other countries such as Japan, Germany, and Sweden, the driving force of the economy does not reside in the finance sector. Although these countries have been more or less obliged to adopt the financial liberalization policies and “global standards” under strong pressure by the finance-led model, they have not adopted the finance-led model. Concerning the aspect of non-stability, the formation and bursting of “asset bubbles” is part and parcel of the model, primarily because increasing asset prices drives the model. In this era of global finance, asset bubbles have succeeded one after the other all over the world and even in the U.S. (that country, for example, experienced the IT bubble of the 1990s and early 2000s and then the housing bubble). The finance-led type of capitalism is thus closely tied with the bubble economy and destined to non-stability as a growth regime (Orléan 1999).

The finance-led model of capitalism, having developed in spite of its intrinsic non-stability, fell into a structural crisis with the bankruptcy of Lehman Brothers; note the downswing wave after 2008 in Figure 9.1. The finance-led model, after roughly 20 years of sustainable growth, entered a period of structural crisis. Sketching the broad mechanism of crisis by using Figure 9.3, one can observe that previous virtuous circles have broken and reversed in the other direction, transforming into vicious circles. That is, falling asset prices now serve as a driver to destroy the previous stability built upon its rise: financial returns decrease, and this leads to substantial financial losses that result in the bankruptcy of various financial institutions and the overall paralysis of the financial system. Excess leverage and consumption, sustained by increasing asset prices, also slows down. This breakdown induces a contraction of investment (de-leveraging), which, together with that of consumption, dents aggregate demand, and consequently profits and expectations for profitability. All these factors reinforce a decline in asset prices.

To sum up, all macroeconomic variables, which formerly drove higher levels of wealth performance in a positive chain reaction, now destroy that very wealth in a negative chain reaction. There is no likelihood that the economy will automatically recover from this crisis, and it barely escaped from total collapse by “exceptional” and “non-conventional” economic measures. Only a new growth regime and a new mode of *régulation* based on radical structural changes will lead to a way out of the crisis. We are now in this sort of structural crisis. This is the historical topology of the crisis of 2008.

Diversity, confrontation, and complementarity of the world economy

Methodology of the comparative approach

At this point, an inquiry will be made into the spatial configuration of capitalism in the era of world financial crisis and finance-led growth. Countries other than the U.S. and UK, even if greatly affected by the financial and hegemonic power of these countries, did not fully adopt the Anglo-Saxon model. Conversely, some countries successfully developed an alternative, original model of capitalism. Not only in advanced countries but also in the middle and less developed countries, capitalism is now developing in various and diversified forms. These new forms are influencing one another. We must examine the spatial dynamics of capitalism.

Political economists typically have examined the spatial configuration of capitalism at a point in time; the discipline has repeatedly attempted, since the time of Adam Smith, a comparative study or typology of national economies. However, compared with the eighteenth and nineteenth centuries, or even with the mid-twentieth century, the number of capitalist countries has increased remarkably, enlarging the capitalist zone. Compared with the 1950s and 1960s, when capitalist countries were generally limited to North America, Europe, and Japan, there has been a capitalist explosion, which now includes the NIES, ASEAN, and ex-socialist countries, as well as Latin America and Oceania, and a part of the African countries. Much attention is paid to the BRICs countries as promising new market economies or as emerging capitalist countries. With an increasing number of countries adopting various types of capitalism, the varieties of capitalism have become more and more remarkable.

Faced with a number of different variations of capitalism, it is not sufficient to adopt a *typical country approach* for the analysis of the capitalist world. The typical country approach, conventionally adopted in political economy, is an analytical method in which one analyzes the most advanced and dominant country in the contemporary world, stylizing it as an ideal type of capitalism. The analytical framework posits that an archetype of capitalism can be instructive, even though the analysis is not comparative in nature. Behind this approach, one may find a notion of stage theory or convergence theory: These theories hold that differences between capitalist economies stem from their being at different developmental stages; thus, middle and less developed economies will sooner or later converge to the archetype. The UK served as the main capitalist archetype in the nineteenth century; the U.S. served as the main archetype in the twentieth century.

The typical country approach, despite its failings, was useful in understanding elements of capitalism. In the current environment of capitalist diversity, however, simply analyzing the American economy will not confer much insight into how other countries are likely to develop. Indeed, to understand a more diversified capitalist milieu, another approach must be adopted: the *comparative*

approach. New disciplines like comparative institutional analysis and comparative analysis of capitalism have been recently explored for this purpose.

Diversified capitalist countries not only confront, but also complement each other, creating a quasi-hierarchical structure of the world. It is very difficult to clarify thoroughly complicated dynamics in space as a whole. However, the first step for this clarification is to classify various forms of capitalism in a typology and compare them. Only through rigorous comparison can one delineate and understand some essences of capitalist dynamics. This is why the comparative approach is a necessary analytical tool to understand the new era of capitalism. We will create a brief sketch below regarding the dynamics in space of the contemporary world economy, after surveying the main results of the comparative analysis of advanced capitalism in recent years.

The diversity of advanced capitalist countries

The Varieties of Capitalism (VOC) is a well-known comparative analytical approach of the main OECD countries at the end of the twentieth century. Hall and Soskice (2001) expressed criticism of the convergence view of the American model and classified the advanced capitalist countries into two types: Liberal Market Economies (LMEs) and Coordinated Market Economies (CMEs). The Anglo-Saxon countries (headed by the U.S.) belong to the LMEs; the CMEs are composed of Continental European countries (headed by Germany), Nordic countries, and Japan. This approach finds that both types of capitalism have not only recorded nearly equivalent economic performance, but also have their proper *raison d'être* because their respective industries' comparative advantage is completely different. These findings challenge the prevailing opinion that insists on the efficiency of, and therefore the necessary convergence of advanced capitalist economies to, the American model.

The VOC approach had a strong impact in that it proposed, based on the comparative approach, a spatial configuration of advanced capitalist countries in a simple two-type classification. This is why the approach has wielded sharp criticism against the convergence view. However, this analytical framework also has numerous problems. First, do Germany, Sweden, and Japan, which were grouped in the same category, really have identical economic systems? Second, given that France and Italy are classified as neither LMEs nor CMEs, is the typology that regards these two powers as exceptions or intermediate cases sound and valid? To respond to these questions, Amable (2003) presented a full analysis from a point of view of the *régulation* approach.

Here, we summarize only his core conclusions. Concerning the main OECD countries at the end of the 1990s, he distinguishes five types of capitalism: the Market-based, Asian, Continental European, Social-democratic and Mediterranean models. After qualitative analyses of each model's institutional characteristics and the institutional complementarity between five institutional areas—product market, labor market, finance, welfare, and education—he proceeds to a quantitative analyses, represented in Figure 9.4. This figure shows that countries that

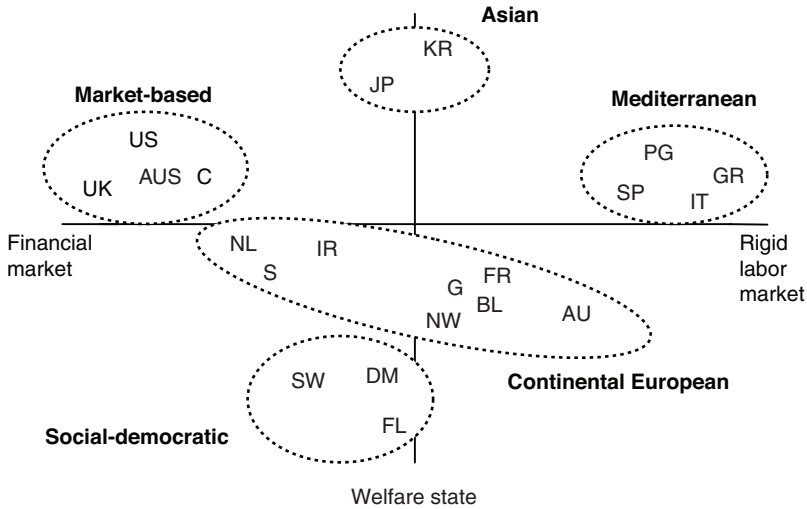


Figure 9.4 Diversity of advanced capitalist countries (source: Amable (2003), modified and added by Yamada).

Notes

AU: Austria, AUS: Australia, BL: Belgium, C: Canada, DM: Denmark, FL: Finland, FR: France, G: Germany, GR: Greece, IR: Ireland, IT: Italy, JP: Japan, KR: South Korea, NL: Netherlands, NW: Norway, PG: Portugal, S: Switzerland, SP: Spain, SW: Sweden.

are situated at the same level on the horizontal axis nevertheless differ greatly on the vertical axis and *vice versa*. This figure permits us to make the following critical or complementary points about the VOC's two type classification:

- 1 The LME countries defined by the VOC approach are in fact very homogeneous compared with one another. This is also verified by Amable as shown by the Market-based cluster in Figure 9.4.
- 2 In contrast, the CME countries are extremely different on the vertical axis (i.e., on their level of welfare state) or, more generally, on the extent of social solidarity, even if they share an intermediate degree of market liberalization. We see in the CMEs various variations from the Nordic countries with a high level of welfare to the Asian ones with a low level of welfare. CMEs are not homogeneous at all; we can never identify Germany with Japan, Japan with Sweden, and Sweden with Germany.
- 3 The VOC approach often contrasts Germany with the U.S. However, the two countries are not archetypally different. The polar opposite of the U.S. is represented by the Mediterranean countries that are characterized by robust regulatory markets. The Continental European model, including Germany, is situated near the origin in Figure 9.4. This means that the Continental European model occupies a relatively intermediate and moderate

position, with a middle level of market liberalization and a middle (and high) level of public welfare.

- 4 France and Italy, which had no right place in the VOC's framework, are now situated properly in the Continental European and Mediterranean models respectively.

According to Amable, these five types of capitalism did not substantially change in the last ten years at the end of the twentieth century, and other than the Market-based model, there may be an institutional complementarity that will result in their good economic performance. In short, he indicates that the American model is not necessarily the only efficient and superior type of capitalism.

Spatial dynamics of the world economy

We have hitherto analyzed typologies focusing on advanced capitalist economies as well as the configurations of economic diversity previous to the world financial crisis of 2008. The crisis spread from the LMEs to the CMEs, if we use the VOC's concepts; or from the Market-based capitalism to the Asian, Continental European, Social-democratic, and Mediterranean ones in Amable's terminology, thus developing into a literal socio-economic crisis. The crisis spread not only to almost all advanced countries, but also to the middle and less developed ones, that is, all over the world.

Through the crisis, one can discern not a little sign of the changes in the configuration of the world economy. First, U.S. President Barack Obama, with the help of Congress, eschewed financial liberalization in favor of a more robust regulatory framework by signing the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010. Second, the sovereign debt crisis of Greece, and of other southern European countries in recent years, brings into focus the fragile nature of the Mediterranean type of capitalism, while Ireland, Iceland, and some central-east European countries that have a great deal of debt in foreign currency have acceded to crisis. All these have resulted in the difficulties of the Eurozone economy. Third, the relative position of the advanced capitalist countries has declined; none can cope alone with economic crises any more without cooperation from the emerging and main petroleum exporting countries (e.g., of the BRICs). This new dynamic was seen in the expansion of global economic organizations to include emerging economies, as well as the traditional industrialized economies to include emerging economies, as in the case where the G7 was expanded to the G20.

With these challenges, the world economy is now seemingly more and more diversified. One can easily grasp the remarkable diversity of each country's growth strategy by simply glancing over METI (2010). From Table 9.1, especially in the right-hand column, we can easily identify the leading sector or the strategic factor of demand. Finance is the main driver of the UK economy (and, needless to say, the U.S. economy). Exports are the main driver of Germany, Sweden, Korea, and Singapore (not to mention Japan). France and the U.S. are

Table 9.1 Economic growth models in major countries

<i>Country</i>	<i>Economic growth model</i>	<i>Leading factor</i>
UK	It grows while gathering enterprise, money, and people from around the world. It has a background in the additional value of a financial system that grows high-level investment.	Finance
USA	The US economy has developed and activated innovation by bringing in people and money from around the world, because its economy is led by domestic demand and personal consumption. This is supported in order to continue to grow the US population.	(Finance) Consumption
France	It achieves growth through a balanced industrial structure that it is supported by reliable domestic demand based mainly on personal consumption.	Consumption
Germany	It grows as a part of the EU market because of the stimulus to export through decreases in labor cost and productivity enhancement.	Export
Sweden	This is society of high welfare and high load that achieves high-level education and political transparency, a flexible labor market, technological innovations and growth by foreign capital.	Export
South Korea	Export-led growth by concentrating technological development and marketing aimed at the overseas market, mainly in IT, vehicles and the steel industry.	Export
Singapore	The connection with the world economy is widely secured by a multi-directional free trade system, and it grows through external demand for its added-profit trade.	Export
China	It has stimulated growth and investment through high savings and the expansion of technology transfer and trade, and the introduction of foreign capital by a policy of gradually opening up to foreign business.	Investment Export
India	Steady domestic demand through a huge population, and growth through the export of the IT service industry that it is supported by high-level education.	Domestic demand Export
Brazil	Good domestic demand through the control of inflation and rising disposable income, and it grows with a diverse industrial structure through investment in a wide field, including export and service industries, resources, and industrial goods.	Domestic demand Export

Source: Extracted from METI (2010); right-hand column added by author.

led by individual consumption, China by investment and export, India by domestic demand and software export, and finally, Brazil by domestic demand and primary commodities export.

However, Table 9.1 shows only the variety in each country's growth strategy. It does not show the opposition and correlation among strategies, or the spatial structure of the world economy. In this respect, Boyer (2011) proposes seven types of economic model as the main components of the world economic space: dominant financier, industrialist, developmentalist, rentier, hybrid/disarticulated, dependent financier, and pre-industrial economies (Figure 9.5). From Figure 9.5, one can conceive the spatial configuration of today's world economy as confrontation and complementarity between the seven types of growth model through finance, investment, trade, migration, and geopolitics. Each economic model has its proper policy targets and concerns, and thus has different and opposing interests. For example, the dominant financier type, providing global financial intermediation, promotes its interests through greater financial liberalization/innovation and the least-possible level of regulation. The industrialist type relies on technological innovation and exports, supplying high quality manufactured products to the world. The industrialist demands a more open economy and greater financial stability. The rentier type also exports raw materials (such as petroleum) and invests the rent (savings) in other countries; financial stability is also a concern. The developmentalist type of continental economies exports commodities and invests savings in foreign countries; this type attaches the most importance to national growth and industrial specialization. The hybrid/disarticulated, dependent financier, and pre-industrial types are sub-players; they are more or less subordinated to the other four types.

As suggested by Figure 9.5, the contemporary world economic space is not merely characterized by relations of confrontation and complementarity between and among different types of growth models; it is also subsumed in a hierarchical structure or a world domination–subordination structure. Concerning these differentiated structures, one has often understood them as being synonymous with the concepts of “core–semiperiphery–periphery” (Wallerstein 2004). However, these concepts may ultimately lead to a static and fixed picture of world history, which fails to grasp an underlying geopolitical dynamism from periphery to semiperiphery, from semiperiphery to core, and vice versa. To overcome this defect and understand the dynamics in space of the world economy, the concept of “strategic area” (Mistral 1986), once proposed by the *régulation* school, should be used in place of the concept of “semiperiphery.”

According to Mistral, for a particular “international regime” to prevail, a strong, hegemonic power is needed so that many countries adhere to the regime and will be incorporated complementarily into “differentiated economic spaces.” The dominant economy, then, does not simply subordinate other countries to it, but provides opportunities to the rest of the world for dynamism in capital accumulation. The question is whether the rest of the world can make better use of the possibility of dynamic accumulation or not; it also depends on the historical conditions unique to each country. Mistral refers to the “strategic area” as an

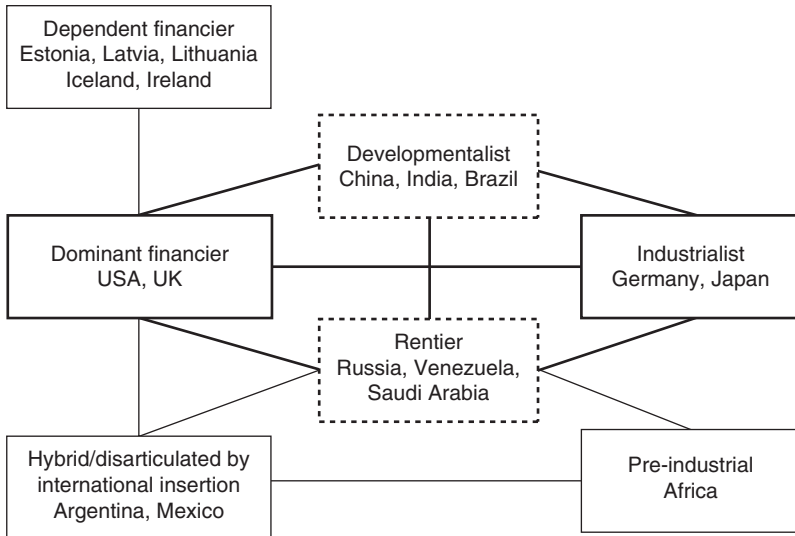


Figure 9.5 Seven types of economic models in the contemporary world (source: Boyer (2011), modified by Yamada).

area that transforms this possibility into actuality and extracts substantial profit from the development of the core economy. For classical examples of the strategic area, he cites Germany in the age of Bismarck and Meiji Japan. Strategic area countries often emerge on the scene during the era of structural crisis of the development model of hegemonic power.

It will be convenient to insert this concept of strategic area into the core-periphery framework to understand the spatial dynamics of capitalism. In current parlance, the strategic area is sometimes referred to as “newly industrializing economies” or “emerging market economies.” It may become a “challenging country” in respect to (or against) the hegemonic country. As countries that constitute the core change throughout history, countries constituting the strategic area also change. In this sense, strategic area countries obey not only the “logic of adhesion” to the map of the international division of labor, but also the “logic of eviction” from it. Though this is only a preliminary hypothesis, we can obtain Table 9.2 if we sketch the spatial configuration of each period of capitalism from this point of view.

As shown in Table 9.2, capitalism has changed over the past 150–200 years, with the alternation of development models, constituent strategic area countries, and the dynamics in space of the world economy. At the beginning of the twenty-first century, the “core” of the world economic space is occupied by North America, Western Europe, and Japan. The development models of many of these countries are finance-led and/or export-led. Or, if we use Boyer’s terms, these are dominant financier and industrialist types. Countries that constitute the

Table 9.2 Differentiated world economic space in historical changes

Emblematic year Peak	1873	1929	1973	2008
Hegemon and its development model	UK English type	UK→USA (Transitory type)	USA Fordist type	USA Finance-led type
Core	UK, France, USA	UK, USA, France, Germany	North America, Western Europe, Japan	North America, EU15, Japan
Strategic area	Germany, Japan		NIES, ASEAN	BRICs (esp. China)
Periphery	Asia, Africa, Latin America	Asia, Africa, LA (except Argentina)	Asia (except NIES and ASEAN), Africa, LA	Asia (except NIES, ASEAN, India and China), Africa (except South Africa), LA (except Brazil), CIS (except Russia)

Note

Emblematic years and development models correspond to those of Figure 9.1.

“strategic area” are now the BRIC countries, of which China is usually the first mentioned. Many of these countries’ economies are driven by exports and by the potential of robust domestic demand. They belong to the developmentalist and rentier types in Figure 9.5. The G20 is mainly composed of the core countries and those in strategic areas; all these countries play a key role in the world economy. Many other countries, including most of AALA ones, are allowed to exist in the chinks as “periphery.” The world economic space today is constituted by a differentiated hierarchical structure and by the dynamics of confrontation and complementarity between economic models.

Structural change, diversity and trend

We have examined above the dynamic of capitalism from the perspective of the dimensions of time and space. This dynamic was understood via a synthesis of two angles: the *structural change* of the socio-economy that is made up of an epoch by the structural crisis, and the *diversity* of the world economy that is elucidated by the comparative approach. As mentioned at the beginning of this

chapter, the *régulation* school has established the core question to be solved as the “variability of economic and social dynamics in time and space” (Boyer 1990). This question is answered first by the above analysis of the socio-economy from the viewpoint of its *structural change* and *diversity*.

However, these two angles alone are not sufficient to understand the basic movement of world history. In fact, the analysis of structural change is apt to end in a depiction of only one country, insofar as it is an analysis of growth regimes and development models. On the other hand, the analysis of diversity, insofar as it remains an attempt at typology and the comparison of types of growth, does not address the dynamics between numerous different economic types: relationships between hegemonic and challenging countries, core–periphery relationships and their changes, and relationships of confrontation and complementarity among economic types.

Here, we must note that the ensemble of structural change and dynamics among different economic types gives a particular rhythmic movement to each epoch of world history. That is, through the intermediation of structural change, dynamics among economic types, and also economic policy thought – including the ideological current of the times – there emerges in world history a sort of *trend* (and its swing) of a preferred economic model (Yamada 2008). Not to mention the classical pattern observed by Pirenne (1914), that in historical capitalism since the twelfth century, a surprising regularity has occurred, in which “the phases of economic freedom and of economic regulation have succeeded each other.” Arrighi (1994) also pointed out the trend alternation of epochs of material expansion with those of financial rebirth and expansion. Thus, the trend and its historical swing are a widely acknowledged phenomenon.

Taking the most recent 150–200 years of capitalism into consideration, a trend of marketization under economic liberalization prevailed from the nineteenth century to the 1920s: the age of free competition or the “self-regulating market” (Polanyi 1944). From the 1930s to 1960s, socialization or institutionalization that attempted to control the market succeeded this age. This trend was called the “self-protection of society” (*ibid.*), and was symbolically represented by the New Deal in the 1930s and Keynesianism after World War II. Since the 1970s, after the collapse of Keynesian economic policies, the trend of marketization was revived under the banner of neo-liberalism; globalization and financial liberalization were its symbolic expression. The final destination of this marketization trend was none other than the world financial crisis of 2008. Today, nearly four years after the financial crisis, is the trend of our times again turning into one of social institutionalization? If Polanyi called the historical turn from economic liberalization to the self-protection of society in the 1930s “the great transformation,” are we currently witnessing the “second great transformation”?

To fully understand capitalist dynamics, a new conceptual apparatus of *trend* (and its turn) is needed in addition to those of structural change and diversity. The dynamics of capitalism in time and space should be grasped from the angle of *trend turns that incorporate structural changes and diversities*.

Bibliography

- Aglietta, M. (1979) *A Theory of Capitalist Regulation: The US Experience*, London: NLB.
- Aglietta, M. (1998) "Le capitalisme de demain," *Note de la Fondation Saint-Simon*, no. 101.
- Amable, B. (2003) *The Diversity of Modern Capitalism*, Oxford: Oxford University Press.
- Arrighi, G. (1994) *The Long Twentieth Century*, London and New York: Verso.
- Boyer, R. (1979) "La crise actuelle: Une mise en perspective historique," *Critiques de l'économie politique*, nos. 7–8.
- Boyer, R. (1990) *The Regulation School: A Critical Introduction*, New York: Columbia University Press.
- Boyer, R. (2000) "Is a Finance-led Growth Regime a Viable Alternative to Fordism? A Preliminary Analysis," *Economy and Society*, 29(1).
- Boyer, R. (2004) *Théorie de la régulation, 1. Les fondamentaux*, Paris: La Découverte.
- Boyer, R. (2011) *Les financiers détruiront-ils le capitalisme?* Paris: Economica.
- Boyer, R., H. Uemura, and A. Isogai (eds) (2012) *Diversity and Transformations of Asian Capitalisms*, London and New York: Routledge.
- Boyer, R. and T. Yamada (eds) (2000) *Japanese Capitalism in Crisis: A Regulationist Interpretation*, London and New York: Routledge.
- CNN Money (2008) "Greenspan: It's a 'credit tsunami'." Online. Available at: http://money.cnn.com/2008/10/23/news/economy/committee_regulatory/index.htm.
- Hall, P. and D. Soskice (eds) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantages*, Oxford: Oxford University Press.
- Marglin, S.A. and J.B. Schor (eds) (1990) *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*, Oxford: Oxford University Press.
- METI (2010) *White Paper on International Economy and Trade 2010*. Online. Available at: www.meti.go.jp/english/report/downloadfiles/2010WhitePaper/3-1-3.pdf.
- Mistral, J. (1986) "Régime international et trajectoires nationales," in R. Boyer (ed.), *Capitalismes fin de siècle*, Paris: Presses Universitaires de France.
- Orléan, A. (1999) *Le pouvoir de la finance*, Paris: Odile Jacob.
- Pirenne, H. (1914) "Stages in the Social History of Capitalism," *American Historical Review*, 19(3).
- Polanyi, K. (1944) *The Great Transformation: The Political and Economic Origins of Our Times*, Reprint 2001, Boston: Beacon Press.
- Wallerstein, I. (2004) *World-Systems Analysis: An Introduction*, Durham and London: Duke University Press.
- Yamada, T. (1994) *The Régulation Approach*, augmented edition, Tokyo: Fujiwara Shoten Publishers (in Japanese).
- Yamada, T. (2008) *Capitalisms: Comparative Analysis of Capitalism*, Tokyo: Fujiwara Shoten Publishers (in Japanese).
- Yamada, T. (2011) "Configuration and Historical Topology of the World Financial Crisis," in H. Uni *et al.*, *Régulation Theory of the Financial Crisis: Questions for Japanese Economy*, Kyoto: Showado Publishers (in Japanese).

10 Neoliberalism and its crisis

Gérard Duménil and Dominique Lévy

Introduction

The term “neoliberalism” is now commonly used to refer to the phase of capitalism that began in the transition between the 1970s and 1980s. The functioning of capitalism was thoroughly transformed. Nearly 30 years later, as of 2007, many had already heralded the “end of history.” But the first symptoms of the “crisis of neoliberalism” were observed in August 2007.¹

After the meltdown in September and October 2008, most economists came to acknowledge its serious character, a major crisis in the history of capitalism reminiscent of the Great Depression. The lessons of the Depression had been learned, and the corresponding policies were used to dampen the shock, an all-out support to ailing financial institutions and huge deficits of government accounts, the come-back of Keynesian policies. In the second quarter of 2009, the trough of the recession had been reached and the same economists began to use the past tense when speaking of the crisis.

As of the fall of 2011, the atmosphere is distinctive. The macroeconomies in the United States and Europe did not recover an autonomous capability to grow independently of deficits (despite the return to comparatively elevated growth rates in the peripheries). The analysis of the determinants of the crisis points to structural mechanisms that have not been reversed, basic features of neoliberalism and the disequilibria of the U.S. economy. Will neoliberalism survive the crisis? What new social configurations could, instead, be established? What will be the position of the United States within international hierarchies?

The present study addresses these various issues: the overall periodization of capitalism, in which neoliberalism defines a specific phase (section 2); the nature and methods of neoliberalism (section 3); the two episodes of the crisis, respectively, around 2008, and the crisis of sovereign debts in the United States and Europe in 2011 (section 4); the prospects for the forthcoming decades (section 5). The United States and Europe are central stage in the analysis of the two episodes of the current crisis. But in the discussion of scenarios for the future, particular attention must be paid to emerging countries, first of all, China.

Periodizing capitalism

The following subsections make explicit our general historical framework of analysis: (1) modes of production, the establishment of “modern capitalism” at the turn of the twentieth century; (2) the structural crises that marked the emergence of modern capitalism and punctuated its history; (3) the social orders separating these crises and their relationship to the transformations of capitalism.

Capitalism, the revolutions in the ownership of the means of production, and modern capitalism

Central to Marx’s interpretation of history is the distinction between various modes of production. Underlying this periodization is the broad historical dynamic of productive forces and relations of production. This dynamic is *permanent*, that is, not interrupted during the course of a specific mode of production, here capitalism. Marx elaborates on the broad notion of the increasing social character of production. This transformation is expressed in the growing sophistication of production and the complexification of the network of interrelations. These relationships are manifest within enterprises (where they reached a high degree of development), as well as at the level of the society as a whole and gradually more, around the globe.

The transformations of enterprises – concerning technology and organization, and correspondingly the size of units of production – and the extension of markets during the nineteenth century in the United States were preparing radical institutional changes. The institutions in which the ownership of the means of production is expressed were transformed, marking a major break in the history of capitalism, which we denote as the entrance into “modern capitalism.” The sudden wave of incorporation around 1900 is known as the corporate revolution. The revolution of financial institutions refers to the emergence of a new banking system (of the Morgans, Rockefellers, and the like) directly involved in the financing of the emerging large corporations, backing the wave of incorporation. The phrase “managerial revolution” is used to denote the third aspect, the transfer of the traditional tasks of the active capitalist to salaried staffs of managerial and clerical/commercial personnel.

Class patterns were correspondingly transformed. An important outcome was the emergence of a new bourgeoisie at a distance from production, whose ownership of the means of production was supported by the holding of securities, such as stock shares and bonds, giving to this ownership a financial character. In the managerial revolution, a strongly hierarchical division of tasks (a “polarization”) occurred, with a concentration of initiative, power, and income among managers, and execution among lower ranking employees. The emergence of these new intermediate classes – managers and other employees – defined the class pattern typical of modern capitalism to the present. We denote capitalist and managerial classes as “upper classes,” and clerical/commercial employees and production workers, as “popular classes.”

One of our theses concerning the course of history is that the progress of coordination involved in the three revolutions above commanded the rise of managerial classes. The relationship between capitalist owners and managers, thus, became a central political issue. We even contend that the continuation of the same dynamic could determine the transition to a new managerial mode of production, beyond the rule of capitalist owners.

Structural crises

The emergence of modern capitalism was the result of continuous underlying trends, but the changes were precipitated by the major crisis that occurred in the United States during the 1890s. This crisis was the first of four successive structural crises. The second, the Great Depression, is better known. The third was the crisis of the 1970s, with the slowing down of accumulation and the wave of inflation. The fourth one is the current crisis of neoliberalism. One can note the periodic character of such breaks, about every 30 or 40 years, although it is difficult to tell the origins of this regular pattern.

Both the crises of the 1890s and 1970s followed periods of declining profit rates. They can be denoted as “profitability crises,” manifest, respectively, in a competitive war and a wave of inflation. The Great Depression and the current crisis are not profitability crises. Capitalist classes dramatically pushed forward basic economic mechanisms – as in financialization and globalization (in both of which deregulation is involved) – in directions supportive of the rise of their income and wealth. They were very successful in this endeavor within a time frame of two or three decades. But, as Marx and Engels had described in the *Manifesto*, they behaved as apprentice “sorcerers,” at some point, losing control of their own magic. We denote such crises as “crises of financial hegemony” (in reference to Finance, defined as capitalist classes and financial institutions).

Social orders

We call “social orders” (or power configurations) a phase of capitalism characterized by the prevailing specific hierarchies of power among classes or fractions of classes, including the compromises among these groups. Social orders can only be defined in reference to a given pattern of class relationships, as prior or after the establishment of modern capitalism. They delineate shorter periods in the history of the mode of production. Only the three social orders in modern capitalism are relevant to the present investigation.

- 1 *The first financial hegemony.* Beginning with the three revolutions to the Great Depression, capitalist classes enjoyed a situation of hegemony within social relations. The worker movement (with major strikes) was finally curbed under the circumstances created by World War I. A form of social compromise was established with the emerging class of managers, despite the emotion within capitalist classes created by their rising power. Although

the Federal Reserve was created in 1913, resistance remained strong against the central control of the macroeconomy. Liberalism was the doctrine, domestically as well as internationally.

- 2 *The postwar compromise.* The Great Depression, the New Deal, World War II, and the strength of the worker movement worldwide led to the establishment of a new social compromise after the war. Many of the rules enacted during the New Deal were prolonged, but a milder social compromise was found. Keynesianism was substituted for liberalism, with a major role of the government (given the dramatic rise of government revenue), monetary and fiscal policies, while the initiative concerning production and investment was left to enterprises. (A more detailed analysis would be required to account for the differences between national policies and the continuing weakness of international coordination, as envisioned in Bretton Woods.) These years were those of the Welfare State. The compromise was to the Left, between managers and popular classes, while the power and income of the upper classes were diminished, with a sharp reduction of inequalities. Important differences were observed among countries, for example, between the United States and Europe (with, notably, the nationalization of important segments of the economy in Europe) and, to an even larger extent, Japan.

The postwar compromise died of its lack of political prospects in combination with: (1) its internal weaknesses (the almost exclusive concern about the prolongation of the progress of purchasing power); (2) the exhaustion of the favorable features of technical-organizational change inherent in the new efficiency proper to modern capitalism; and (3) the struggle of the capitalist classes.

- 3 *The second financial hegemony.* The crisis of the 1970s and the weakening of the worker movement allowed capitalist classes to recover their earlier hegemony around 1980, the outcome of a class struggle in which popular classes were defeated. Capitalist classes imposed a new discipline on popular and managerial classes. Gradually, however, an alliance was formed among upper classes, between capitalists and managers – that is, to the Right. The overall rearrangement of the economy and society in general was dramatic.

The relationship between the mode of production (given the revolutions introduced into modern capitalism) and social orders is not only that the latter defines a shorter term periodization. The link is dynamic. The social actors active within social orders are determined by the metamorphosis of class patterns associated with the transformation of relations of production – specifically, over the decades considered, the rise of managers that echo the overall process of socialization. The postwar compromise, although it was finally reversed, can be interpreted as a first rehearsal of a great historical scenario in which capitalist classes would be set aside. In neoliberalism, capitalist classes attempted to orient the social trends inherent in the dynamics of productive forces and relations of production in directions compatible with the survival of their own hegemony. In some respects,

they pushed forward the process of socialization of production, as in neoliberal globalization; in other respects, they worked hard in favor of the limitation of the consequences susceptible of damaging their own hegemony, as in financial deregulation. Overall, they failed to establish or bolster the mechanisms aiming at the stabilization of the course of the economy, nationally or internationally, as manifest in the current crisis, thus jeopardizing their own privileges.

A second hegemony of finance

Neoliberalism is a class phenomenon.² The power and income of Finance, capitalist classes and financial institutions, was restored in a new “social order,” in the wake of the social compromise after World War II. The present section also discusses the expansion of neoliberalism around the globe and its limits, notably in reference to China.

Finance at the helm

The imposition of neoliberalism meant a thorough redirection of the economy, both nationally and internationally. To this one must add the class offensive concerning politics and ideology.

It is, first, important to recall that from the early 1980s to the current crisis, the neoliberal endeavor was very successful when assessed according to its own objectives, the income and wealth of upper classes. In other works,³ we have presented data testifying to the sharp rise of upper incomes (notably the upper 99–100 income fractile). An additional finding is the unexpected importance of the increase of upper wages. In the progress of income inequality, these played a role approximately equivalent to that of capital income (interest, dividends, and capital gains). These high wages are clearly those of managers, notably their upper fractions, while the wages of the bulk of the working population were stagnating or diminishing. To this, one must add that unknown further incomes are garnered and capitalized within tax havens.

An expression of these trends is shown in Figure 10.1. The variables are the New York Stock Exchange indices, corrected for inflation by the deflator of GDP. Clearly apparent are the downturn leading into the crisis of the 1970s, the sharp trends upward in neoliberalism, and the declines into the crisis of 2000/01 and the current crisis. In constant dollars, an investment in 1980 was worth about five times its value during the 2000s.

Besides the new discipline imposed on management and workers to the benefit of capitalist owners (gradually more to the benefit of, jointly, capitalists and managers), one can mention the new policies aimed at maintaining price stability, which worked to the benefit of lenders. But two major components were *financialization* and *globalization*. The intersect, financial globalization, played a central role. Financial mechanisms exploded, with a significant acceleration after 2000. On derivative markets, for example, the gross market value of over-the-counter (OTC) interest rates contracts reached \$20 trillion in 2008,

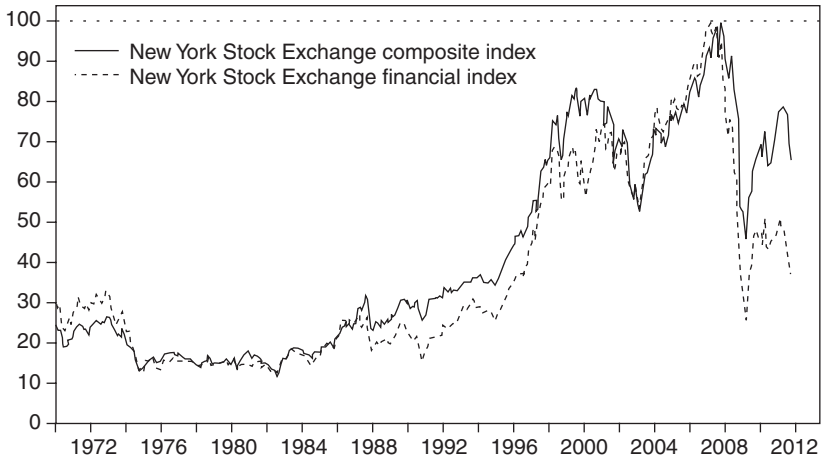


Figure 10.1 NYSE indices, corrected for inflation (max = 100).

compared with \$14 trillion for U.S. GDP; the loans by all banks worldwide to foreigners were multiplied by about three between 2000 and 2008. The imposition of free trade and movements of capitals around the globe opened all regions of the world to the investment of transnational corporations, be they nonfinancial or financial. Between 1970 and 2008, the total exports of goods in the world were multiplied by almost seven; during the 2000s, the flows of direct investment abroad were 48 times larger than during the 1970s. As is also well known, globalization placed all workers of the world in a situation of competition. The impact was devastating on the purchasing power of popular classes and on their access to health care, retirement, and education.

Political life was also thoroughly transformed. As long as the values of the Left were supported by the most educated fractions of the population – linked to what we denote as “managerial classes,” including their intellectual components – capitalist classes had to battle (mostly indirectly) with individual and groups well equipped to resist their contentions. Concerning ideology, in close relationship to the above, the two financial hegemonies replayed the old tune of the “liberalism” of the nineteenth century, as implicit in the notion of a “neoliberalism.” In this context, “liberalism” denotes the freedom of capitalist classes to act – possibly including progressive features within earlier social structures (in the phase of establishment or maturation of capitalism), though the circumstances created by the maturation of relations of production in the twentieth century (not to mention the twenty-first) made such features outdated. In its early formulations, as in von Hayek’s *Road to Serfdom* in 1944, neoliberalism was defined in reaction to the so-called “totalitarian” regimes in Nazism and Sovietism, and also in reaction to social democracy, which he supposed would lead, sooner or later, to totalitarian regimes. Following von Hayek, social-democracy was born to lead, in the short or longer run, to totalitarianism.⁴ This program is directly

aiming at the imposition of a class “democracy,” that is, structured to the benefit of upper classes, as in both financial hegemonies.

A neoliberal globe?

It is important to distinguish between the expansion of neoliberalism to all countries around the globe and neoliberal globalization (free trade and the free international movements of capitals). Several countries in Latin America refused George Bush Junior’s offer concerning the broad Free Trade Area for the Americas (FTAA). If the three well-known Andean countries were indeed part of the neoliberal international “division of labor,” they broke domestically with a number of the rules of neoliberalism. But the major and more important case for the coming decade is China.

The official phrase “Socialism with Chinese characteristics” is certainly misleading.⁵ The Chinese economy and, more generally, society can be described as the combination of a *managerialism*, under the leadership of officials and (usually simultaneously) the members of the Communist party, and a mushrooming *capitalist sector*.

During the 2000s, China followed a very efficient trajectory concerning growth and exports, in which its position within neoliberal globalization was crucial. But this does not mean that the domestic trajectory of the Chinese economy is neoliberal. The intervention of the government remains very strong and at odds with the rules of neoliberalism: (1) the exchange rate of the *renminbi* is controlled centrally; (2) the same is true of capital movements, in and out of China (given the role played by Hong Kong); (3) and this central control also extends to financial markets, which are under close scrutiny; (4) the banking system is still basically owned by the government and its action targeted toward development, with a lax credit policy; (5) the key sectors of the economy are still owned by the government, with a very active industrial policy in favor of development.

In this context, it is difficult to determine the pattern of class alliances in Chinese society. The government and, first of all, the Communist party traditionally claim to directly represent the interest of the people, but everybody knows that the social situation is more complex.

The recent developments are worth a careful consideration. From the early 2000s, the Hu-Wen course (the period encompassing Hu Jintao and Wen Jiabao) marks a significant alteration of the trajectory followed during the 1990s (the Jiang Zemin era). The new course strengthened the grasp of central authorities and manifests increased concern about social unrest. Thus, it tends to extend a number of social benefits (health, retirement) for certain categories of workers. Any reference to a “social democracy” would, however, be misleading. Although the purchasing power of managers is increasing rapidly, the conditions of life and work of the bulk of urban and countryside workers (given the flows of migrants) remain very hard, while the inclusion of capitalist classes in the structures of power at the top are progressing. These latter features suggest social

alliances at the top of social hierarchies, similar to those prevailing within financial hegemonies in capitalist countries, with the *major difference* that the leadership is in the hand of officials and members of the Communist party. The case of the managers of enterprises is more ambiguous, given the often unclear patterns of ownership of non-state enterprises.

Two first steps in the crisis of neoliberalism

As of the fall of 2011, the current crisis clearly entered into a second episode. One can, equivalently, refer to two crises, in 2008 and 2011, but they are tightly connected. The second episode is the crisis in the treatment of the first crisis. The following two subsections are successively devoted to each of them.

Neoliberalism under U.S. hegemony: the crisis of 2008

The determinants of the crisis of 2008 are summarized in Figure 10.2.⁶ *Neoliberalism*, in the left brackets, is at the origin of everything, but in combination with *U.S. hegemony*, as in the phrase “neoliberalism under U.S. hegemony.” This second aspect emphasizes the importance of the trajectory of the U.S. macroeconomy, only made possible by the towering international position of the country. The two arrows A and C distinguish between two sets of factors, in the upper and lower brackets. The former refers to general features of neoliberalism shared by all neoliberal countries, although the United States was leading most of these trends. Prior to 2007, with few exceptions, the factors listed in the lower brackets were typical only of the U.S. economy:

- 1 *Neoliberalism in general*. These factors are all expressions of the endeavor of Finance to remove all barriers to its power and wealth, as in the *Quest for high income*, along the lines already introduced (capital incomes, wages, conditions of labor, policies, etc.). The diagram makes explicit *Financialization* and *Globalization*, including financial globalization, aiming at the same objective. Deregulation was a crucial tool. A huge and unwieldy financial-

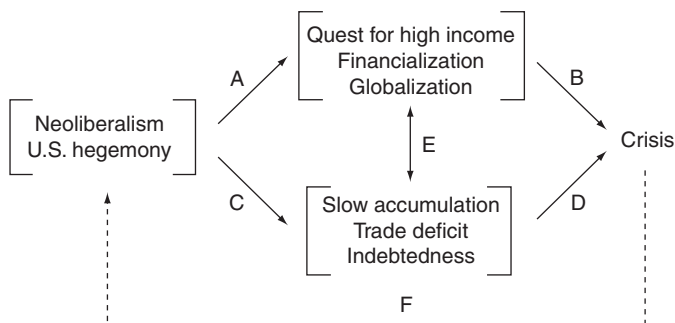


Figure 10.2 Neoliberalism under U.S. hegemony.

global structure was created, within each country and internationally. Other countries, such as the United Kingdom, were thoroughly transformed in the directions opened by neoliberal financialization and globalization.

A crucial factor of the crisis was deregulation and the reluctance to reregulate financial mechanisms, given threatening trends on the part of monetary authorities, notably the Federal Reserve. To this one can add the difficulties encountered in the conduct of monetary policy in the context of neoliberal globalization, as the Federal Reserve lost control of long-term interest rates. The blind faith in the self-discipline of financial-global market mechanisms, not a “mistake” in the conduct of monetary policy, was the root of the meltdown.

- 2 *The trajectory of the U.S. macroeconomy.* The first factor in the lower brackets is slow accumulation. The United States were not the only economy among advanced countries in which the rates of accumulation were lower than before the neoliberal decades; but in that nation, the downward trend of accumulation (with the exception of the high-tech boom during second half of the 1990s) was part of the quite specific combination of three trends: (1) the slowing down of accumulation; (2) the increasing deficit of foreign trade; (3) growing indebtedness.

Concerning the latter aspect, indebtedness, one must distinguish between domestic debt and foreign financing:

- 1 In the present investigation, domestic debt is defined as the sum of the debts of households and the government. Each can borrow and make financial investment. Depending on the issue considered, either the gross amount of debt (as in the study of financial stability), or the net debt – gross debt minus financial assets (as in the study of the formation of demand) – is relevant. Enterprises also borrow but they make financial investments for approximately the same amount; so it is possible to abstract from their net debt in analyzing demand mechanisms.
- 2 The rest of the world makes financial investments in the U.S. economy and, reciprocally, U.S. economic agents make financial investments in the rest of the world. Foreign financial investment (or foreign financing) refers to the U.S. assets held by foreigners, securities, loans, and deposits.⁷ The net external debt of the U.S. economy is an important variable in the analysis of the crisis. It is the difference between the U.S. assets held by the rest of the world and the foreign assets held by U.S. agents.

A basic relationship links the net debts (in terms of *variations*, Δ):

$$\Delta \text{ Net external debt} = \Delta \text{ Net debt of households} + \Delta \text{ Net debt of government}$$

This relationship is illustrated for credit market instruments (exclusively) in Figure 10.3. The variables depicted in this figure represent amounts outstanding instead of variations; thus, the joint variation of the two

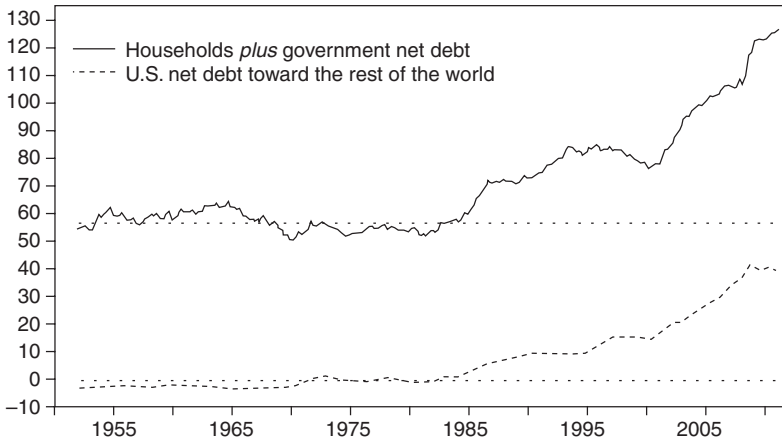


Figure 10.3 Net debts: U.S. households and government considered jointly, and U.S. economy toward rest of world (percentage of U.S. GDP, quarterly).

Note

The variables are debts in credit market instruments. The rest of the world also purchases stock shares of U.S. corporations (and reciprocally) but these amounts are much smaller.

variables is manifest in the parallelism of the two lines. Two periods are clearly apparent: one from the 1950s to the early 1980s, and the second from the neoliberal decades which followed, when the trajectory of disequilibria in the U.S. economy was initiated.

These patterns of variation are the product of the reciprocal causal link between: (1) free trade (at the origin of the deficit of foreign trade in a world of unequal labor cost and technical capabilities, and exchange rates often divorced from purchasing power parities); and (2) the growth of the domestic debt. *The direction of an increasing fraction of demand toward the rest of the world must be compensated by the stimulation of domestic demand to ensure a normal use of productive capacities on the domestic territory.* In addition, part of this stimulation is derived toward the rest of the world, adding to the requirement to stimulate. The increase in the gross debt of households in the United States was all the more dramatic because households were also making financial investments.

- 3 *Relationships between the two sets of factors.* They are represented by the vertical arrow E. An important aspect is that both financialization and globalization made possible the growth of the debt of households. Financial deregulation paved the way to subprime mortgages and other junk bonds, to the proliferation of Mortgage Backed Securities (MBSs) supported by private label securitization, and to the multiplication of vehicles such as Collateralized Debt Obligations (CDOs) and Credit Default Swaps (CDSs). Financial globalization allowed for the sale of about half of the products of securitization to the rest of the world.

The collapse of the fragile financial-global structure inherent in neoliberalism was triggered by the wave of defaults on household mortgages that began in 2006 in the United States, and then spread to the rest of the world.

Europe was well advanced along the neoliberal trajectory, and also subject to the perilous developments listed in the upper brackets in the diagram. It was part of the overall fragile financial structure, which was also destabilized when the original shock came from the United States. (*When considered globally*, Europe was not affected by the same disequilibria as the U.S. economy; these disequilibria involved specific countries within Europe.)

Crisis in the treatment of the crisis: the U.S. and European economies in 2011

The present section focuses on the U.S. and European economies as of 2011. In both regions of the world, the treatment of the crisis of 2008 combined loans to the financial sector and very large deficits of governments' accounts.⁸ To this, one can add the provision of dollars by the Federal Reserve to foreign central banks. These actions were successful in a given time frame, though with significant limitations.

- 1 Despite major failures, the loans to financial institutions allowed for the survival of many of those hurt by the crisis. It is important to emphasize, however, that this support did not stop the so-called "credit crunch," notably in the United States. As of the second quarter of 2011, the new loans to households by financial institutions are still inferior to the sums paid back by households. Only the loans to enterprises have been significantly revived.
- 2 As of 2011, in the United States, the only economic agent at the origin of final demand still financing part of its expenses by new borrowing is the government. The deficits of the budgets in all countries successfully supported the macroeconomy, though with important limitations. First, despite government deficits larger than 10 percent of GDP, the recovery is weak within major countries of the center. In the second quarter of 2011, the U.S. GDP in constant dollars almost reached its pre-crisis level (in the fourth quarter of 2007), but new symptoms of a downturn are apparent. Both in the U.S. and Europe, industrial production indices remain inferior to their peak prior to the crisis (10 percent below in the United States). Second, and most importantly, four years after the first symptoms of the crisis were observed, this stimulation never reignited the two economies' *autonomous capability to grow*.

The roots of the sovereign-debt crisis, as of 2011, lie in this latter feature of the macroeconomy. The support of the general level of activity of the U.S. economy requires the stimulation of domestic demand by rising indebtedness. Given the levels reached by the debt of households, it is hard to imagine that this

supplement could come from households. (Actually, the gross debt of households diminished to a small extent.) Only the government deficit can uphold the macroeconomy.

Prior to the crisis, a considerable fraction of the Treasury securities issued to finance the deficit was purchased by foreigners, an average of 78 percent between 2002 and 2007. The increase of deficits during the crisis posed a major threat to the exchange rate of the dollar. In the last months of 2010, the Federal Reserve began to buy amounts of Treasury securities even larger than the increase of the government's debt, in the procedure known as "quantitative easing." During the first two quarters of 2011, the Federal Reserve thus purchased the equivalent of 160 percent of the new securities issued. Correspondingly, during the same period, the share of securities purchased by the rest of the world diminished to 17 percent. Households were simultaneously selling a fraction of the securities they held.

The trade-off is clearly established. Either the deficient demand to producers based on U.S. territory is compensated by government spending, or the macroeconomy plunges. The situation has reached such a degree that the contraction of output, if it occurred, would be spectacular. The further destruction of a large fraction of productive capacities within industry is implied. The resistance would be sharp. The U.S. manufacturing sector presently accounts for only about 10 percent of GDP (this still represents 25 percent of manufacturing worldwide), but its role is crucial concerning foreign trade. The political agenda in the United States, with the forthcoming elections, is such that the Republicans play the dangerous game of pushing the U.S. economy toward a new recession.

In Europe (either the 27, or the 17 of the euro area), either no deficit of foreign trade, or only a small one, is observed for the entire zone; and the debt of households did not reach levels similar to U.S. households, a situation substantially distinct from that prevailing in the United States. However, a pattern similar to that in the U.S. economy prevails within a number of European countries. In those countries, the same determination to reduce deficits on the part of governments is observed as is seen in the U.S. This is where the problems lie.

The combination of the two deficits – foreign trade and government as in the U.S. economy – defines the worst possible configuration for a small European economy, in particular if these trends have been established years prior to the crisis, as in Greece. Under such circumstances, the so-called "markets" (financial institutions, notably outside of the European Union) react aggressively to the prevalence of these twin deficits. One can contrast this configuration with the one prevailing in Japan, with a skyrocketing government deficit but a large surplus of foreign trade. Since the surplus of foreign trade creates a flow of financing from the country to the rest of the world, the financing of government debt is less dramatically dependent on foreign financing, and the exchange rate of the currency is not threatened.

One important feature of the debt problem in Europe is, however, that the foreign financing is, to a large extent, provided by European banks. For example, in Greece at the end of 2010, the total claim of foreign banks amounted to

45 percent of the Greek GDP, of which 9 percent is due to banks outside of the eurozone and the remaining 36 percent to banks within the zone. For Portugal, the total debt to foreign banks is equal to 93 percent of GDP; this can be broken down, respectively, into 16 percent held outside of the eurozone and 77 percent held inside it. Thus, the problem is mostly European. This does not, however, change the fact that the banks which lent to these countries, in particular to their governments, are now facing a difficult situation. The European Central Bank is confronted with circumstances similar to those that followed the first major shock in late 2008, and is compelled to either refinance these banks for considerable amounts, or to elaborate new mechanisms (such as “eurobonds”). But the problem is not simply *liquidity*, but also *solvency*. The banks’ own funds must be increased (and devalued to the extent of incoming losses). Who will recapitalize the banks confronting these pressures? Governments already fighting to curb deficits?

In the case of the eurozone, the crisis revealed the weaknesses inherent in the construction of the European Union and the euro area within neoliberal patterns. There was no “financial European Union,” as Europe was immediately inserted within financial globalization, with the free international mobility of capital. Consequently, “markets” were supposed to discipline countries, not strong central governance, as governance should be restricted only to blind rules (such as the rule that sets a maximum level of government deficit at 3 percent of GDP).⁹ The solidarity among countries remained weak. The deterioration of the macroeconomic situation in a number of countries is not a recent development, and nothing was done. Ireland was allowed to practice fiscal dumping, in a pure neoliberal fashion, with considerable advantages in the medium run, creating a situation whose unsustainable character was revealed by the crisis, again without collective preventive action.

Though under distinct circumstances, the ways out are difficult to imagine both in the United States and Europe. It is, therefore, unlikely that this second episode will be the last in this list, as these countries’ currencies remain under threat. The resistance to change on the part of upper classes is still very strong and the Right is orchestrating alternatives which, if they were actually pursued, would likely lead to chaos.

Beyond neoliberalism: classes in a new social order

In the analysis of historical trends, it is important to distinguish between various time frames, notably between medium-term and longer-term prospects. This is the lesson taught by, respectively, the interwar period and the war, on the one hand, and the postwar decades, on the other hand. Concerning historical prospects, we distinguish between three alternative social orders: (1) a third financial hegemony, in continuation of the second but with the required adjustments; (2) neomanagerialism, the continuation of the alliance at the top of social hierarchies, but under the leadership of managerial classes; and (3) a scenario similar to the postwar compromise. In these respects, the present situations in the United

States and China appear symmetrical. Concerning political orientations, class struggle will have the last say.

Preliminary crisis episodes – forthcoming social orders

In the discussion of possible options for the coming decades, the comparison with the situation that prevailed during the 1930s, 1940s, and after World War II is telling. The Great Depression led to the establishment of social configurations as divergent as Nazi Germany and the New Deal in the United States (or the Popular Front in France). Political circumstances, including the preparation for the war, played a central role. Both Nazism and the New Deal, however, shared a common feature: the strong intervention of the government. After World War II, a new social order was found in the postwar compromise, with more moderate traits. Despite remaining differences, convergence was observed within, at least, the United States, Europe, and Japan.

Concerning the current crisis, a possible scenario is that a similar course of events be reproduced. A first period would be marked by strong perturbations and potentially diverging configurations (to the extreme right, the right, or the left). Only later would a new more stable social order be found. It would match some of the features of the underlying transformation of relations of production, in line with the new degrees and forms of the socialization of production, nationally and internationally. For example, new coordination would be established globally. This would have to be capable of imposing a degree of coherence in the previous wild neoliberal globalization, a combination of limitations to free trade and the free movements of capital internationally; and this in turn would require advances in the enhancement of global governance, for example, controls imposed worldwide on the expansion of financial mechanisms. Class struggle would, as after World War II, determine political orientations. When we refer to the establishment of *new social orders*, we point to this type of longer-term development. It is difficult, however, to imagine what type of events, similar to World War II, could command the transition from the preliminary disorderly configurations to these more coherent and stable paths.

As already stated, the postwar compromise was established in the context created by the Depression and the war, given the political conditions resulting from a strong workers' movement worldwide. A few decades later, this social order died of the metamorphosis of these circumstances. Despite the violence of the crisis, the present situation is thoroughly distinct. A new social compromise to the Left, grounded in the alliance between popular and managerial classes, is unlikely, although, simultaneously, the present crisis demonstrated that the trends inherent in the second financial hegemony are unsustainable.

A third financial hegemony – neomanagerialism

Considering post-neoliberal social orders at a general level of analysis, two options open up. Due to the political situation recalled above, the alliance at the

top of social hierarchies between capitalists and managers is the most likely scenario. The alternative is between the exercise of leadership by capitalist or managerial classes. Though to different degrees, a significant break with the rules of the second financial hegemony is implied in both instances.

- 1 *A third financial hegemony.* Capitalist classes find a way out of the present crisis and show a capability to adjust the power configuration to the advance of productive forces and relations of production, both nationally and internationally. A degree of regulation and collective governance is involved. The freedom to act of capitalist classes is subjected to self-discipline. Manifestations of such concerns are already apparent in the contemporary second financial hegemony. The action of the Federal Reserve intending to stabilize the economy, nationally and internationally, testifies to the prevalence of such trends. Evidence of this pattern is also seen in the so-called “Basel Accords” concerning the balance sheets of banks, and in the concern that an important fraction of financial transactions is performed within exchanges, instead of via direct OTC procedures. International institutions such as the World Trade Organization (WTO) or International Monetary Fund (IMF) already play important roles. A new social-global arrangement would require the extension of such mechanisms. The role of managers would increase technically; but the leadership and the income of capitalist classes would not be questioned.
- 2 *Neomanagerialism.* This term obviously involves some wordplay with respect to neoliberalism. Just as the latter notion called for the restoration of some of the features of the liberalism of the nineteenth century, neomanagerialism points to aspects of managerial capitalism during the postwar decades, basically the leading role of managers and their larger degree of autonomy vis-à-vis capitalist classes. In neomanagerialism, the alliance at the top is also preserved, but the leadership is transferred to managerial classes.

In a potential third financial hegemony, the adjustment to the advance of relations of production would be subjected to the leadership of capitalist classes. This might take the form of the control of the stability of trajectories (involving both the macroeconomy and financial mechanisms, given the tight relationship between the two), the control of national growth performance, or even industrial policies or forms of protectionism. In neomanagerialism, even more importantly, these trends would be pushed to further degrees: fundamental aspects of social relations would also be involved, notably concerning comparative powers in decision making and income channels (for example, in wages and bonuses relative to capital income). A degree of “financial repression” would be imposed, but with some moderation, since the new social alliance would still be to the right. This would open a path to capitalist families in their gradual transition to the new configuration (a movement whose preliminary forms are already apparent in the second financial hegemony.)¹⁰

In the distinction between the two social orders, one can observe the tight link to the historical progress of productive forces, the transformation of relations of

production, and the corresponding class patterns. A third financial hegemony can be viewed as an adjustment of the power of capitalist classes to the progress of relations of production. This is what neoliberalism failed to do and what provoked its crisis. Like the second financial hegemony, the third such hegemony would manifest a resistance to adjustments of a similar historical import, along a road leading to its own structural crisis. In neomanagerialism, the adaptation would be much stronger, opening a much more stable historical trajectory. Obviously, the outcome would be distinct from the one – a “social-managerialism” – to which the alliance to the Left would lead, and which we judge unlikely under the present conditions of class struggle. But the two trajectories would share common aspects, those conveyed by the transformation of relations of production.

In the definition of the whole range of outcomes – third financial hegemony, neomanagerialism with the compromise to the right, and social-managerialism with the compromise to the left – there is obviously a matter of degree (how much government intervention, autonomy of managers, financial repression, social protection, etc.) Our interpretation, concerning the past as well as the future of societies, is that such *degrees* are superficial expressions of specific historical configurations of relations of production and class hierarchies of power and compromise, to be distinguished in their *nature*.

The United States and China: mirror images?

The present situation in the United States is much more serious than is usually thought. A central thesis in *The Crisis of Neoliberalism*¹¹ is that the changes to be undertaken are so dramatic that a third financial hegemony would not measure up to the task and a transition to neomanagerialism is required if U.S. upper classes want to preserve their power and income. This is due to the joint requirement of remedying the unsustainable trends toward financialization and globalization and, simultaneously, correcting the trajectory of disequilibrium of the U.S. macroeconomy. Concerning this latter aspect, it is even difficult to imagine ways out. This is all the more true if one takes account of the requirement to significantly slow down the decline of the international hegemony of the country. Thus, consciousness of the country’s interest, notably on the part of upper classes – what we denote as the “national factor” – could provide the stimulus in the direction of a new course in neomanagerialism.

Despite obvious differences, the situation in China is in many respects symmetrical. The development of the country is based on the combination of a strong managerial leadership, notably on the part of officials/members of the Communist Party, and an exploding capitalist sector, a combination directly evocative of neomanagerialism. One difference is, however, that the managerial aspect is not “new” with respect to an earlier managerial capitalism, but to the rule of a managerial class in China prior to the reforms (with its bureaucratic aspects). The symmetry with the U.S. society lies in the observation that Chinese society is now confronted with the continuation of its neomanagerial traits or the transition to financial hegemony.

Overall, the United States must now confront the bifurcation between a third financial hegemony and neomanagerialism, while China faces the same alternative, but coming from the other branch. The situation in Europe is significantly distinct as, in the short run, the main issue seems to be the preservation of the European Union and the eurozone.

Within the dynamics governing such historical bifurcations, the seriousness of the contemporary crisis, its duration and depth, will play a central role. The features of the crisis also command the possible reignition of new bouts of more radical class struggle on the part of popular classes. But one must keep in mind the likely divergences within various regions of the world and, in the medium run, the uncertainties surrounding what has been denoted earlier as “crisis episodes,” including far-right endeavors. Crucial will also be the agility of upper classes, in their two components, to react to historical circumstances instead of defending narrowly defined short-term interests.

Notes

- 1 Broad use is made of our recent book (Duménil and Lévy, 2011).
- 2 An interpretation that we introduced in the mid-1990s, first published in English in Duménil and Lévy (2001).
- 3 Most recently in Duménil and Lévy (2011). See also Duménil and Lévy (2004).
- 4 Von Hayek (1944). See also Mirowski and Plehwe (2009).
- 5 A recent summary of these official theses can be found in Cheng and Xin (2011).
- 6 Duménil and Lévy (2011), p. 34.
- 7 Stock shares are part of securities, and should not be referred to as “debts,” but it is convenient to denote foreign financing as a “foreign debt.” Note that direct investments abroad are counted as “financial investment.”
- 8 Duménil and Lévy (2011), Part VII.
- 9 Such rules are reminiscent of the short-lived attempt at the implementation of monetarist procedures in the early 1980s in the United States in place of Keynesian feedback policies.
- 10 Duménil and Lévy (2011), Ch. 5.
- 11 Duménil and Lévy (2011), Part IX.

References

- Cheng, E. and X. Xin, 2011, “Fundamental Elements of the China Model,” *International Critical Thought*, 1, pp. 1–10.
- Duménil, G. and D. Lévy, 2001, “Costs and Benefits of Neoliberalism: A Class Analysis,” *Review of International Political Economy*, 8, pp. 578–607.
- Duménil, G. and D. Lévy, 2004, “Neoliberal Income Trends: Wealth, Class, and Ownership in the USA,” *New Left Review*, 30, pp. 105–133.
- Duménil, G. and D. Lévy, 2011, *The Crisis of Neoliberalism*, Cambridge: Harvard University Press.
- Mirowski, P. and D. Plehwe, 2009, *The Road to Mont Pélerin*, Cambridge: Harvard University Press.
- von Hayek, F.A., 1944, *The Road to Serfdom*, reprint 1980, Chicago: University of Chicago Press.

11 Fiat money and how to combat debt deflation

Thomas Sekine

1

Uno's brief memorandum entitled "The Development of Capitalism after the First World War," appended to the revised edition of his *Keizai-Seisakuron* (now translated into English as *The Types of Economic Policies under Capitalism*), 1971, has always been a source of great inspiration as well as of embarrassing mystification to Japanese Unoists.¹ For many years, Tsutomu Ôuchi's influential book, *A Study of State-Monopoly Capitalism* (in Japanese), 1971, was believed to be the standard guide to a correct apprehension of Uno's intention in that essay. I believe, however, that the book was on the wrong track. For Ôuchi and his followers interpret the 1929 crisis to have been just another capitalist crisis. The reason why capitalism was subsequently mired in a decade of depression instead of automatically recovering from it as would have been expected from the theory was that, according to them, the bourgeois states, then under the imminent "general crisis" of capitalism, had to intervene politically, unable to wait long enough for the lengthy process of its self recovery from crisis, which involved a reorganization of industry with a set of new technical innovations, to work its way through. Most of them actually believe that the post-1914 world economy continued to belong to the stage of imperialism, though under the novel threat of "the general crisis." Yet, this, in effect, ignores Uno's fundamental thesis that the post-1914 world economy *could no longer mark a new stage of capitalist development*, and so *must be studied directly as the economic history of the present*.

I would rather follow Mitsuhiro Takumi's short but insightful book, *Economic Recessions that Hearken Back to the Great Depression* (in Japanese), 1998, since its argument is far more persuasive. In it the author states that, after the crisis of 1929, the prices of the products of key industries did not fall; instead, the physical scale of production and employment shrank. This suggests that the capitalists in key industries did not seek innovations that would have enabled them to subsequently produce their products at lower production-prices. In the absence of innovations occurring "in a cluster" during the depression phase that follows a periodic crisis, capitalism could in no way reset its own reproduction process in the key industrial sector, at a higher level of the organic

composition of capital. The law of relative surplus population would then cease to function, as would the law of value. Of course, the prices in question are those of the products of key industries, as, indeed, the prices of primary goods and of the products of light industry fell quite dramatically even during the crisis of 1929.

After the war of 1914, the world economy underwent profound structural changes, of which the most significant was the fact that the centre of commodity-production shifted from Europe to the United States, where, since prewar years, the “production of durable goods by means of durable goods” had been a salient and dominant feature, as was illustrated by the automobile industry in particular. That trend became even more general and decisive after the war. Productive plants and equipment consisted then of expensive and complex “capital-assets,” i.e., durable capital-goods, which rendered the price of the products rigid downward. Although such commodities as “coal, iron and steel,” which were abundantly produced by prewar “monopoly capitals” in Europe and elsewhere, could easily be “dumped” in external markets at very low prices, even while being sold at high monopoly prices inside the border, elaborate and expensive commodities such as the automobiles produced (by assembling parts and components) in American factories, could not so easily adapt to the volatility of prices. These commodities could not be produced, unless sold for a supply-determined price, such as could be represented by the formula $p=(1+m)u$, that is to say, at a level equal to unit labour costs, $u > 0$, appropriately marked up with $(1+m) > 1$. The price of the commodity could not be reduced flexibly, since both the unit costs (mainly labour costs) and the mark-up rate tended to be quite rigid.

2

These considerations lead me to a belief that Takumi’s theory, in effect, presupposes an oligopolistic economy with an industrial structure of the Minskyan type, that is to say, one in which “complex and costly capital-assets are extensively used.” This type of industrial structure, which I would call here “Fordist” for short, had been firmly established in the United States after World War II, and was propagated from there to all the developed economies in the world. For a firm to invest in plants and equipment in such an economy (apart from the exceptional cases in which it finances all its investment with its own money) means entering into a debt contract to be paid off by instalments over time. In other words, it commits itself to a series of regular payments of given sums of money in the future, as stipulated in the contract. The sources of the money which will be needed for that purpose on successive due dates are primarily the quasi-rents (or gross profits) it expects to earn, while using the plants and equipment productively; but the firm’s future receipts (incomes) involve uncertainty. In order not to fail to meet its commitments, even when the expected receipts in future turn out to be below expectation, the firm must have on hand sufficient liquidity (money or some readily cashable assets to dispose of) and, if need be,

a line of credit where its own debt will be accepted. This means that the firm cannot totally concentrate on its production alone, but must always keep in touch with financial markets so as to be on the alert to changes therein. In response to this trend, sophisticated financial markets develop, in which not only banks but also many specialized, non-bank financial intermediaries operate by coordinating lenders and borrowers. An enormous quantity of money or funds saved out of incomes and “lying idle” – i.e., not yet committed to any definite investment project, but seeking temporary returns in the meantime – flows into and out of such markets. Both lenders and borrowers run risks on their account in dealing with such money.

The development of money and capital markets of this nature is a specific phenomenon to the age of Fordist commodity-production. In the pure theory of capitalism (*the dialectic of capital* or Uno’s *genriron*), there is no theory that directly accounts for such a phenomenon. The bank credit that is expounded there is essentially a development of commercial credit (i.e., credit that industrial capitals give to one another among themselves); it consists mainly of discounting trade bills and offering short-term loans to expedite the circulation of commodities. It has the effect of “capitalist-socially” economizing idle money, including “idle money to be,” with a view to maximizing the production of surplus value (or creation of disposable money incomes). Banking, in particular, consists of activating “idle money to be” into *credit money* or readily usable means of purchase. The social reproduction-process of a capitalist economy automatically generates idle money, either in its latent form (as “idle money to be”) or in the form of savings out of already earned surplus value (or disposable money incomes). Idle money in its latent form means money that, if received now as proceeds of the commodities sold, would be saved rather than spent. It is commodity-economically rational to minimize the period during which money must stay “idle,” without contributing to the production of surplus value, so that the pure theory of capitalism (*dialectic of capital* or Uno’s *genriron*) must explain the whole system of credit logically from the point of view of “how to capitalist-socially economize idle money.”²

It is quite otherwise with the system of finance that develops in the age of Fordist commodity-production. First, the money already saved, but not yet converted into capital (i.e., not yet invested in real capital formation) and so lying idle, far from being scarce as in olden times, abounds everywhere in the economy, reflecting the fact that the opportunities for their healthy investment in real terms (conversion into real capital) tend to be insufficient in today’s world economy. However, money staying idle without being converted yet into capital, but merely held to satisfy the “speculative motive” while seeking temporary returns, will congregate in the money market as *casino capital*, which is a form (specifically adapted to the present-day phase of the disintegration of capitalism) of “money-lending capital.” The latter is characterized as an “irrational form of capital” in theory, and is associated with the Hegelian concept of “the measureless,” meaning that it can contribute even towards the undoing of the logic of capital.³ The presence of such capital is, by itself, deflationary. Moreover, by the

time the return on its speculation exceeds that on real investment, a Wicksellian cumulative process will work downward, until the shrinkage of the real economy becomes catastrophic.

3

In the interwar period, when the American economy was not yet equipped with Minsky's "Big Government and Big Bank," the speculative boom of the 1920s could quite easily turn into the depression of the 1930s. After World War II, however, the government sector became enormous compared with its prewar size, and the Federal Reserve Bank along with its associated institutions established its position as "the lender of last resort" in national finance. To what extent then did the postwar U.S. economy become effective in warding off a Great Depression of the type experienced in the 1930s, which Minsky called "It"? This was the question that he posed to himself. Through the analysis of "a deep recession but not a depression of 1975" and others, he then developed his unique thesis of the "financial instability hypothesis."⁴ The postwar American economy, according to him, enjoyed an exceptional period (a brief one of 20 years or so) of "tranquility with robust finance," but thereafter proved itself to be inherently unstable both on the upside and the downside. Although it has so far been contained successfully without sliding into "It" thanks to the stabilizing effect of Big Government and Big Bank, the degree of instability increases every time the Fed intervenes, validating, in the process, the existing structure of indebtedness in the private sector, by supplying more liquidity.

There is undoubtedly a great deal for we Unoists to learn from Minsky's exceptionally penetrating analysis of the nature of the Fordist commodity-production. However, we must be alert to the fact that he does not use the term "capitalism" in the same sense as we do. To Minsky "capitalism" simply means "a mode of commodity-production in which increasingly more capital-assets are used;" he does not seem to be interested in an "objective definition of capitalism by capital itself" in the form of *the dialectic of capital*, or Uno's *genriron*. Not that Minsky was wrong in not having been aware of the Unoist procedure, but it is important for *us* to be able to learn from his insight in the right context, one that is consistent with Uno's overall approach. That context is "capitalism in its process of disintegration" after the war of 1914–17. At the purely theoretical level we know, for instance, that the *actual process of capital accumulation* occurs through the alternation of the "widening phase" (in which accumulation occurs with a constant organic composition of capital) and the "deepening phase" (in which a switch occurs from a lower to a higher organic composition), the two phases being divided by a periodic crisis, which entails a complete disruption of the social reproduction-process. This alternation of the two phases appears, on the surface of the capitalist market, as the prosperity and depression phases of the business cycle.⁵ At the more concrete-historical (or empirical) level, however, we must be aware that loan-capital, which formerly pursued capitalist-rational banking, has been sidetracked in recent years, and tends to be

overwhelmed by non-bank financial intermediaries, which act as a special form of “money-lending capital” in the newly developed financial markets, with all its irrational rapacity and pre-capitalist “measurelessness.” I believe that it is important to distinguish *the level of abstraction* at which these two types of problems should be discussed. In particular, it is not my view that capitalism *per se* (i.e., as conceptualized at the purely theoretical level) is inherently unstable or self-destructive, as Minsky remarks frequently, just because it undergoes business cycles punctuated by periodic crises of increasing severity,⁶ even though I can readily agree with him (at the more concrete-empirical level) that contemporary “capitalism” (i.e., capitalism in the process of disintegration) is characterized by increasingly suicidal instability (because “money-lending capital,” which had long been “tamed” as “loan-capital” under capitalism proper, came back with a vengeance in the form of “casino capital” in the disintegrating phase of capitalism), and that, unless controlled in a rather extra-capitalist fashion, it may end by terminating not only capitalism itself but also human society with it.

The evolution of the world economy since the war of 1914–18 has often been segmented into three periods: (1) the interwar period; (2) the period from 1945 to 1979; and (3) that from 1980 to the present. The first represents the period of Great Transformation, in which the “centre of commodity-production” shifted from Europe to the United States. The second period consists of the 35 postwar years, in the first 20 of which Keynesian social-democracy and the welfare state appeared to work rather well, and in the remaining 15 of which the economy performed haphazardly, as it was caught in the throes of “stagflation.” The third period may be viewed as the years of the neo-conservative counter-revolution, which has substituted rabid allegiance to neoliberal “market fundamentalism” for the previously accepted Keynesian social-democracy. I will adopt this convenient tripartite segmentation of the world economic history since the end of World War I to the present, in the course of which “capitalism,” in the proper sense of the term, has been in the “process of disintegration,” and will focus especially on the alarming phenomenon of “financial instability” that became manifest, particularly from the second to the third period.

4

As Minsky acknowledges, the American economy, legally and institutionally shaped by New Deal legislations and reforms, worked with relative “tranquility” during the first two decades following World War II. Perhaps this was due to the fact that with the presence of Big Government, the balance of outstanding federal debts held by the private sector far exceeded that of outstanding private debts, which rendered finance relatively “robust.” At the same time, however, the overwhelming superiority of the American economy relative to the others in productivity and political impact, as well as the unchallenged credibility of the U.S. dollar, must have contributed to this stability. Yet, as time passed under the cloud of the Cold War, and as the burden of the military expenses which had to be borne mainly by the Americans began to weigh heavily on the U.S. balance

of payments, the latter turned foul, until it eventually undermined the credibility of the dollar. In addition to this, the Fordist production of commodities, which depended more and more heavily on “elaborate, complex and expensive capital-assets,” was then even more firmly and extensively established than before at the core of the American economy. Finance turned from robust to turbulent, as its instability became manifest. As the balance of private debts held by the public increased more rapidly than that of government debts, the Fed had to validate the private sector’s overindebtedness, every time it approached a crisis with injections of more liquidity (in the effort to prevent the economy from tumbling into a real depression). A strong inflationary bias was thus built into the American economy. Since, moreover, during the 1970s, external trade grew more speedily than domestic production in the United States, as in many other countries, a sudden rise of international commodity prices (such as those for wheat and petroleum) for contingent reasons added to the inflationary bias already inherent in the Fordist production of commodities, leading to the outburst of universal price inflation, which became difficult to control. It was at this point that the second period of the post-1918 history of the “ex-capitalist transition” came to an end.

The decade of the 1980s opened with the resurgence of neo-conservative ideology which defied the social-democratic trend of the previous era that had been largely inspired by the New Deal and Keynes. The institutional framework designed by the New Dealers and the Keynesians, which had led the American economy to stagflation, was now thought to be outdated, as “supply-side rigidities” had to be removed and the private sector activated by means of “deregulation and small government.” The idea that the American economy then required a structural reform was not unwarranted; but the fact that the reform had to be inspired and undertaken by neo-conservative forces, and in particular by the financial interest nestled in Wall Street, though perhaps unavoidable, gave that reform a pernicious twist, with a pathological effect that eventually completed the disintegration of capitalism. First, a radical *monetarism* was used to control inflation, which did indeed stop the persistent rise in prices, though at the cost of skyrocketing interest rates and the ensuing overvaluation of the dollar. Then, President Reagan’s anti-union policies effectively reversed the rising trend of unit labour-costs; yet, by destroying the long-nurtured industrial peace in labour-management relations, they only fomented social tension and unrest, mistrust, and anxiety, which undermined the foundation of the American dream. Furthermore, although the pursuit of small government by means of deregulation and tax cuts aimed at a radically reduced scale of the federal budget, this particular policy did not immediately achieve the intended result, since it was offset by the president’s enhanced military spending. However, this component in the menu of conservative economic policies was not forgotten; indeed, it was to be pursued all the more vigorously later to achieve a dramatic impoverishment of Big Government.

During the decade of the 1980s, the Cold War was winding down; yet it was not yet over. The reorganization of the economy was thus also intended as part

of the U.S. strategy to win that war. The perceived threat from the USSR, however, disappeared by the end of the decade, and the United States emerged as the only superpower in the world. At this point, Washington adopted for its international strategy the theme of “globalization,” which connoted America’s intention to use “finance rather than industry” to stay at the helm of the world economy. This it could do by maintaining the U.S. dollar as the key international currency, and by further promoting Minsky’s “money-manager capitalism” centered round Wall Street.

5

As pointed out above, the monetarist policy to stifle inflation from the late 1970s to the early 1980s resulted in an extravagant elevation of the rates of interest, which had two wholly unanticipated results. First, many developing countries which had borrowed petro-dollars for the development of their national resources were caught in a “debt crisis,” on the scourges of which I need not dwell here. Second, the commercial banks in the United States, which were prohibited by Regulation-Q of the Glass–Steagall Act from paying adequate interest rates on time deposits, began losing them at an alarming speed to other more reasonable borrowers of funds. When, in 1983, the interest rates payable by banks on time deposits were liberalized, that gave a fillip to a more general liberalization of finance, which included, among others, the de-compartmentalization of businesses in banking, securities, and insurance. Thus, in the latter half of the 1980s a mergers-and-acquisition (M&A) boom occurred, which quickly reorganized and refurbished the management of American industry, signalling the advent of what Minsky termed “money manager capitalism.” This, however, sounded the death knell of traditional, capitalist banking as well. Indeed, the proper function of “relationship banking” reserved for commercial banks – i.e., of originating loans by face-to-face screenings of the most creditworthy clients – was a costly business with modest reward, compared with charging fees on the business of massive financial intermediation.⁷ Therefore, with the liberalization of finance, commercial banks shifted their operation away from relationship banking in favour of fee-earning non-bank, financial intermediation. Since banks, too, are profit-seeking private enterprises, this shift from commercial to investment (or securities) banking could hardly be avoided.

When, on top of this, banks were allowed to take recourse to the novel device of “securitization,” it became possible as well as rewarding for commercial banks to “securitize” their loan contracts, and sell them off in financial markets, disconnecting them from the banks’ own balance-sheets. The securitized loans were then chopped up in pieces, to be skillfully combined with other financial assets of different types in CDOs (collateral debt obligations) or some such dubious packages, invented by the geniuses of financial engineering. The asset quality of these packages was then “actuarially” calculated in an esoteric manner to be “graded” by so-called credit-rating companies. Indeed, subprime mortgage loans were mostly sold off to financial markets in this way, thus dispersing the

germs of systemic risk throughout the latter, which turned into a gamblers' paradise. Thus, in the trend towards "financialization," which is often talked about, and which is meant to characterize the overall feature of the present-day economy, we must distinguish two distinct elements. One comes from the nature of Fordist commodity-production as such, which, as Minsky explained, involves the financing of investment in plants and equipment, and which tends to generate increasingly heavy indebtedness in the private sector. This breeds instability due to the "uncertainty" that necessarily accompanies any exchange of money-today for money-tomorrow. The second element comes from "financial liberalization," which erodes traditional "relationship banking," by making it less lucrative than massive financial intermediation.

I would like to call attention particularly to this second feature of "financialization," the atrophy of traditional commercial banking. This follows from the fact that there exist abundant idle funds, convertible but not yet converted into capital, seeking returns in the meantime in money markets. It is, of course, not the main purpose of traditional banking to serve financial intermediation, i.e., to deal with idle money which is saved from out of money incomes already earned. It is rather to activate "idle money to be" so as to maximize the creation of disposable incomes (i.e., the production of surplus value). In the aggregate-social reproduction-process of capital, there are always traders who can sell their commodities on credit (i.e., in exchange for a bill of exchange) because, were they paid in cash now, it would be saved instead of spent. However, trade bills are specific each time to the use-values of the commodities traded, the persons who actually took part in the trade, and the date on which the deferred payment falls due. Banks, in this perspective, invented a special type of trade bill, called banknotes or *credit money*, in which all such specifications that accompany ordinary trade bills are blotted out, so that it could be used by any traders in any use-values and convertible at any time into cash (formerly into gold, now into legal tender of the state, called *fiat money*). Credit money (or non-cash means of purchase) originally took the form of banknotes issued independently by each commercial bank on its own responsibility, that is to say, to the extent that the bank stood ready to convert its banknotes into cash on demand, or to the extent that it had enough reserve of cash on hand to meet such demand.

6

For small country-banks to issue their own banknotes for circulation, while keeping safe some specie money (such as gold) in their own vault, was a costly business; thus, soon these functions were delegated to a somewhat larger bank in a city, which both issued common banknotes for itself and the group of correspondent small country-banks, and kept safe the specie money of its own and of the country-banks belonging to the group held in a common pool of reserve. By that time, a country-bank issued demand deposits instead of banknotes to its customers, and itself held a demand deposit with the city-bank, in which it kept its reserve money to back up the demand-deposit accounts that it had itself opened

for its own customers against withdrawals. To such a group of banks, this was of course a much more economical way of operating traditional banking. Soon the same relationship developed between the larger city-banks and the main bank of the nation, which became its central bank, so that today the note-issuing function is usually monopolized by the central bank of the nation, and all commercial banks create demand deposits (DDC), where, formerly, they used to issue their own banknotes. Under the present system, therefore, commercial banks retain the right to create demand deposits (called *credit money* as opposed to *fiat money*), when they discount trade bills for, or extend short-term loans to, their clients. Thus, apart from the state which always possesses the sovereign right to issue *fiat money*, the commercial banks which may issue *credit money* in the form of demand deposits are the only private firms empowered to issue money, convertible into the legal tender of the nation.

Minsky, in connection with his criticism of monetarism, affirms that the “money supply” is not a definitive quantity of money inasmuch as “any unit can create money, and the problem is how to make it accepted.”⁸ It is quite true that special-purpose, private, near monies can always be created and accepted, when need be, in appropriate contexts, and that these include not only the money substitutes used in financial markets that he has in mind, but also local monies, like green dollars issued by LETS (local employment and trading systems), that are introduced to activate the local economy. However, insofar as the legal-tender money is concerned, which has the power of compulsory circulation and so must always be “accepted,” the only entities empowered to issue it are, as he himself admits, the nation-state that issues *fiat money*, and the commercial banks that create *credit money*. There has been a proposal to abolish the creation of credit money by private banks, on the ground that it privileges banking against other members of the private sector by granting them a special subsidy in the form of seigniorage income.⁹ It, however, does not appear that even such a large subsidy sufficiently protects the “relationship banking,” which the commercial banks operate, from the more lucrative business of massive financial intermediation.

I believe that, so long as commodity-production continues, the need for credit money issued by commercial banks, whether for discounting trade-bills or for granting short-term loans to expedite the circulation of commodities, will not disappear. Even if it does for larger firms, it surely will not for the overwhelmingly many more small and medium-sized firms that support them from below. Unless commodities move by being purchased more easily at this level by means of bank credit, which activates “idle money to be,” arising necessarily and automatically in society’s reproduction-process, the latter system will remain insufficiently “lubricated” and will eventually begin squeaking due to the grating and abrading of parts at its very foundation or bottom layer. If private banks cannot respond to this need with their traditional “relationship banking,” a state-backed, public body may even have to be created to fill in the gap. The much touted “liberalization of finance” has demonstrated its diabolic feature in thus rewarding big and untrustworthy gamblers at the expense of small and diligent producers,

thereby sapping the basic health of finance and the capitalist economy. If there is need for a “re-regulation of finance,” it will have to begin by redressing this problem.

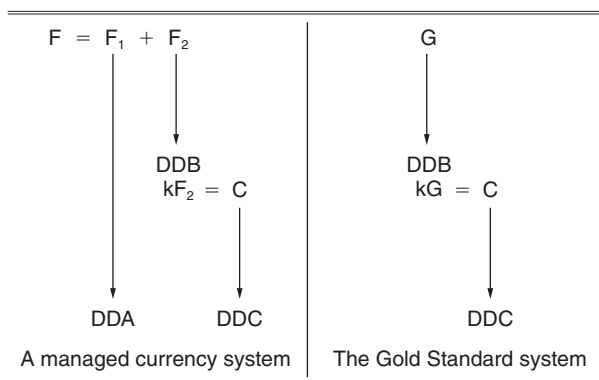
7

After the subprime crisis, the world economy seems to be gradually sliding into a deflationary mode, whereas the Japanese economy has unmistakably suffered from a protracted deflation in the past 20 years or so. When deflation really sets in, the so-called policies of zero interest rate (zир) and of quantitative easing (QE) have never worked to curb it as expected; they often make things worse. These are the policies that Ben Bernanke recommended to Japan in 2000,¹⁰ and he himself tried more recently in the United State with equally disappointing effect, which is only to be expected. If the rates of interest are held at unusually low levels and every one expects that situation to last, those loaded with idle balances will simply stick to them, without investing either in securities or in real terms, so that the economy will be stuck in the state of a “liquidity trap.” If the central bank resorts to open market operations with a view to building base money in the hands of banks, the latter will not respond by making loans, but will simply compete with the central bank in the buying operation, which will only confirm the downward pressure on interest rates. The capital market will then be suffused with idle cash as the bank multiplier fails to offset the effect of additional liquidity, while the real economy remains hopelessly starved for “active” cash. Bernanke, being a good student of Milton Friedman, seems to believe in the effectiveness of “helicopter money,” which the state (in concert with the Fed or the Bank of Japan) can nowadays print, if they so wish, in any desired amount. But the effect of helicopter money depends on *where* it is dropped.

Fables apart, there are only two places where helicopter money (i.e., newly issued fiat money) can descend: either into the demand-deposit account which the commercial banks hold at the central bank (DDB), or into the demand-deposit account which the national government holds at the same bank (DDA). In the first case, it will become “base money” upon which to create credit money, *if the commercial banks so wish*, in the demand deposits that the public holds at a commercial bank (DDC); however, in a deflationary condition with zир or QE, banks refuse to “create credit” and lend to the public, simply because it is not rewarding and, with their equity tending to be already precarious under debt deflation, banks may only be asking for trouble by stepping up lending. Only in the second case can the national government fiscally spend the helicopter money as “active” cash, i.e., as money to buy commodities. In this case, it will create incomes more than itself (with a multiplier effect that is greater than one). Many years ago, commenting on the rabid inflation that plagued Japan immediately after World War II, Uno described the situation as one in which there was abundance of currency (meaning active money) and a shortage of funds (meaning idle money) simultaneously. The shortage of funds then prevented capital from being

formed, with which more goods could have been produced; on the other hand, there were no good ways to soak up active money already flooding the market. That was what made the control of inflation difficult. He did not repeat the mere banality that “too much money was chasing too few goods.” Uno’s students should realize at once that the deflation that confronts us today is due to the shortage of *active* money, even though (or because) an enormous quantity of *idle* money (held to satisfy the speculative motive) is rampant. The reason why neither zirp nor QE, with the compliments of Mr. Bernanke, worked to stop deflation is that he failed to distinguish between the two sorts of money.

Helicopter money may be a useful metaphor to focus our mind on what “fiat money and the managed currency system” mean as opposed to “gold money and the gold standard system.” Now that gold is officially “de-monetized,” no country operates a gold standard system, even though the economist’s thinking may still not be fully liberated from the illusion of specie money. In a genuine capitalist economy, *commodity-money*, such as gold, was automatically generated from out of commodity exchanges. But, today, no such commodity-money is present; it is the monetary authorities of each sovereign nation that issue *fiat money* (F), which is the legal tender of the nation. The idea that a decree (or a fiat) of the nation-state “creates money” may, however, be too offensive for the American conservatives; thus, the more innocuous fable of an unidentified “helicopter” suddenly appearing in the sky to benevolently disperse greenbacks (“like manna from heaven”) may be a less upsetting first approximation. Milton Friedman who first used this metaphor,¹¹ being a radical monetarist, however, took it for granted that all these greenbacks would be used as “active” money, i.e., money to purchase commodities. Yet, money can also be held as a store of value or “idle” balances. Therefore, fiat money issued by the state (F) should also be divided into the two components,¹² the part of it that will be directly spent (F_1) and the other part which will be held in reserve by the commercial banks (F_2). If $F = F_1 + F_2$ is helicopter money, we may imagine that the F_1 -part is dropped into the demand-deposit account that the Government holds with the central bank (DDA), and will be spent fiscally through the national budget as approved by Parliament, whereas the F_2 -part will be dropped into the demand-deposit account that the commercial banks hold with the central bank (DDB), and will not be spent until credit money is created for the public on that basis, as $C = kF_2$ (DDC), where k is a bank-multiplier, which must not exceed the legal cash-reserve ratio ($k^* \geq k$). This “bank multiplier,” the reciprocal of which is the “velocity of monetary circulation,” must not be confused with the Keynesian multiplier, which is the reciprocal of the propensity to save. In this way, one can readily see that the bank multiplier acts as a converter of idle fiat money (held in reserve) into active credit money (ready to be spent). Yet the “activation” of F_2 into C (or DDC) is left to the discretion of the commercial banks, which may not always choose to be “fully loaned-up,” contrary to the wishes of the monetarists. Under the commodity-money standard system, an “optimum supply of money” for the economy is supposed to be achieved automatically. Under a managed currency system it must be approximated policy-wise.



DDA = Demand deposit account that the State holds at the Central Bank;
 DDB = Demand deposit account that the commercial banks hold at the Central Bank;
 DDC = Demand deposit account that the public holds at commercial banks;
 G = specie money such as gold;
 F = fiat money (or helicopter money);
 F_1 = fiat money that the state can withdraw from DDA to spend fiscally;
 F_2 = fiat money held in DDB as reserve money of the commercial banks;
 $C = kF_2$ = credit money that the commercial banks create in DDC;
 $k^* \geq k$ = bank multiplier which must not exceed the official cash reserve ratio (k^*).

Figure 11.1 Comparison of managed currency system and gold standard system.

Notes

DDA = Demand deposit account that the State holds at the Central Bank; DDB = Demand deposit account that the commercial banks hold at the Central Bank; DDC = Demand deposit account that the public holds at commercial banks; G = specie money such as gold; F = fiat money (or helicopter money); F_1 = fiat money that the state can withdraw from DDA to spend fiscally; F_2 = fiat money held in DDB as reserve money of the commercial banks; $C = kF_2$ = credit money that the commercial banks create in DDC; $k^* \geq k$ = bank multiplier which must not exceed the official cash reserve ratio (k^*).

8

There is an important message in the last statement. Fiat money (F) comes in two forms (F_1 and F_2). The literature referred to above in section 6 recommends the abolition of commercial banking, with its function of activating F_2 into C, on the ground that it receives an unwarranted subsidy from the state in the form of seignorage income. From what has been stated above, it should be clear that I have doubts about the pertinence of that recommendation. However, that document has the signal merit of highlighting the important role that F_1 plays under the managed currency system, by going so far as to say that F_1 alone is sufficient to determine the money supply of the nation. The currently orthodox view is that the question of the “money supply” should be left entirely to the banking community (the central bank and the banking system under its control), and that the politics of the state (or government) must not interfere with it. This view also

implies that the fiscal and monetary authorities are, and must remain, separate from each other. It seems to me that such a stance *carries over an old pre-conception from the age of the gold standard*. When gold was the “money of the world” and moved freely across national borders, there was, in principle, no need for the state to intervene in monetary affairs; for “money and banking” managed themselves, and provided the capitalist economy with a near “optimum supply of money” in the long run, if not always.¹³ However, “commodity-money” whether gold or otherwise, has long been replaced by fiat money, meaning that an “optimum money supply” does not obtain automatically. It must, instead, be sought by policy, if in a rough and ready fashion; and, to that end, we need to learn how best to handle both F_1 and F_2 appropriately.

First, I would like to clear up some ambiguity surrounding the question of F_2 as helicopter money. As is well known, it is today called “base money” or “high-powered money,” and its amount is regulated mainly by the central bank’s “open market operations.” In other words, “base money” is increased, when the central bank purchases some high-grade debts, such as treasury bills, from the market in return for its own liabilities (be they in the form of banknotes or of demand deposits). Thus, it appears as though the amount of F_2 is entirely determined by the discretion of the central bank and by it alone, with no involvement of the state in the process. It is true that, under the gold standard, the central bank could safely issue its liabilities only to the extent that it could honour their convertibility into specie on demand, and the amount of specie in its vault did not depend on the state’s will. Normally, the central bank rediscounted highly accredited bills through its window, and made sure that it could meet demand for cash at any moment. When specie money disappears, however, the central bank is freed from the gold constraint. Under a managed currency system, central banknotes are legal tenders, and so are all demand deposits (DDA, DDB, and DDC) from which the owner of the account can withdraw at any time any amount of money in the form of central banknotes. Yet this can make sense only if central banknotes *are equivalent to the paper money issued by the state*, which further means that there is an implicit accord between the state and the central bank to the effect that the former delegates to the latter *the power of determining the amount of F_2 on behalf of the latter*. This is the reason why we can legitimately regard F_2 to be *fiat* or helicopter money dropped into DDB.

As for F_1 as helicopter money dropped into DDA, there is less mystery. But this important instrument of policy is often ignored, *since under the gold standard it was entirely absent*. But, as already mentioned above, the process of $C = kF_2$, given F_2 , may not generate enough active money, C , that the economy requires, since the “creation of credit” in the form of DDC is entirely left to the free choice of profit-seeking private enterprises. If this sort of situation occurs under the gold standard, there is, in principle, no way out, short of easy (or automatic) expansion of the gold producing sector within the country. The economy must bear stringent deflation and let prices fall sufficiently until gold, lured by lower prices or higher interest rates than elsewhere, automatically flows back in sufficient amounts to the vault of the central bank. Indeed, it was precisely for

that reason that the gold standard collapsed and gave way to a managed currency system. Yet this unfamiliar instrument, F_1 , has been tenaciously resisted because it introduces state-power too blatantly; and, to many, the idea of the state “printing money” sounds tawdry and somehow repugnant! However, it is *not* necessary for the government to actually turn to its odious printing machine; for the central bank has already printed (and is ready to print) enough of its notes, into which all existing demand deposits (DDA, DDB, and DDC) are convertible, and these notes circulate already as the legal tender of the nation. It is not necessary to print another set of government paper money and let it circulate side by side with the central banknotes already in circulation. What matters, in this system, is that all fiat money issued by the state takes the form of “liabilities of the central bank,” and so F_1 , created in DDA and convertible at will into central bank liabilities, must also be backed up by an equal value of credibly high-grade assets, just as F_2 was. That, however, can easily be arranged by handing to the central bank an official certificate signed and stamped by the state, granting it the right to create fiat money F_1 in DDA in the amount that the state specifies in the certificate. That should be an asset of a sufficiently high-grade that the central bank can use it to back up its liability. If that is unappealing, the preferred alternative might be that the central bank “purchases” from the state (or underwrites) its “perpetual bonds (like consols) bearing no interest,”¹⁴ instead of ordinary national bonds, corresponding to the value of F_1 . In any case, if specie money must be replaced by *fiat money* (and the gold standard by a managed currency system), it is necessary that this new instrument of monetary policy, F_1 , must be explicitly recognized. This raises, however, the new question as to whether this new instrument is one of monetary policy or is it rather that of fiscal policy?

9

For example, another anti-deflationary measure that Bernanke recommended to the BOJ in 2000 was a depreciation of the yen.¹⁵ He quite rightly thought that the BOJ, if willing, could supply as much yen as would be necessary with which to buy dollars and other foreign currencies and to bring down the yen’s value to a desired level. However, that would have been an “unsterilized” intervention, which, by that time, the Japanese authorities had somehow learned to regard as a taboo (perhaps to avoid being accused of “dirty floating” of the yen). On the other hand, with regard to undertaking a “sterilized” intervention, i.e., intervention in foreign exchange markets, while keeping the existing level of the money supply unchanged in Japan, the fiscal authorities decided that they did not have enough resources available for the purpose. At the present time, however, as the climate of deflation deepens worldwide, the yen is once again appreciating and, this time, to a level that practically dooms existing Japanese industry. To bring its value down to a more reasonable level, an “unsterilized intervention” may still be a credible option; and that will involve dropping the necessary amount of helicopter money (F_1) into DDA for fiscal use. The question then is whether or not “buying foreign exchange in the market” with the

newly created fiat money is a top fiscal priority. It may not be, especially if those to whom F_1 is paid eventually will save it and hold it idle (or use it simply to pay off their past debts) rather than spending it on commodities. I also believe that there are many more crying needs at present, especially in the regions of the country devastated in March 2011 by the severe earthquake, tsunami, and the nuclear disaster, for fiscal money to be urgently spent, be it for rescue, reconstruction, rehabilitation or a new departure. If, for instance, an F_1 of about 50–100 trillion yen is spent fiscally without delay, that will immediately generate incomes and employment to compensate for and enhance the ones destroyed, either over the past two decades or more recently, so as to reflate the national economy vigorously with no inflation,¹⁶ and will also have the by-effect of depreciating the yen considerably (without the monetary authority being accused of intervening in the foreign exchange market).

Yet, to finance any part of the national budget by “printing money,” which the creation of fiat money F_1 essentially is, has been condemned as something so “underhanded” or “depraved” that no civilized government should even think of. It is universally thought of as a pathetic lack of sound fiscal discipline which only foretells an uncontrollable hyperinflation as due punishment. This completely groundless superstition, as already mentioned, is a mere vestige of the now demised gold standard system. Japan’s deflationary gap today is estimated to go up to 400 trillion yen,¹⁷ which, for its GDP of roughly 500 trillion yen, may, at first sight, strike one as unbelievable. Yet, in the past 20 years or so, the Japanese GDP stagnated and hardly grew, while the average performance of other economies in the world roughly doubled their scale. It follows then that, if the Japanese economy performed only as well as the average, its GDP would now be in the range of 900–1,000 trillion yen. In that light, the deflationary gap of 400 trillion yen cannot easily be dismissed as a fantasy. It must rather be a fairly accurate measure of the national income needlessly lost to the Japanese people, because of the misguided economic policy relentlessly pursued by the powers that be in this country, obsessed by anachronistic teachings and riddled by fear of the unknown.

Japan has been paralyzed in the stalemate of “budgetary crisis” for a long time, unable to resort to any effective macro policy action, and thus to extricate itself from deflationary spiral and debt deflation, supposedly *for want of fiscal revenues*. Once caught in this quagmire, no one can break away from it by means other than the recourse to the method of “helicopter money F_1 ” as outlined above, whether the authorities and the public in their conventionally bound thinking realize it or not. More recently, both Europe and the United States also seem to be on the verge of being trapped in a similar bind of “no fiscal revenue, no fiscal action.” It is all the more urgent, therefore, for us to surmount the mesmerizing spell of neoliberal economics, and to wake up to the need to firmly grasp what *fiat money and the managed currency system*, which have supplanted *gold and the gold standard*, mean to us. For otherwise, the chance of us repeating the tragedies of the twentieth century will be imminent. Recall that, after the end of the World War I, by far the greatest majority of political, business, and intellectual leaders were firmly convinced that the first priority for the

reconstruction of the war-devastated world economy was the restoration of the international gold standard system as it had operated in prewar days, completely unaware of the fact that the war had demolished all the material conditions that would make such a pious dream come true. The result was the Great Depression and then the World War II. If, under the grip of the neoliberal pundits, we still cannot wake up from the smug dream of “capitalism forever,” allowing ourselves to be misguided by the will-o’-the-wisp of the gold standard, we are certainly heading for a disaster of untold magnitude. However, *if capitalism is in disintegration, human society need not be*. We only have to make the right choice, which requires that we begin to envisage and to develop a thriving human society *beyond* capitalism, capitalism here meaning the self-conclusive and self-governing commodity-economy. To overcome the impending peril of the deflationary spiral and debt deflation, by aggressively applying the method of “helicopter money F_1 ” so as to pump “active money” into circulation, may well be the first decisive step in transition towards “another historical society” which will replace capitalism.^{18,19}

Notes

- 1 An example of “mystification” appears already in the title. I have considerable difficulty in translating his wording *shihon-shugi no hatten* (literally into “the development of capitalism”), since his main claim in the memorandum is that capitalism fails to mark a new “developmental stage” after World War I. What he must really have meant by *hatten* here was more like the “transformation, transfiguration, even aging or decline” of capitalism.
- 2 The emphasis here was on the economizing of “idle money to be” rather than on “idle money saved from already earned cash income.” The latter arose mostly in the form of “depreciation funds” or “accumulation funds,” biding time until they grew into a sufficient size appropriate for spending on capital goods. However, under capitalism proper, idle funds saved out of already earned surplus-value income were scarce, and did not linger long before being converted into real capital. Even the savings of the landowning class mainly funded wars and social capital, such that Malthusian underconsumption did not really threaten the capitalism of the mid nineteenth century with significant deflationary pressure. The problem of unproductive “*rentier* incomes” which led to more savings than could be effectively invested (even abroad) arose only after World War I, that is, in the *disintegrating phase* of capitalism. On the other hand, the economizing of “idle money to be” by means of banks’ “credit creation” was an essential feature of capitalism proper, facilitating the smooth circulation of commodities within the reproduction-process of society. In it there arose habitually a number of traders who, in selling their commodities, did not need to insist on receiving cash immediately because, had they done so, they would have saved rather than spent it. They may be deemed to have been in possession of “idle money to be.” Not to take advantage of such existing slack or latitude that arose automatically in the social reproduction-process, and thus to fail to sell commodities which could otherwise have been sold, would be contrary to commodity-economic rationality. The purpose of bank-credit was to find the most creditworthy traders and to provide them with active (credit) money to expedite the circulation of commodities.
- 3 On the nature of “money lending capital,” see Sekine (1997), Vol. I, pp. 96–104.
- 4 Hyman P. Minsky (2008).
- 5 Sekine (1997), Vol. I, pp. 217–220.

6 Interestingly, Minsky (2008, p. 222) himself writes:

Capitalism may very well work best when capital assets are cheap and simple. Instability may very well be exacerbated as production becomes more capital-intensive and as the relative cost and gestation periods of investment goods increase, for in such a capitalist economy financing arrangements are likely to appear in which debtors pay debts not with cash derived from income production, but with cash obtained by issuing debt.

This completely agrees with our (Unoist) view that capitalism worked best (and was closest to its theoretical image) in its liberal stage of development, when leading use-values (such as cotton goods) were readily commodifiable and representative capital-goods (like spinning machines) were both cheap and simple. “Complex and elaborate” durable goods which are at the core of the present-day world economy in both production and consumption are surely much less easily commodifiable than the predominant use-values in the nineteenth century. This bears on the fact that even very simple fixed capital of the prime age of British cotton industry could cause the accumulation-process of capital to become cyclical, and thus constituted the limit of the theory of the circular flow of the capitalist economy (that of the reproduction-schemes). See Sekine (1997), Vol. I, pp. 206–215.

7 My argument in this and following several sections closely echoes points made by Professor Jan Kregel in another context (Kregel 2009).

8 Minsky 2008, pp. 78–79.

9 Huber and Robertson (2000, p. 89) estimate the seigniorage income earned by the banks at \$37.3 billion for the United States, and 1.85 trillion yen for Japan in 1998.

10 Bernanke 2000.

11 Friedman 1969, p. 4.

12 See the left-hand panel of Figure 11.1.

13 See the right-hand panel of Figure 11.1.

14 The perpetual bonds bearing no interest issued by the state exempt the latter from repayment and interest payment, so it is equivalent to a decree (or fiat) of the state simply bidding the central bank to create fiat money on its behalf (though in the form of the liability of the central bank). They can, however, be marketed with some sweetener, such as the exemption of their holder from inheritance tax up to their value, which may have the advantage of absorbing some idle funds and thus relieving some deflationary pressure.

15 Bernanke 2000, pp. 160–162.

16 The current level of the money supply in Japan is about $M_2=820$ trillion yen, and $M_3=1,105$ trillion yen, so that, although $F_1=100$ trillion yen is quite substantial in comparison with the normal size of the general-account budget of the Japanese government, it is not an unrealistic way to deal with the national disaster of the current magnitude. If inflation occurs subsequent to this move, which is always possible for any number of contingent reasons, its cause cannot be ascribed to this particular action.

17 See Niwa (2000, 2003, 2006). More recently, Professor Niwa applied the same method to estimate that the potential GDP in the 1990 [2000]-price for the year 2008 [2010] amounted to about 979 [1020] trillion yen, which, in comparison to the actually recorded figure of GDP, in the same 1990 [2000]-price, of 537 [545] trillion yen, shows the gap equal to 442 [575] trillion yen, again in terms of the 1990 [2000] price. The figures in the square brackets have been made available to me more recently by Professor Niwa.

18 This is like administering a blood transfusion when the patient is about to die of intense anemia. Just as the religious fundamentalist refuses to save lives that could be saved, the market fundamentalist prohibits the fiscal supply of active money to save the economy because it smacks of socialism!

- 19 There are two important themes that could not be treated in this chapter. One has to do with the international dimension of the managed currency system, which amounts to how to institute and manage an SDR-like cocktail of major currencies as the key international currency. The other has to do with how to institute and manage a national body which wisely determines and oversees the fiscal-monetary priorities of the nation. These are both questions of administration rather than of knowledge. If the former is beyond human wisdom even though the latter is not, human society will be destined to perish with capitalism, and that will be soon.

Bibliography

- Bernanke, Ben S. (2000) "Japanese Monetary Policy: A Case of Self-Induced Paralysis?" in Ryoichi Mikitani and Adam S. Posen (eds) *Japan's Financial Crisis and its Parallels to U.S. Experience*, Institute for International Economics, Special Report 13, Washington D.C., pp. 149–166.
- Friedman, Milton (1969) *The Optimum Quantity of Money and Other Essays*, Aldine Publishing.
- Huber, Joseph and Robertson, James (2000) *Creating New Money: A Monetary Reform for the Information Age*, New Economics Foundation, London.
- Kregel, Jan (2009) "Why Don't Bailouts Work? Design of a New Financial System versus a Return to Normalcy," *Cambridge Journal of Economics*, Vol. 33, pp. 653–663.
- Minsky, Hyman P. (2008) *Stabilizing an Unstable Economy*, McGraw Hill.
- Niwa, Haruki (2000) "The Recent Deflationary Gap in Japan: A Quantitative Measurement," *Journal of Asian Economics*, Vol. 11, pp. 245–258.
- Niwa, Haruki (2003) "Deflationary Gap in Japan, 1970–2000: A Quantitative Measurement," *Journal of Economic Policy Studies*, Vol. 1, No. 1–2, pp. 79–101.
- Niwa, Haruki (2006) "Deflationary Gap in the Japanese Economy, 1970–2004," Measurement of Its Scale," in *Foundation of Economic Policies according to New Keynesian Orthodoxy*, Tokyo (in Japanese).
- Ôuchi, Tsutomu (1971) *A Study of State Monopoly Capitalism*, Tokyo (in Japanese).
- Sekine, Thomas T. (1997) *An Outline of the Dialectic of Capital*, 2 vols, Macmillan Press.
- Takumi, Mitsuhiro (1998) *Economic Recessions that Harken back to the Great Depression*, Tokyo (in Japanese).
- Uno, Kôzô (1971) "On the Development of Capitalism after the First World War," appended to his *Keizai-Seisakuron* (The Types of Economic Policies under Capitalism), Tokyo.

Part III

Global reconfiguration of capitalism

12 Can the U.S. economy escape the law of gravity?

A Minsky–Kalecki approach to the crisis of neoliberalism

Gary A. Dymski

[European] capital markets cannot equal that of the US in breadth, liquidity, and competitiveness in the foreseeable future.

Emile Despres, Charles P. Kindleberger, and Walter Salant (1966, p. 528)

It is tempting to look at the market as an impartial arbiter . . . But balancing the requirements of a stable international system against the desirability of retaining freedom of action for national policy, a number of countries, including the US, opted for the latter.

Paul Volcker (1979, p. 4)

Introduction

Steady U.S. macroeconomic growth was the one constant during the tumultuous 1990s, a decade that saw Japan’s momentum-less stagnation, the Mexican financial crisis of 1994–95, the investment boom and financial crisis in East Asia, and the Brazilian and Russian devaluations and Long-Term Investment meltdown of 1998–99. In the early 2000s, the U.S. experienced a recession. Interest rate cuts – later labelled the Greenspan “put” – followed. These reversed the drop-off in housing starts and resale prices, and led to renewed growth. In the early 2000s, it seemed that the U.S. economy had completely evaded any law of economic gravity. Explaining this situation was the challenge I took on in my address before the 49th annual meeting of the Japanese Society of Political Economy (JSPE) in October 2001. This chapter extends the argument I advanced in the JSPE conference.

So why did the U.S. economy avoid the law of economic gravity in the 1990s and early 2000s, before crashing to earth? This paper argues that the U.S. avoided the law of economic gravity, as long as it did, because the dynamics of the U.S. business cycle have changed: from the 1980s and until the 2008 crisis, U.S. business-cycle expansions have been longer than in the past, and have resulted in less cumulative growth.¹ This essay uses ideas developed by two giants of twentieth-century economics, Hyman Minsky and Michael Kalecki, to answer this question. These two figures had well developed ideas about the

sources of cyclical fluctuations, emphasizing respectively financial instability and labor and capital militancy. Both focused on the sources of growth and stagnation in advanced capitalist economies. Both highlight crucial elements in contemporary dynamics. At the same time, the ideas of both are intentionally incomplete. Kalecki was acutely aware of the importance of monetary factors in cyclical fluctuations, but deemphasized these in his formal work (Dymski, 1996a). Conversely, Minsky was aware of the importance of labor-market dynamics, but emphasized financial factors in his theoretical work.²

Thus, the silence of one is the focal point of the other. Many economists have taken up the challenge of combining these two authors' insights in theoretical models incorporating financial and labor dynamics.³ This chapter takes a largely empirical approach, exploring the postwar behavior of the U.S. macroeconomy. These two authors' ideas about how U.S. business cycles have evolved are shown to be accurate for the postwar period up until the 1980s; beyond that, their ideas about macroeconomic dynamics, which implicitly focus on a *national economy* perspective, must be adjusted to take into account the impact of sustained global imbalances.

In most cases, a nation's cross-border imbalances are typically contained, and net out over time. The situation of the U.S. economy in the last 30 years is different. During this period, the U.S. built up a trade deficit – and corresponding capital-account surplus – of unprecedented size. This huge flow asymmetry became a fundamental feature of the global economic structure. This large and sustained cross-border imbalance cannot be explained in purely economic terms. The persistence of this imbalance rests on something deeper – and as it happens, another imbalance.

This further imbalance is the U.S.'s hegemony in the global political-economic system. The U.S. has held global economic hegemony since the establishment of the Bretton Woods system. However, the character of this hegemonic power has changed: until 1973, it was rooted in the underwriting of a fixed-exchange rate currency system; thereafter, it has been linked to the size and capacity of the U.S.'s economy, military establishment and financial markets. The period from 1973 until the 2008 crash, in turn, was an era of great instability and recurrent crashes. The U.S.'s "safe harbor" role gained unprecedented importance; for in those years, financial deregulation and relaxed controls on cross-border movements made it feasible for those with wealth to reallocate their wealth portfolios globally.⁴ The period during which the U.S. was a "safe harbor" magnet for global wealth largely corresponded with a period in which the trading capacity of many of the United States' national partners expanded (while the restructuring – that is, "hollowing out" – of American manufacturing and agriculture has been completed). So a global macroeconomic imbalance, paralleling the deeper global power imbalance, arose on the basis of a sustained exchange of competitively priced goods for the promise of economic security.

This global imbalance was the root cause of the change in the character and timing of U.S. cyclical fluctuations. When confidence in the "safe harbor" character of U.S. financial and asset markets was shaken by emerging problems in

subprime lending in 2006, then further hurt by the 2007 collapse of subprime financing markets and then the 2008 failure of major investment banks due to their subprime exposures, the long period of defying economic gravity came to an end for the U.S.: lost lending capacity, equity losses, and the collapse of the housing bubble punctured both consumption and investment spending, and a new period of U.S. macroeconomic stagnation was at hand. In sum, understanding the current situation requires both using these theorists' ideas and also adapting them to these new circumstances.

The cyclical models of Minsky and Kalecki

The “Keynesian Revolution” in economics shifted the focus of national economic policy away from microeconomic market regulation and toward the control of aggregate behavior. Keynes argued that modern capitalist societies can block the cyclical dynamics that generate recurrent high unemployment and asset price collapses. In very different ways, Minsky and Kalecki challenged Keynes' (willfully) optimistic view that the business cycle is a thing of the past. Minsky considers the cyclical implications of capital-market and financial structures; Kalecki, in his “full employment” article, focuses on labor extraction.

The Minsky Financial-Instability Model

Hyman Minsky argues in a series of papers and books published primarily in the 1970s and 1980s that advanced capitalist economies are subject to cyclical variability due to financial instability.⁵ The precondition for financial instability is a set of financing relationships between surplus units with excess resources and deficit units which seek to spend beyond their available means. These arrangements are fragile in a dual sense: borrowers' expectations about future income may be disappointed; and lenders may encounter difficulties in supporting their financing commitments. So spending supported by financing gives rise, respectively, to default and liquidity risk. Intermediaries may ameliorate these risks for lenders or borrowers, but only by bearing them or passing them on to third parties. The level of these risks, and hence the degree of financial fragility depends on three factors: the terms and conditions of financing; the riskiness of the projects being financed; and the balance-sheet obligations of the borrower units.

Financing expenditures with debt increases the demand for aggregate output, but comes at a cost: the economy becomes more fragile as financial commitments rise relative to income flows. The range of income outcomes that permits deficit units to meet repayment commitments shrinks as leverage (the ratio of debt to income) grows – both for individual units and for the economy as a whole. Financial instability tends to rise when an increasing number of households spend beyond their means. When borrowers cannot meet repayment demands, cash-flow disruptions spread to other units' balance sheets, and portions of the economy's asset-liability structure is jeopardized. Resale markets for assets – both financial

and housing markets – can worsen mismatches between cash-flow obligations and debt levels: anticipations of rising asset prices encourage the financing of more asset purchases and expenditures, increasing financial risk.

Minsky argued that expectations, debt-financed expenditures, and financial fragility evolve systematically over the business cycle. Initially, balance sheets are robust because assets are conservatively priced and debt commitments modest. The rapid pace of output growth eventually exhausts industrial capacity and forces firms to take on debt to expand production. Meanwhile, expectations turn euphoric and asset prices rise. The combination of euphoric expectations and competitive pressure drives up debt/income ratios and asset prices simultaneously; leverage is rewarded. Asset prices rise and debt burdens grow until finally liability commitments outpace asset returns. So an economy becomes more financially fragile as expansion proceeds; finally a downturn is induced. If debt loads grow too much or euphoric expectations break down, a period of financial instability can begin. If asset values fall and deficit units are unable to service their debt loads, sales of assets in markets with few buyers may be triggered, leading to a debt-deflation cycle. The possibility of a systemic crash is the Minsky crisis.

Kalecki's "Political Business Cycle" Model

The central concern in Kalecki's writings – including his early Polish-language essays anticipating Keynes' principle of aggregate demand – was the problem of investment and employment fluctuations in capitalist economies. Kalecki's formal models (Kalecki 1954) identified several sources of fluctuation, including variable price-markup ratios and accelerator effects.

It was, however, in one of his non-technical papers, "The Political Economy of Full Employment," that Kalecki developed the argument that sustained full employment is impossible in advanced capitalist societies. His pessimism stems, in effect, from the dependence of capitalist accumulation on Marxian exploitation. He argues first that if unemployment falls too low, workers' effort in production will decline, reducing the profit rate. So as unemployment falls, worker effort may diminish, and capitalists may feel coerced into providing jobs under terms and conditions that compromise profitability. In effect, profit levels are subject to a labor-effort/output tradeoff. This danger can be averted only if the economy is operated at sub-full-employment levels; but a low-output state – stagnation – also diminishes profits. Continued capitalist accumulation is especially threatened if workers unite in social democratic parties that demand full employment as a political outcome. For then the very legitimacy of the powers and rights of the owners of the means of production can be subjected to fundamental challenges. Capitalists' loss of control leads them to capital strike and/or reduced investment, initiating the downturn. In effect, there is an upper limit to capital accumulation.

There is also effectively a lower limit on growth. High unemployment levels are beneficial in some respects for capitalists: high labor effort is assured, wages

are low, and their control over the production process is guaranteed. Low rates of capacity utilization may be problematic, especially for firms that have significant financial leverage. Another problem arises because of the influence of labor in the political sphere. If unemployment rises beyond some point, political agitation by the working class might trigger government counter-cyclical action.⁶

This leads to the idea of a political business cycle, wherein macroeconomic growth fluctuates between these upper and lower limit points. As unemployment falls during the expansion, capitalists will use their power to withhold investment to regain control over government policies. In turn, downturn is checked when unemployment leads to government counter-cyclical action and low wages lead capitalists to reinitiate investment expenditures.

From the big-government era to neoliberal capitalism

Minsky argues that there was a fundamental transformation in the dynamics of capitalism because of governmental policy reforms made during the Depression. He calls the period before the Depression “small-government capitalism.” In that era, financial instability was resolved through massive job loss and business failure: what Marx called the “slaughter of capital” also served as a labor-disciplining device. The best known instance of this instability was the stock market crash that preceded the Great Depression. But the Depression led to extensive new financial regulation and to the Federal Reserve’s consolidation of its “lender of last resort” role. Government spending programs that spread fiscal benefits broadly (though not comprehensively) across the nation stabilized aggregate demand; the subsequent mobilization for World War II had a similar effect.

These changes brought on the big government era. Cyclical dynamics changed dramatically. Price deflation was checked by the interventions of the Federal Reserve and by counter-cyclical government expenditures. Instead, an inflationary bias was built into the cyclical dynamic (as a consequence of federal monetary and fiscal policy interventions). The cyclical occurrence of excessive levels of business failure, bank failure, and unemployment rates was eliminated. In effect, a tendency toward price inflation was the price of an interventionist state that “stabilized the unstable economy” (as Minsky’s 1986 book put it).

Minsky’s fundamental policy point was that big-government capitalism could transform the dynamics of financial instability. The collapse of asset prices is blocked before it turns negative. Investment too is stabilized at a low but positive level. Debt/income levels rise both cyclically and secularly. Balance sheets are not thoroughly “cleaned” through widespread business failures in the downturn, as in the small-government period; so debt/income ratios build up over time.

Dymski and Pollin (1994) conducted an empirical investigation of Minsky’s notion that the “small” and “big” government eras had different cyclical dynamics.⁷ Dymski (2002, 2009) then extended this original study. Dymski and Pollin (1994) established that cyclical trajectories in the “small government” era (the

years prior to the 1930s) differed systematically from those in the “big government” era (the 1930s through the end of the 1970s), in the ways dramatized by Minsky: debt-deflation occurred systematically in the “small government” era, with deep and prolonged downturns in economic growth and employment; but the “big government” era was characterized by shorter and more moderate downturns, and a shift from deflationary to inflationary bias. The “big government” era also saw higher average real GDP growth, a lower real interest rate, and vastly reduced bank and business failure rates. Dymski and Pollin (1994) found that 1980s’ business cycle behavior reverted to the “small government” era in some ways – high real interest rate and high rates of business and bank failure; but not in others – price inflation was high. It wasn’t clear whether cyclical trajectories were returning to their earlier pattern or whether, a new pattern was emerging. Dymski (2002) added 1990s’ cyclical data, and found that their trajectory closely resembled that of the 1980s, suggesting that the U.S. economy had entered a new phase in the 1980s.⁸ Dymski (2009) found that 2000s’ cyclical data (through the end of 2007) also fit into a “neoliberal era” pattern.

The defining characteristics of this era are the systematic deregulation of financial intermediation and financial flows, relatively open trade flows, and a shift in government’s role. To borrow Kregel’s (1998) terminology, the “big government” role of counter-cyclical spending has largely disappeared; replacing it are government’s “big bank” mechanisms for stabilizing the economy (the central bank’s lender of last resort function and its use of interest rates to moderate inflationary and deflationary tendencies). The “capital-labor accord” that was implicitly struck during the Golden Age period is abrogated. Labor’s right to organize, to protect its real wages from erosion, and to negotiate directly with firm owners and managers is challenged; similarly, the use of government expenditures to support the unemployed, the infirm, and the elderly is increasingly restricted.

Government is no longer envisioned as a guarantor or provider of security for individuals; instead, its more modest role is to police market relations, to insure that the rules of the game are fair.⁹ Indeed, authors that discuss the new global regime usually take as their theme the surrender of government control to market forces. The possibility of capital flight or disinvestment (or both) serves as a check on any government’s capacity to protect its citizens’ living standards or its firms’ cash flows.

The shift from the “big government” to “neoliberal” era can be seen in the shifting cyclical dynamics over these years. In these pages, we do not reproduce the empirical cyclical data shown in Dymski and Pollin (1994), Dymski (2002), or Dymski (2009), which used annual data. Instead we examine quarterly data that explores this growing rift in cyclical behaviour.

Minsky’s guiding notions – that big-government interventions would stabilize the economy, at the price of higher price inflation – can be evaluated for the period from the 1950s forward with the help of Figures 12.1A–12.1B and 12.2A–12.2B. The behavior of real GDP in longer postwar cyclical expansions is shown in Figure 12.1A. The most rapid growth from trough to peak occurred

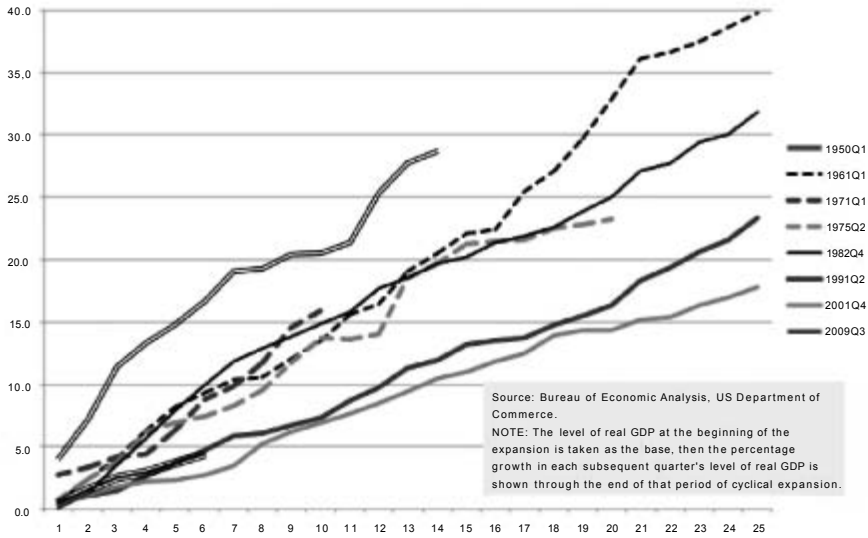


Figure 12.1A Quarterly U.S. real GDP growth in longer post-war expansions, trough to peak (truncated at 25 quarters) (source: Bureau of Economic Analysis, U.S. Department of Commerce).

Note

The level of real GDP at the beginning of the expansion is taken as the base, then the percentage growth in each subsequent quarter's level of real GDP is shown through the end of that period of cyclical expansion.

in the 1950s. The pace of real GDP growth was more moderate in the long 1960s' expansion and in the two 1970s' expansions. The latter two were relatively short, truncated by supply-side shocks and other pressures. The first long expansion of the 1980s closely follows the growth trajectories of the 1970s. Thereafter, however, GDP growth moderates substantially. The long 1990s' and 2000s' expansions unfolded at just over half the pace of earlier expansion periods. Table 12.1B examines the cyclical behavior of real GDP during recessionary periods. Here it can be seen that the cyclical downturns in the 1950s and in the neoliberal years were sharper; in the 1960s and 1970s, GDP shrinkage in periods of contraction was relatively moderate, not sharp.

The behavior of prices is, in turn, explored in Figures 12.2A and 12.2B. In postwar cyclical expansions, Figure 12.2A shows that 1950s' inflationary pressure was relatively strong. This was followed by a decade of moderate price inflation (assisted by the effects of an increasingly overvalued U.S. dollar). However, in the three 1970s' and early 1980s' expansions, inflationary pressure was unleashed; among these three expansions, the explosive growth of prices in the later 1970s stands out. The 1990s', 2000s', and current (2009-) expansions, by contrast, show that price inflation has again been tamed. GDP-deflator shifts in cyclical contractions resemble the broad pattern observed for

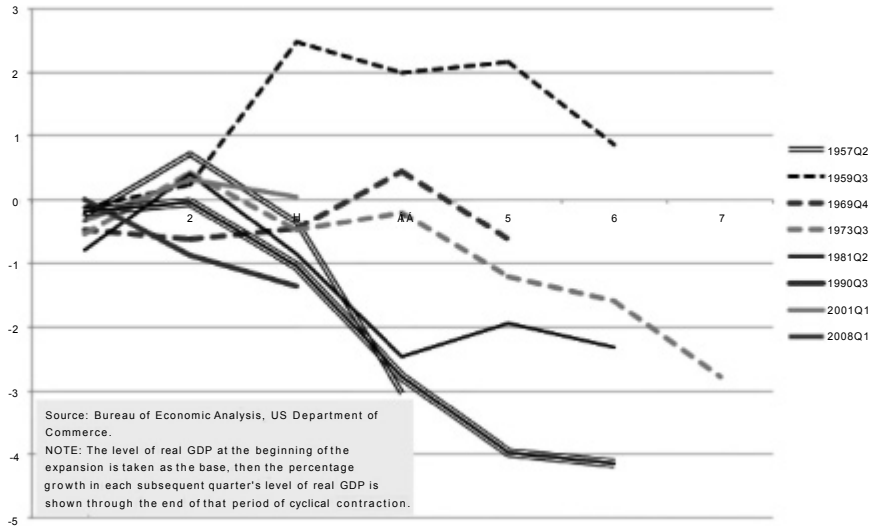


Figure 12.1B Quarterly U.S. real GDP change in longer post-war contractions, peak to trough (source: Bureau of Economic Analysis, U.S. Department of Commerce).

Note

The level of real GDP at the beginning of the expansion is taken as the base, then the percentage growth in each subsequent quarter's level of real GDP is shown through the end of that period of cyclical contraction.

postwar expansions: a pattern of very moderate (if persistent) price inflation in the 1950s and 1960s is replaced by increasing rates of price inflation which reach a peak in the mid-1970s and begin to moderate somewhat in the early 1980s before settling back into much slower rates of price inflation in the 1990s and 2000s.

Taking GDP growth and price inflation together, Minsky's vision of a tamed "big government" capitalism was clearly more a hope than a reality. What Minsky intended was a solution that would rescue the sort of benevolent, predictable macroeconomic performance that Okun (1975) had hoped would operate with law-like regularity. Minsky put forth this vision in his 1986 book, even though by then the pre-conditions for the "big-government"/"big-bank" stability policies he advocated were slipping away. As Figure 12.3 shows, discretionary non-military federal expenditures began declining significantly (as a share of U.S. GDP) by the early 1980s, slightly lagging an increase in mandatory (non-military) federal spending. The early 1980s were also a period in which a series of banking and financial deregulation acts were launched, with profound implications for macro-stabilization policy. The seeds were being planted for financial strategies that would compromise the economic functionality of financial intermediation and open the way to untethered (and system-endangering) speculation and risk-taking.

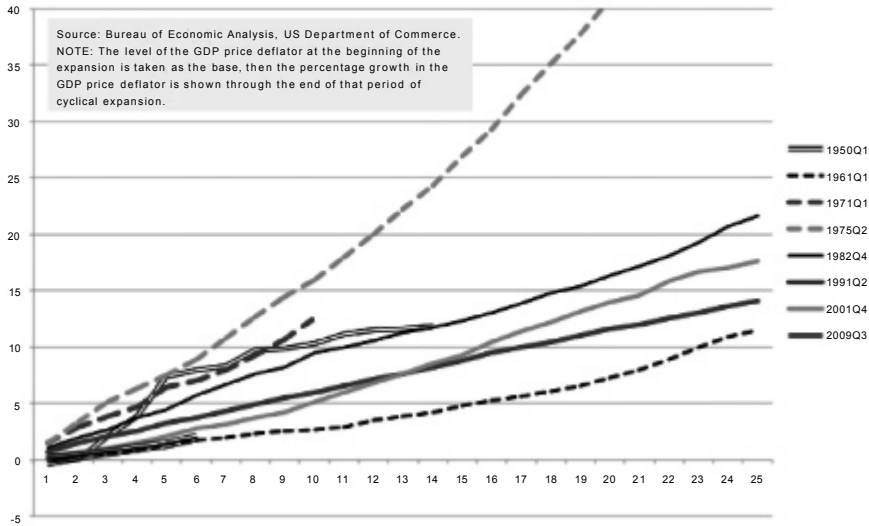


Figure 12.2A Quarterly U.S. price-deflator growth in longer post-war expansions, trough to peak (truncated at 25 quarters) (source: Bureau of Economic Analysis, U.S. Department of Commerce).

Note

The level of the GDP price deflator at the beginning of the expansion is taken as the base, then the percentage growth in the GDP price deflator is shown through the end of that period of cyclical expansion.

In effect, accompanying the changed patterns of GDP growth and price inflation – which suggested to many economists that appropriate macro policies had led to a “great moderation” in global-North cyclical fluctuations – were behavioral shifts undercutting the policy tools needed to bound fluctuations.¹⁰

This “great moderation” did not mean that the U.S. economy became a pain-free zone during the neoliberal era. To the contrary, business and bank failure rates climbed much higher than in the big-government era. In the 1990s, numerous forms of predatory lending, which preyed on working-class people, especially racial minorities, were invented and marketed. Further, employment/unemployment balances were becoming much more disadvantageous to workers than in the pre-1980 (“big government”) period. In effect, Kalecki’s political cycle was also evolving in this period.

Shifts in Kalecki’s political business cycle

Kalecki’s political business-cycle model suggests that unemployment behavior should change once workers have political representation. Specifically, the unemployment rate should not fall as low in expansions, due to problems with labor-extraction under welfare-state full employment, nor should it rise as high

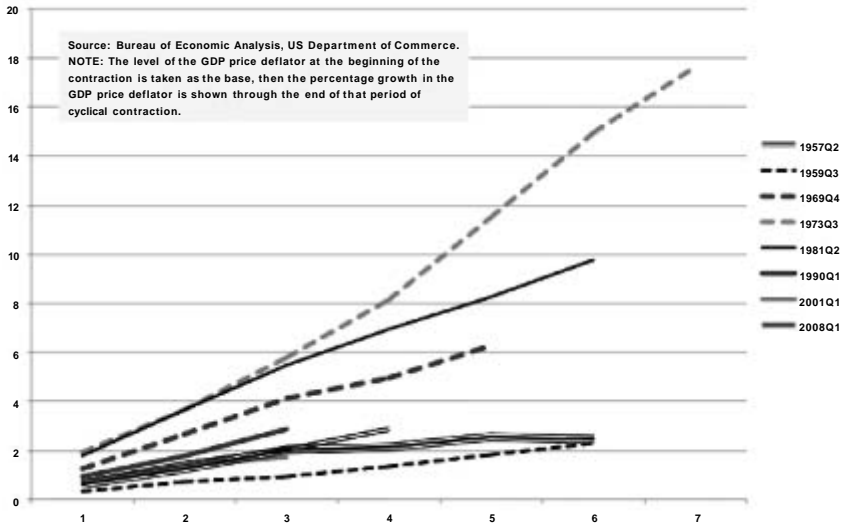


Figure 12.2B Quarterly U.S. price-deflator growth in longer post-war contractions, peak to trough (source: Bureau of Economic Analysis, U.S. Department of Commerce).

Note
 The level of the GDP price deflator at the beginning of the contraction is taken as the base, then the percentage growth in the GDP price deflator is shown through the end of that period of cyclical expansion.

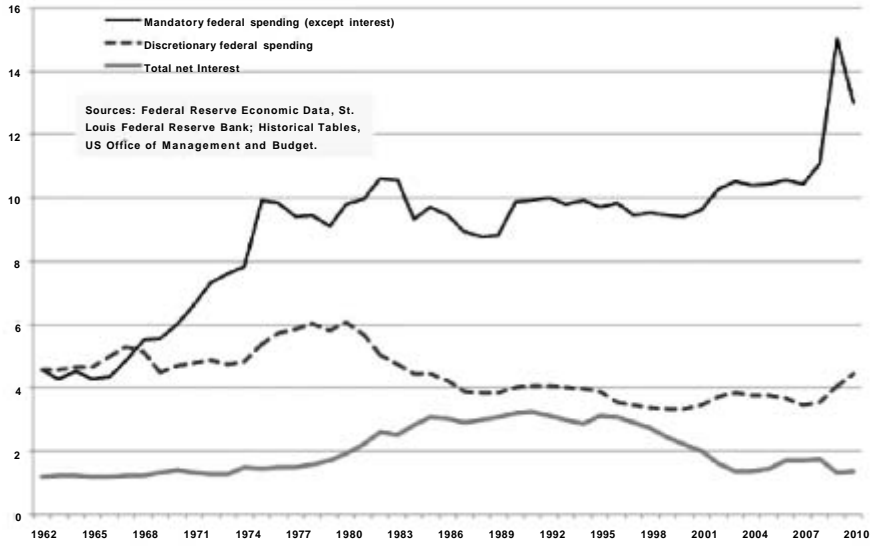


Figure 12.3 Mandatory and discretionary U.S. Federal-Government expenditures (excluding military sector), 1962–2010 (in 2005 \$) (source: Federal Reserve Bank; Historical Tables, US Office of Management and Budget).

in downturns, due to the political power of labor. In effect, the two force vectors on either side of the unemployment/labor-extraction nexus should create the conditions for what David Schulman of Salomon Brothers termed, in 1992, the “Goldilocks” economy (not too hot, not too cold). An analysis of employment statistics in the “small” and “big government” eras supports this conjecture: from the pre- to the postwar economy, U.S. business-cycle trends showed more moderate lows and highs than in the past.

However, in the neoliberal era, the hot-cold balance in Kalecki’s political business-cycle has been upset: capital increasingly secured higher growth rates for profits not by extracting labor from labor-power in domestic markets, but via aggressive globe-spanning investments in production and assembly facilities in lower-wage hubs. This eased the lower-bound constraint on the unemployment rate, even while the growth in redundant workers – and the competition among regional governments for manufacturing or service employment – reduced the political penalties associated with high unemployment rates.

This “boundary shift” can be seen in the drift of U.S. unemployment rates over time. Figure 12.4A shows the movements in the unemployment rate for full-time 25–54-year-old workers during postwar cyclical expansions. The expansions that began in 1950, 1960, and 1971 are bunched at the bottom of this unemployment-rate landscape. Unemployment rates begin at higher ranges in the mid-1970s and early-1980s expansions; but they do drop into significantly

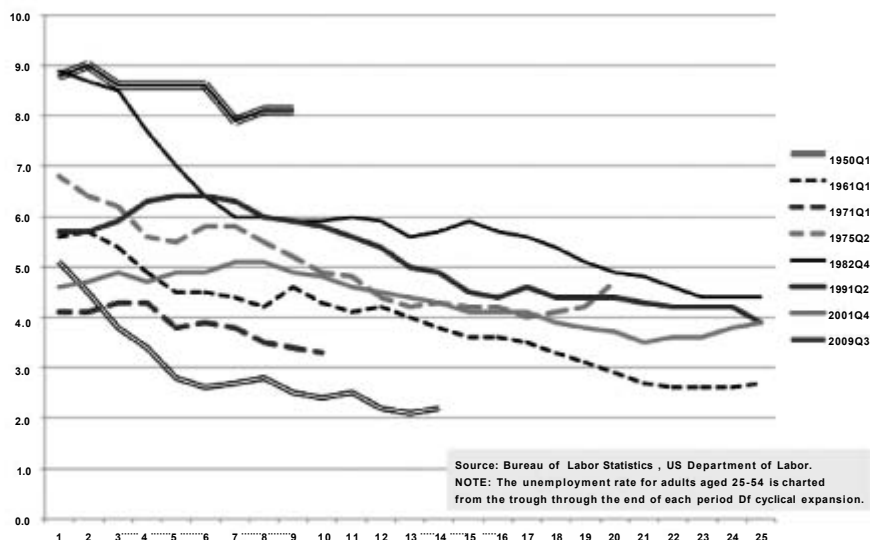


Figure 12.4A Quarterly U.S. unemployment rate (adults 24–54 years old) in longer postwar expansions, trough to peak (truncated at 25 quarters) (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note

The unemployment rate for adults aged 25–54 is charted from the trough through the end of each period of cyclical expansion.

lower ranges during these expansions (as in past expansions). The 1991 and 2001 expansions are different: they start in moderate ranges, but drop very little during the run of the cycle. This pattern has thus far been repeated in the expansion that began in 2009: it started at a very high level (as did the 1982 expansion), but has dropped less than a percentage point during the seven-quarter expansion shown here. Figure 12.4B shows trends in unemployment rates during cyclical contractions. Note that through 1981, contractions persisted for 4–7 quarters, with the unemployment rate arcing upward throughout that time-period. The 1990 and 2001 downturns in GDP growth were remarkably short – just two quarters – allowing no time for significant unemployment-rate adjustment. This pattern shifted dramatically with the 2008 recession, however; it lasted a long time and saw the unemployment rate double.

Figure 12.5, which contains data on labor-force participation rates during cyclical expansions, presents another perspective on the drifting boundaries of Kalecki’s accumulation cycle. The data starkly illustrate that the base-level of labor-force participation rose consistently from cycle to cycle from 1950 to 2001: it started at 60 percent and climbed to 67 percent. Working from this shifting base-level, labor-force participation rose notably in every expansion through 1981. In the 1991 and 2001 expansions, it was flat. In the 2009, labor-force participation started from a lower base (just over 65 percent) and has drifted down. Figures 12.6A and 12.6B, in turn, shows evidence of drifting boundaries as well.

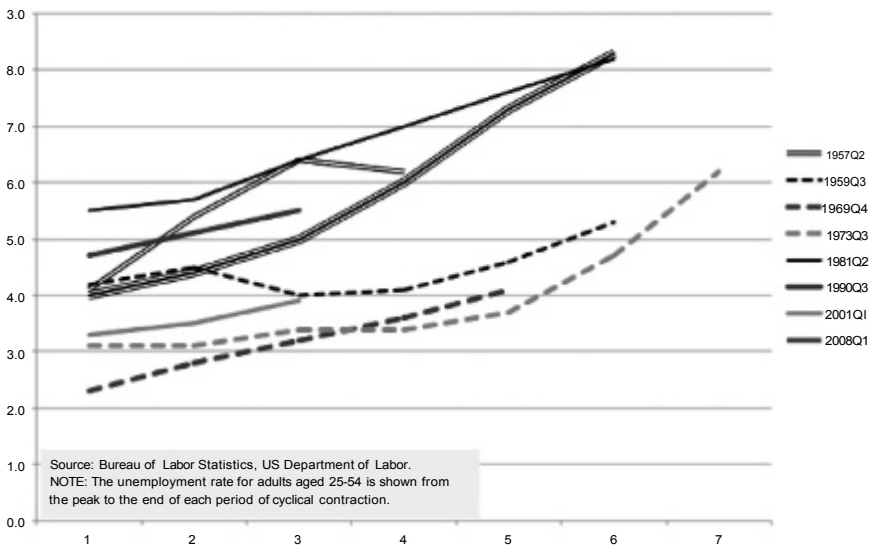


Figure 12.4B Quarterly U.S. unemployment rate (adults 24–54 years old) in longer post-war contractions, peak to trough (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note

The unemployment rate for adults aged 25–54 is shown from the peak to the end of each period of cyclical contraction.

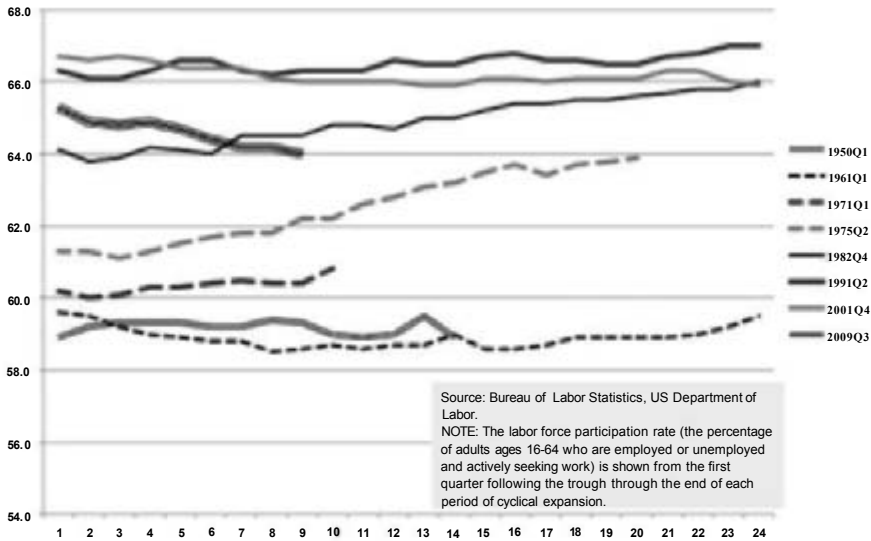


Figure 12.5 Quarterly U.S. labor-force participation rates in longer post-war expansions, trough to peak (truncated at 25 quarters) (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note

The labor force participation rate (the percentage of adults aged 16–64 who are employed or unemployed and actively seeking work) is shown from the first quarter following the trough through the end of each period of cyclical expansion.

These figures display data on the average duration of unemployment for all unemployed workers for periods of cyclical expansion and contraction, respectively. Generally, this average duration has a downward slope in expansions, and drifts slightly upward in contractions. Both Figures 12.6A and 12.6B provide weak evidence that unemployment duration has been rising through time; but they provide strong evidence that the 2008 recession and 2009 expansion are unusually harsh, with durations far above those experienced before.

Figure 12.7 provides another angle on the evolution of the forces shaping the Kaleckian business cycle in the postwar era. This figure’s columns summarize a decomposition of the sources of real GDP growth on a decade-by-decade basis, using annual data, from 1950 to 2010. Since business cycle troughs occurred in 1950, 1961, 1971, 1982, 1991, and 2001, these years are used to demarcate time-periods. Then GDP in any year is decomposed as follows.

The change in GDP from one year to the next can be interpreted as approximately equal to the sum of the changes in these terms (using a time-derivative approach and ignoring cross-effects). Then for every year in a given decade (or quasi-decade), the percentage contribution of each component to the overall change of real GDP in that series is weighted by that year’s contribution to the overall decade-long shift in GDP. Summing up these weighted percentage

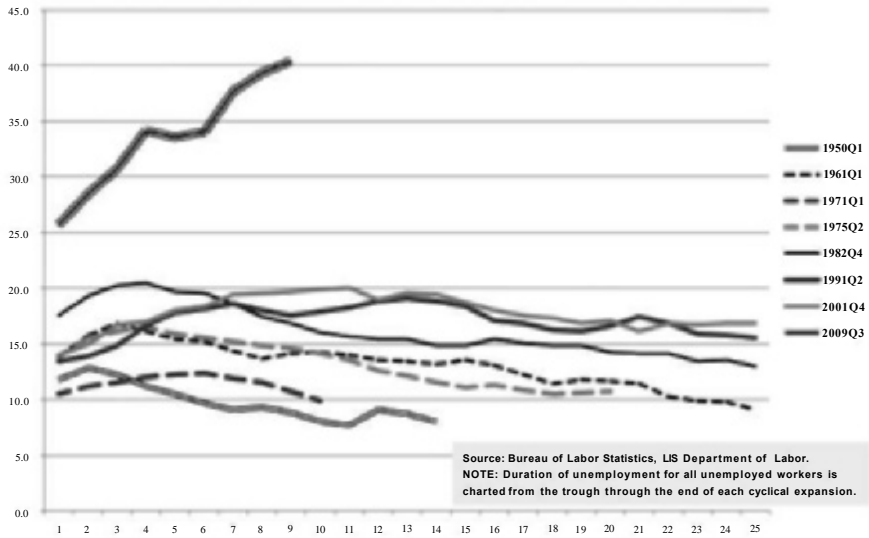


Figure 12.6A Quarterly U.S. average duration of unemployment in longer post-war expansions, trough to peak (truncated at 25 quarters) (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note

Duration of unemployment for all unemployed workers is charted from the trough through the end of each cyclical expansion.

contributions by each of the terms in this decomposition permits us to evaluate the sources of real GDP growth. Figure 12.7 shows a remarkable transformation. In the 1950s and 1960s, productivity growth (real GDP/employed worker) accounted for most of real GDP growth; almost all the remaining growth in GDP can be attributed to a growing working-age population. The 1970s marked a break in pattern: population growth itself drove GDP growth, as productivity growth fell to less than 30 percent and there was substantial labor-force entry by working-age adults. This labor-force entry effect continued into the 1980s, as productivity growth strengthened somewhat while the working-age population effect weakened substantially. The 1990s brought a virtual repeat of the 1960s: more than half of GDP growth was driven by productivity growth, and one-third by labor-force growth. In the 2000s, however, both productivity growth and population growth slowed in influence; these factors were heavily offset by a shrinkage in the ratios of labor-force to working-age population and of employed workers to labor force. Only in the 1970s was this decade-long decline in the employed-worker/labor-force ratio duplicated.

From a Kaleckian perspective, maintaining labor peace involves generating sufficient productivity growth to spread income gains between workers and capitalists. The growth of the working-age population spreads income across households as long as these households' members enter into the labor-force and then

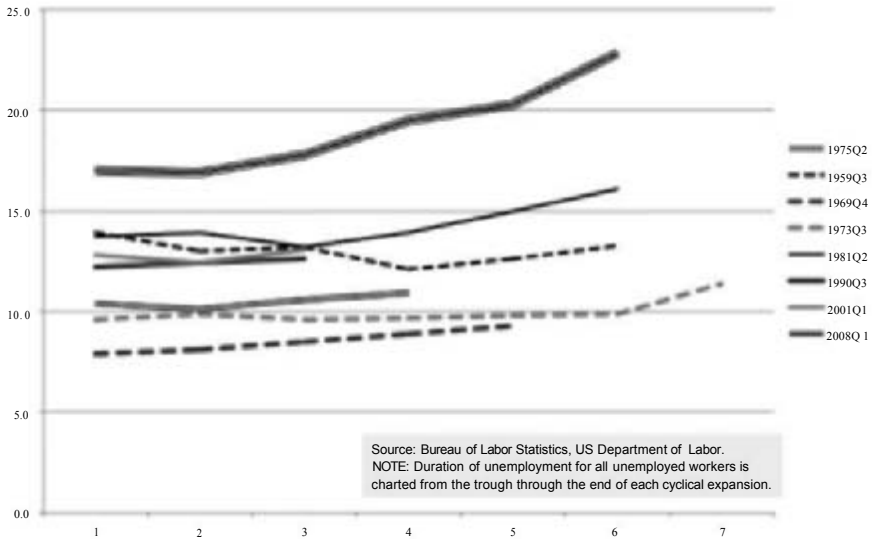


Figure 12.6B Quarterly U.S. average duration of unemployment in longer post-war contractions, peak to trough (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note
 Duration of unemployment for all unemployed workers is charted from the trough through the end of each cyclical expansion.

into paid employment at steady rates. If these rates of labor-force participation and/or of paid employment are reversed, then the spread of income across households is made more difficult; it requires transfer mechanisms outside of the capital-labor relation in the private sector. An increasing pace of labor-force participation, as in the 1970s and 1980s, puts pressure on the upward bound: the number of unwaged adults shrinks and the economy must run hotter to satisfy heightened income/employment demands. A reduced level of labor-force participation, on the other hand, relaxes the lower-bound constraint on the business cycle: the economy can perform worse without triggering political demands from labor/popular coalitions for public-welfare expenditures.

In sum, the data for the U.S. suggest that while the 1990s brought a return to 1960s-type growth patterns, trends in the 2000s permitted a U.S. political business cycle which involved less pressure from labor on capital than had been the case in the previous four decades.¹¹ As productivity growth fell below its Golden Age peak, there were fewer gains to share; but labor-force participation trends meant that labor made weaker demands on capital to share its gains.

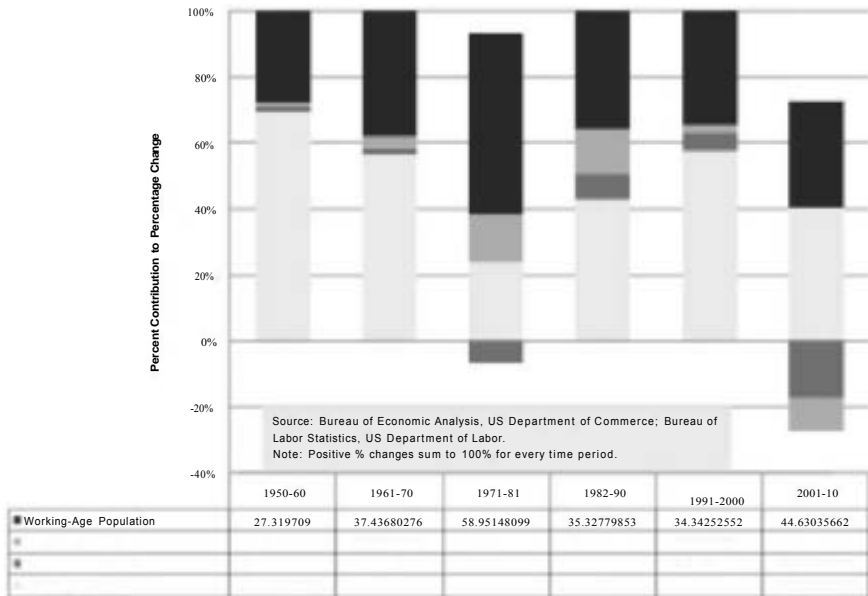


Figure 12.7 Sources of U.S. GDP growth, by decade, 1950–2010 (source: Bureau of Labor Statistics, U.S. Department of Labor).

Note
 Positive % changes sum to 100% for every time period.

Global hegemony and the U.S. business cycle

How can the transformation of Minskian financial cycles and the “softening” of Kaleckian political business-cycle constraints be explained? The shifting level of U.S. global hegemony may hold the key to these trends. Until the late-2000s, the U.S. economy was viewed as having unassailable global power; see, for example, Cumings (1999). This global power emanated from the political sphere and extended to the economic sphere due to the pre-eminence of Wall Street and the “New Economy.” U.S. global dominance was paralleled by weaknesses elsewhere: Latin America had its Lost Decade in the 1980s, while Japan’s economy was mired in its own Lost Decades; and during the 1990s, Europe was stagnant due to problems of transition in Eastern Europe and to policies implemented to meet the European Monetary Union criteria.

The two bases of U.S. economic strength were badly shaken in the early 2000s. The New Economy was hit with an equity-market collapse, the manufacturing sector experienced severe layoffs, the trade deficit grew to unprecedented levels, and household saving rates fell to historical lows. The layoffs, trade deficit, and low saving rate were all linked to the strong dollar: the dollar attracted foreign savings, drew in foreign savings, and undermined exports.

In the early 2000s, Krugman (2001) recommended policy steps to reduce the value of the dollar and restore U.S. exports. He argued that the U.S. should learn from the post-peso crisis experience of Mexico, citing the devaluation of the dollar under the 1985 Plaza Accord as a precedent. Krugman's argument rested on an apparent paradox: the U.S. had a weak trade position, but could strengthen its trade balance by making its currency weaker. Underlying Krugman's argument is this premise: the strategic position of the U.S. economy rests on its proprietorship of the world's reserve currency of choice. The dollar has indeed been the ultimate positional asset in the neoliberal order.

As a fiat currency, the dollar's strength has rested ultimately on the strength of the U.S. itself. This strength rests on several distinct bases: U.S. military power and the geographic isolation of the U.S. from most global upheaval; the size of the U.S. economy and the sophistication and relative openness of its financial markets; the U.S.'s willingness to absorb immigrants, and its capacity to generate jobs; and the shrinking list of prosperous, secure alternatives.

The links between political and economic instability, capital movements, and currency balances and values have been examined by economists over the course of many years. Kindleberger's well known 1937 volume, for example, described capital movements as destabilizing: "capitalists seek to avoid the country of business of depression and avoid the possibility of national bankruptcy," a process that can end only with drastic action, such as an overnight devaluation, banking system collapse, a debt moratorium, foreign exchange controls, or the "accession of a 'strong man' to power" (Kindleberger, 1937: 170–172).

This argument leads directly to Kindleberger's oft-cited argument that the international financial system functions well only when one nation is willing and able to function hegemonically as the international lender of last resort – as the guarantor of global financial stability (Kindleberger, 1973, 1974). This leads to the idea that a nation which functions as a hegemonic financial center is special, and its currency should enjoy special privileges. In the 1960s, the U.S. developed a trade deficit, at the same time that its leading companies were acquiring business assets abroad. This imbalance is sustainable only if the rest of the world is willing to hold the dollars thus released from their nation of origin. The idea of a dollar shortage had been suggested in the 1950s; in the 1960s a number of authors joined this argument to the idea of the U.S.'s superior financial and investment markets – see Kindleberger (1965) and the well-known essay by Despres *et al.* (1966) which is cited above. The Bretton Woods fixed exchange-rate system did not survive the stresses of this period; policy flexibility was needed, as Volcker (1979) later noted. During the 1970s, the dollar fell against all the currencies of its major trading companies. This was viewed by American economists as a means of "passively" accomplishing restoring balance-of-payments equilibrium (Krause, 1970), and by Europeans as an effort by the U.S. to export the worst effects of 1970s stagflation to Europe (Parboni, 1979). U.S. military power reached a low in the 1970s with defeat in Vietnam.

By the end of the 1970s, the U.S. economy was in disarray. This led to a shift in U.S. economic policies – away from a welfarist, regulationist state and toward

marketization and deregulation. The U.S. banking system was opened to market forces and consolidation. U.S. workers were exposed to new risks, pay cuts, and dislocation. Paul Volcker (1979) baldly described the agenda: “a controlled disintegration in the world economy is a legitimate objective for the 1980s.”

The U.S. position on balance-of-payments management was transformed in this period of “controlled disintegration:” the idea of managing the exchange rate to permit passive balance-of-payments adjustment was replaced by the idea of a passive exchange-rate policy. This policy approach was captured in McKinnon’s suggestion that the U.S. is the “Nth country” in a world of “N-1” managed currencies.¹² The Reagan Administration used this philosophy to implement a macroeconomic policy that imposed tight money and high interest rates as a means of attacking inflation, on the one hand, and expansionary fiscal policy as a means of stimulating demand, on the other. The result was a rapid rise in the value of the dollar and a rapid deterioration of the U.S. current account. Overseas wealth-owners (especially Japan) bought dollar-denominated assets. Coincidentally, the Reagan Administration reasserted U.S. military might. The high real interest rates, together with a collapse in commodity prices, destabilized heavily indebted Latin America and led to its “lost decade.”

This episode demonstrated the willingness of the U.S. to seek its own position of advantage even at the expense of allied nations’ distress. This was the apparent advantage of being the “Nth country.” By 1985, U.S. trade was so badly in deficit that the Plaza Accord was pushed through as a means of reducing the competitive advantage of Japan. Net U.S. exports recovered substantially. This agreement was subsequently modified in the 1987 Louvre G-7 meeting; according to McKinnon (1996), this subsequent session marked a commitment by the U.S. and other nations to maintaining greater exchange-rate stability. This meant yet another shift in U.S. exchange-rate management. McKinnon (1996, page 498) describes it as follows:

Rather than “benign” neglect, the private markets came to believe that American monetary policy, and the policies of other countries, would eventually be adjusted if necessary to stop a run on the currency. . . . In particular, American monetary policy no longer perversely aggravated cycles in the dollar exchange rate and in world money.

This period of stability came apart after 1995. Among the causes were the extended rise in U.S. financial-market prices, the major periodic financial crises of the late 1990s, and the “private market” beliefs cited by McKinnon. The rise of the dollar in this period, and the failure of the dollar to drop in response to interest-rate easing in 2000–01, can be attributed to the hegemonic role of the U.S., its status as a safe haven in a world of crumbling sanctuaries and alternatives.

Minsky's Model and Global Imbalances

The Neoliberal era saw the U.S. shift from the low dollar of the post-Bretton Woods 1970s to a "high dollar" regime from the 1980s onward. This transformed the business cycle as Minsky sketched it out: no longer was cyclical downturn triggered by rising price inflation, and reversed through accommodative monetary policy. Instead, the high dollar disciplined prices; and monetary policy was aimed at the dollar as much as at domestic conditions. Similarly, U.S. lender-of-last-resort interventions and U.S. equity prices would henceforward reflect not simply domestic conditions but overseas wealth-holders' assessment of the relative desirability of U.S. equities.

The U.S. economy would stumble in the Neoliberal period, then, not when price inflation roared out of control, or when asset markets collapsed, but when U.S. corporations could no longer use financial leverage to enhance their rates of return on capital; and when U.S. households would no longer be able to meet the challenge of being simultaneously the world's consumers of last resort and its borrowers of first resort.

The shift from the low dollar of the 1970s to the high dollar of the Neoliberal regime had one further significant effect, working through equity-market prices. The U.S. corporate sector became more dominant due to its firms' relatively high market value. This in turn was linked to the U.S. economy's being a global liquidity sink due to its persistent current-account deficit. The market value of U.S. firms nearly doubled in the 1990s, for example, while that of British and Japanese firms shrank.

Kalecki's Political Business Cycle and Global Imbalances

It follows from this argument that those with substantial amounts of dollar-denominated wealth hold a key global and national strategic position. In this context, the U.S. economy's shift toward greater wealth inequality during the Neoliberal period (Wolff 1995, 1998) was a key factor in softening the Kaleckian political constraint. The neoliberal period witnessed a weakening of trade unions in the U.S. and the relocation of many U.S.-based manufacturing offshore. Much U.S. manufacturing survived only with lower wages and reduced labor standards.

Service industries, in the meantime, went in two different directions. One direction led to the "New Economy," consisting of enclaves of workers with specialized skills commanding scarcity rents. Much of these workers' compensation came in the form of shares and stock options. Thus, the accelerated growth of asset prices during much of the neoliberal era aligned these workers' interests with wealth-owners'. The second direction led to service jobs demanding few skills. These became the reserve of economically insecure, heavily minority workers. These workers' ranks include many undocumented laborers, whose presence reinforces high levels of labor effort in lower-skill occupations (Dymski, 1996b).

These two arms of the new service economy are structurally interlocked. Business and consumer services have been increasingly targeted toward upscale customers – the prosperous few whose fortunes are tied to the stock market – and supplied by low-wage and immigrant labor. This interlock, like the rise of the global factory and of immigrant labor, also affects the political dynamics of the business cycle that Kalecki identified. Gains in employment have very different rewards for “average” workers – and hence political effects – than did employment gains in the Big Government era. And unemployment pressures may operate differently in these two ends of the new service economy; pain felt in the lower reaches of the wage and skill structure may be invisible in the privileged reaches of the workforce (and vice versa). Some portions of the “working class” gain when new sources of low-wage labor are opened up; and other portions lose. Class solidarity by workers dissolves in the face of the working class’s numerous skill-based, education-based, racial and gender divides (Dymski, 1996c).

Conclusion

This chapter has investigated the shifting behavior of the U.S. business cycle by reflecting on Minsky’s small-government/big-government framework and on Kalecki’s political business cycle. It has used selective empirical evidence to argue that the neoliberal era brought an end to the apparent stability of the big-government era that Minsky hoped would constitute the end of history – or at least of capitalist instability. It undermined the relatively narrow band within which Kalecki’s political-business cycle moved for two decades in the postwar period.

The key problem was the ever-deepening asymmetry in the global role of the U.S. economy. The U.S. economy’s apparent strength, including its high-dollar policy, was linked to a persistent weakness – its deficit on current account. The aggressive deregulation of finance that accompanied the neoliberal years in the U.S. made it appear, for almost three decades, that the U.S.’s global imbalance was the result of its strength, not its weakness: its persistent surplus on capital account could be viewed as comparative advantage in being a global safe haven, or the home of the world’s dominant financial center. When they first emerged, the “twin deficits” of government and current-account deficits drew substantial attention from policymakers and the public. But the less-remarked on capital-account inflows that paralleled these deficits were a convenience; further, the sky did not fall, as Minsky once put it. For some time, these structural features became normal, apparently unremarkable features of the world economy.

However, these structural imbalances undermined the vibrancy of U.S. business-cycle dynamics. Minsky’s formula for maintaining economic stability – “big government” and “big bank” – was neutralized. The Kaleckian political business cycle, wherein political pressures, exerted on one side by capital and on the other by labor, force the economy to maintain a reasonable – not excessive – pace of accumulation, was loosened and weakened. The undercutting of U.S.

labor eventually hollowed out the income flows needed to sustain vibrant accumulation and creditor-borrower relations. Kalecki's upper bound on unemployment was altered through structural shifts in the labor market, intimately linked to globalization.

The answer to the question posed in this chapter's title is self-evident: no economy rooted in capitalist accumulation can avoid the "law of gravity." What goes up must come down when the underlying motives driving economic forces are insatiable desires to accumulate and to gain at the expense of the other. The U.S. did not reach the end of history in the neoliberal era; instead its cyclical dynamics gradually lost their forcefulness in restoring the conditions for further accumulation. Eventually, the pressure point was the inability of American households to maintain consumption expenditures and absorb debt while sustaining real-wage losses and reduced labor-force participation. The balance between asset-price appreciation, debt buildup, and consumption crystallized into a knife-edge. The point on this knife edge sharpened as the boom in financial prices spread into housing. When the under-regulated U.S. financial sector made housing the new favourite object of its zero-sum speculation games and rent-seeking, the crash was a matter of time.

For a time, the special position of the dollar as the ultimate safe haven in a world of stagnation and insecurity kept the game going. The high U.S. dollar maintained U.S. prosperity, via its effects on price inflation, interest rates, mortgage refinancings, etc., up to a point. The worse were conditions in the rest of the world, the higher the rental value of the dollar, and the more distorted the United States' external position could become without adverse effects. But this was not a sustainable calculus for twenty-first century economics. Despres, Kindleberger, and Salant argued in the 1960s that a global dollar shortage justified a U.S. trade deficit together with a high dollar. What was on offer in the 2000s was not so much a dollar shortage as a global security shortage. For a time, the good life was for sale; its rental price the cost of acquiring U.S. dollars. But the current situation rested on too many knife-edges to persist indefinitely. Even the protection of a nuclear missile shield could not alleviate unsustainable pressures on increasingly polarized U.S. households and businesses.

Much of this concluding section was written as a speculation – a "what if" – in the address I delivered a decade ago in Tokyo. For many sentences, adapting that essay for use today involved replacing the conditional tense ("what if" phrases) with the declarative (phrases about what "was" or now "is"). The extended crisis seen as a distant, if dark, possibility ten years ago, continues to unfold as this essay is being written.

The essay delivered before the Japanese Society for Political Economy in October 2001 ended with the suggestion that:

The globe's leading nations might be forced to choose yet again between the military and the populist solutions to global capitalist instability and crisis. History has recorded how this choice was resolved in the last century; can we be wiser in this new one?

The shadows now being cast by the Euro crisis – not to mention the shadows cast by a U.S. politics besieged by nativism and Know-Nothingism – give little reason to hope that human resources of wisdom have yet been rekindled. What hope we can find for transcending this crisis of capitalism resides in part in renewing the political economy traditions of Marx and Keynes, and in striving to communicate across national borders. The Japanese Society for Political Economy has already played a crucial role in this renewal of ideas and this sustaining of communication. The active participation of Society members in the debates triggered by the still-emerging global crisis can help to assure that paths of peace and not war are chosen in humanity's renewed search for more prosperous worlds for our children, and for our children's children.

Notes

- 1 Chauvet and Potter (2001) demonstrate these points using time-series techniques on aggregate data.
- 2 Minsky mentioned in conversation during his 1994 visit to California that he made this decision in the early 1950s, at which time the labor movement was villainized by opportunistic politicians.
- 3 See Crotty (1990), Itoh and Lapavistas (1999), Jarsulic (1988), Sawyer (1985), Skott (1989).
- 4 In the contemporary period, then, the U.S. is not hegemonic in the price sense of Kindleberger: the Federal Reserve is not pre-committed as a lender of last resort (LLR) in a fixed-exchange rate system.
- 5 See especially Minsky 1975. Minsky's ideas have several sources; but his main inspiration is Keynes (1936). Keynes famously observed that economic agents will discount liquidity in periods of growth and rising asset values, but run to liquidity in times of contraction and unstable markets.
- 6 Another possibility is state-led recovery to increase the state's military might and/or its colonial reach, as emphasized in Kalecki (1971).
- 7 The details of this investigation are elaborated in the chapters cited here. Briefly, annual U.S. Economic data were collected (or in one case constructed) for the period 1887–1988 for several aggregate variables. These variables were then grouped by cycle based on NBER business-cycle turning points, and cyclical “trajectories” were computed. These trajectories traced out the average behavior of each variable from the trough to the peak of every business cycle, discarding World-War periods. Several variance-based tests established that these trough-peak data were most efficiently grouped according to the “small government” (pre-1930s), “big government” (1930s to 1970s), and “neoliberal era” (1980s–present) eras.
- 8 These time series were recalculated to reflect some differences in measurement. In particular, chain-weighting replaced earlier methods of making real/nominal adjustments, and some conventions about depreciation and other components of macroeconomic aggregates have changed.
- 9 This restricted vision of the role of government is set out forcefully and clearly by Guitián (1998).
- 10 The term “great moderation” was introduced by Stock and Watson (2002).
- 11 Robert Gordon, for one, has been quite suspicious about whether the 1990s marked a return to 1960s-like prosperity. At the beginning of the 1990s expansion, Gordon wrote an article investigating why the U.S. was apparently in a “jobless recovery” (1993). He was suspicious of claims about the resurgence of productivity; he argued in a famous unpublished paper (1999) that investment growth was linked to unsustainable

computer-system conversions. He examined the “new economy” more closely (2000). He remained skeptical that the U.S. economy’s high growth from 1995 to 2000 is based on “permanent” sources of economic advantage (2001). For a contrary view, see Stiroh (2001) and the references therein.

12 McKinnon (1979, pages 34–35) wrote:

N-1 exchange-rate policies correspond approximately to N-1 balance-of-payments targets. If the accounting is such that the sum of the world’s payment surpluses equals the sum of all deficits, the balance-of-payments position of the Nth is determined from the other N-1. Again, to avoid conflict and insure consistent decentralization of balance-of-payment policies, the natural counterpart of a passive foreign exchange rate policy is a passive balance-of-payments policy.

Bibliography

- Chauvet, Marcelle and Simon Potter (2001) “Recent Changes in the US Business Cycle,” *Staff Report No. 126*. Research Department, Federal Reserve Bank of New York.
- Crotty, James (1990) “Owner Manager Conflict and Financial Theories of Investment Instability: A Critical Assessment of Keynes, Tobin, and Minsky,” *Journal of Post Keynesian Economics*, 12(4), Summer: 519–542.
- Crotty, James and Gary Dymksi (1998) “Can Global Neoliberalism Survive Victory in Asia? The Political Economy of the Korean Crisis,” with James Crotty, *International Papers in Political Economy*, 2.
- Cummings, Bruce (1999) *Parallax Visions: Making Sense of American-East Asian Relations at the End of the Century*, Durham, NC: Duke University Press.
- Despres, Emile, Charles P. Kindleberger, and Walter Salant (1966) “The Dollar and World Liquidity,” *The Economist*, February 5.
- Dymksi, Gary (1996a) “Kalecki’s Monetary Economics,” in *An Alternative Macroeconomic Theory: the Kaleckian Model and Post Keynesian Economics*. edited by John King, Amsterdam: Kluwer Academic Publishers, pp. 115–140.
- Dymksi, Gary (1996b) “Exploitation and Racial Inequality: The US Case,” *Research in Political Economy*, 15, pp. 111–138.
- Dymksi, Gary (1996c) “Economic Polarization and US Policy Activism,” *International Review of Applied Economics*, 10(1), January, pp. 65–84.
- Dymksi, Gary (1999) “Asset Bubbles in the Korean and Japanese Crisis: A Spatialized Minsky Approach,” *Journal of Regional Studies*, Korea, May.
- Dymksi, Gary (2002) “Post-Hegemonic US Economic Hegemony: Minskian and Kaleckian Dynamics in the Neoliberal Era,” *Keizai Riron Gakkai Nempo (Journal of the Japanese Society for Political Economy)*, 39, April, pp. 247–264.
- Dymksi, Gary (2009) “Heterodox Economics as Crisis Theory: From Profit-Squeeze to the Global Liquidity Meltdown,” in *Heterodox Macroeconomics: Keynes, Marx and Globalization*, edited by Jonathan Goldstein and Michael Hillard, New York: Routledge, pp. 66–84.
- Dymksi, Gary and Robert Pollin (1994) “The Costs and Benefits of Financial Instability: Big Government Capitalism and the Minsky Paradox,” in *New Directions in Monetary Macroeconomics: Essays in the Tradition of Hyman P. Minsky*, edited by Gary Dymksi and Robert Pollin, Ann Arbor: University of Michigan Press, pp. 369–401.
- Godley, Wynne (1999) “Seven Unsustainable Processes: Medium-Term Prospects and Policies for the United States and the World,” *Special Report*, Jerome Levy Economics Institute of Bard College.

- Godley, Wynne and Alex Izurieta (2001) "As the Implosion Begins...? Prospects and Policies for the US Economy: A Strategic View," Jerome Levy Economics Institute, June.
- Gordon, David M., Richard Edwards, and Michael Reich (1982) *Segmented Work, Divided Workers*, Cambridge: Cambridge University Press.
- Gordon, Robert J. (1993) "The Jobless Recovery: Does it Signal a New Era of Productivity-Led Growth?" *Brookings Papers on Economic Activity*, 1, pp. 271–316.
- Gordon, Robert J. (1999) "Has the 'New Economy' Rendered the Productivity Slowdown Obsolete?" Mimeo, Department of Economics, Northwestern University, Revised version, June 14.
- Gordon, Robert J. (2000) "Does the 'New Economy' Measure up to the Great Inventions of the Past?" *Journal of Economic Perspectives*, 14(4), Fall 2000, pp. 49–74.
- Gordon, Robert J. (2001) "Technology and Economic Performance in the American Economy," working paper, Department of Economics, Northwestern University, April.
- Gutián, Manuel (1998) "The Challenge of Managing Capital Flows," *Finance and Development*, June.
- Houston, David (1992) "Is there a New Social Structure of Accumulation?" *Review of Radical Political Economics*, 24(2), Summer, pp. 60–67.
- Itoh, Makoto and Costas Lapavistas (1999) *Political Economy of Money and Finance*. Houndmills, UK: Macmillan.
- Jarsulic, Marc (1998) *Effective Demand and Income Distribution*, Boulder, Colo.: Westview Press.
- Kalecki, Michal (1954) *Theory of Economic Dynamics*, London: Allen and Unwin.
- Kalecki, Michal (1971) *The Last Phase in the Transformation of Capitalism*, New York: Monthly Review.
- Keynes, John Maynard (1936) *The General Theory of Employment, Interest, and Prices*, London: Macmillan.
- Kindleberger, Charles P. (1937) *International Short-Term Capital Movements*, New York: Columbia University Press.
- Kindleberger, Charles P. (1965) "Balance-of-Payments Deficits and the International Market for Liquidity," *Princeton Essays on International Finance*, No. 46, Princeton: Princeton University Press.
- Kindleberger, Charles P. (1973) *The World in Depression, 1929–1939*, Berkeley: University of California Press.
- Kindleberger, Charles P. (1974) *The Formation of Financial Centers: A Study in Comparative Economic History*, Princeton: International Finance Section, Princeton University.
- Krause, Lawrence B. (1970) "A Passive Balance of Payments Strategy for the US," *Brookings Papers on Economic Activity*, 3, pp. 339–360.
- Kregel, Jan (1998) "Yes, 'It' Did Happen Again: A Minsky Crisis Happened in Asia," Working Paper No. 234, Jerome Levy Economics Institute of Bard College, April.
- Krugman, Paul (2001) "Blessed Are the Weak," *New York Times*, August 1.
- Leonhardt, David (2001) "More Falling Behind on Mortgage Payments," *New York Times*, June 12.
- Lippit, Victor D. (1997) "The Reconstruction of a Social Structure of Accumulation in the United States," *Review of Radical Political Economics*, 29(3), Summer, pp. 11–21.
- McKinnon, Ronald I. (1979) *Money in International Exchange*, New York: Oxford University Press.
- McKinnon, Ronald I. (1996) *The Rules of the Game: International Money and Exchange Rates*, Cambridge: MIT Press.

- Minsky, Hyman (1975) *John Maynard Keynes*, New York: Columbia University Press.
- Minsky, Hyman (1982) "Can 'It' Happen Again? A Reprise," in *Can 'It' Happen Again?* Armonk, NY: M.E. Sharpe.
- Okun, Arthur (1975) *Equality and Efficiency: The Big Trade-Off*, Washington, D.C.: Brookings Institution.
- Parboni, Riccardo (1981) *The Dollar and Its Rivals*, Trans. Jon Rothschild, New York: Verso Press.
- Roosa, Robert V. (1964) "Balance of Payments Adjustment and International Liquidity," *Journal of Finance*, 19(1), March, pp. 1–15.
- Sawyer, Malcolm C. (1985) *The Economics of Michal Kalecki*, Houndmills, Basingstoke: Macmillan.
- Stock, James H. and Mark W. Watson (2002) "Has the Business Cycle Changed and Why?" NBER Working Paper No. 9127, Cambridge MA: National Bureau of Economic Research, September.
- Skott, Peter (1989) *Conflict and Effective Demand in Economic Growth*, New York: Cambridge University Press.
- Stiroh, Kevin J. (2001) "Investing in Information Technology: Productivity Payoffs for US Industries," *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, 7(6), June.
- Volcker, Paul A. (1979) "The Political Economy of the Dollar," *Federal Reserve Bank of New York Quarterly Review*, Winter, pp. 1–12.
- Wolff, Edward (1995) *Top Heavy*, New York: The New Press.
- Wolff, Edward (1998) "Recent Trends in the Size Distribution of Household Wealth," *Journal of Economic Perspectives*, 12(3), Summer, pp. 131–150.

13 The political economy of global imbalances and the global financial crisis

Kang-Kook Lee

Introduction

Starting from mid-2007, the global financial crisis engulfed the global economy. The crisis occurred at the heart of the U.S., and spread to other countries very rapidly. After Lehman's bankruptcy in September 2008, it hit almost all advanced countries and developing countries hard. Many explanations have already been presented about the cause of the crisis. Commonly presented causes of the crisis include problems of financial deregulation, too much risk-taking by financial institutions, lax monetary policy causing the real estate market bubble, and so on. The crisis was indeed a highly complex event and its full analysis is beyond the scope of this chapter. However, it is certain that the strong belief in the free market and the benefits of financial deregulation and globalization waned significantly after the crisis, while the Keynesian argument for the stronger role of the government became much more popular.

Given the critique of neoliberal financial globalization, this chapter examines the so-called global imbalances as an important background element in the current financial crisis. We analyze how imbalances in the global economy grew serious and how they contributed to the global financial crisis. We review former debates on global imbalances and critically examine the current arguments about the relationship between the global financial crisis and imbalances. In our critical examination, we point to neoliberalism in both the U.S. and East Asia in the global neoliberal growth regime as an underlying cause that worsened global imbalances and finally resulted in the global financial crisis. Global imbalances appear to have been reduced after the crisis and the deep recession in the U.S. However, there should be more concerted efforts in the U.S. and East Asia to bring about a rebalancing of the global economy. We present future prospects and underscore the change of the growth strategy in East Asia as well as in the U.S.

This chapter is organized as follows. The next section investigates the current global financial crisis, focusing on a brief review of its causes in and effects on the global economy. The third section presents the problem of global imbalances, underscoring the political economy of global imbalances and the differential effects of neoliberalism on the U.S. and on East Asia. It also examines the complex relationship between global imbalances and the current global financial crisis

under the global neoliberal growth regime. The fourth section examines the current changes of global imbalances after the crisis and presents future prospects.

The global financial crisis after 2007

The financial crisis in the U.S. involved a collapse of the new financial architecture that was established by financial deregulation based on dominant neoliberalism after the 1980s (Crotty, 2009). For example, in 1999, the U.S. government repealed the Glass–Steagall Act that separated the operations of commercial banks and investment banks. Also, the Commodity Futures Modernization Act, which deregulated all financial transactions – including financial derivatives – was passed by the U.S. congress in 2000. Along with these deregulation measures, financial innovation encouraged the growth of securitization of debts and financial derivatives markets.

Financial institutions' business dealing with mortgage-backed securities (MBSs) grew extensively in the early 2000s against the backdrop of a bubble of the real estate market. Many institutions introduced aggressive business strategies based on the selling of mortgages and mortgage-related products. They developed complex securitization schemes, called collateralized debt obligations (CDOs), which divided debts into several tranches, which were then repackaged and sold in the financial markets. Credit rating companies gave these assets high valuations which did not reflect their systemic risk. The amount of CDOs issued in the U.S. rose from \$157.4 billion in 2004 to \$520.6 billion in 2006; the size of the CDO market overall grew by a factor of four between 2002 and 2006, when it reached an estimated \$2 trillion.

The growth of the derivatives market made the mortgage-securitization process even more complicated. The size of the credit default swaps (CDSs) that provided insurance service for financial institutions dealing with CDOs skyrocketed from less than \$1 trillion in 2001 to more than \$60 trillion in 2007 in the whole world. Investment banks such as Lehman Brothers actively utilized special investment vehicles (SIVs) to conduct business in this sector on a huge scale. The large investment banks were known as a “shadow banking system,” which took large risks but was not regulated properly.

Of course, the growth of the real estate market bubble lay behind these changes. In the U.S. the price of real estate in ten large cities soared by almost 120 percent from 2000 to 2006, according to the Case–Shiller index. Lax monetary policy by the Fed after the 2001 recession facilitated the bubble's growth (though tighter monetary policy may not have halted this growth). Low interest rates also led to a “search for yield,” an increase in the demand for a wider class of riskier assets yielding higher returns. Financial institutions that dealt in mortgage-based CDO expected the real estate price to continue to rise and made efforts to increase their leverage fully to maximize their assets and returns. However, the real estate market bubble finally began to burst in 2006, bringing about a sudden financial collapse along with the default of CDOs and of related CDSs (Acharya *et al.*, 2009). The fall in the value of mortgage-backed securities was amplified by a financial multiplier process, since financial institutions with

high leverage needed to sell their risky assets in reducing their leverage (Adrian and Shin, 2008). From mid-2007 on, no financial institutions were willing to purchase sour mortgage-based securities; a severe credit crunch occurred in the U.S. financial markets. The financial crisis peaked in September 2008 when Lehman Brothers went bankrupt. After that peak, large financial institutions on the verge of bankruptcy, such as Merrill Lynch, AIG, and Citigroup, received bailout finance or were sold to other institutions.¹

This episode demonstrated a typical financial-crisis cycle in that it involved the growth of bubbles, overlending by financial institutions with irrational exuberance, and then a collapse (Reinhart and Rogoff, 2009). But because it was associated with extensive financial innovation linked to deregulation, and because of the incapacity of the government to monitor it, this crisis represented an institutional failure of the U.S. financial system and posed a more serious threat to the U.S. economy. This ushered in a period of serious reflection about the role of mainstream economic theory in reality. A new consensus emerged among most economists that financial markets are not inherently efficient and proper government regulation is crucial.

The financial crisis in the U.S. hit other countries hard through several channels due to the globalization of world financial markets. First, foreign – and especially European – financial institutions that had exposure to problematic assets such as CDOs experienced huge losses. Second, the U.S. financial crisis resulted in a huge drop in asset-market prices, including real-estate and stocks, significantly shrinking financial institutions' asset base and producing a credit crunch in other countries. Third, foreign investment in emerging-market countries, especially bank lending and portfolio investment, declined sharply due to deleveraging by advanced countries' financial institutions. This dealt a hard blow to countries that relied highly on foreign capital, including Iceland, Ireland, and nations in Eastern Europe and elsewhere. Finally, the crisis resulted in a deep global recession and greatly reduced global export demand; world exports fell by about 10 percent in 2009. This severely damaged the economies of export-dependent countries, including those in East Asia. The overall losses triggered by this financial crisis were certainly larger than the original IMF estimates of \$4.1 trillion in all advanced countries and \$2.7 trillion in the U.S. (IMF, 2009).

The policy response in many countries was to prop up the economy by way of a tremendous expansion of liquidity via the introduction of zero-percent interest rate policy and large-scale fiscal spending. The enactment of the American Recovery and Reinvestment Act in early 2009 committed the U.S. government to spending as much as \$787 billion to avert an economic collapse. The Fed also cut interest rates aggressively from 5.25 percent in early 2008 to 0.25 percent in mid-2009, as well as providing credit directly to troubled financial institutions through many support programs. Other advanced countries quickly followed the U.S. All the G20 nations were in collaboration to boost the global economy. Thanks to these efforts, it is likely that the worst of the current crisis, the largest since the Great Depression, is over. However, economic recovery is expected to be painfully slow. The global growth rate fell from 5.4 percent in 2007 to 2.9

percent in 2008 and -0.5 percent in 2009; it recovered to 5 percent in 2010 but is expected to be about 4 percent or less in 2011 and after (IMF, 2011).

The global economy has numerous problems, including growing fiscal deficits and public debt levels in many advanced countries, and disorder in the global financial system. A double-dip recession remains a strong possibility. One thing this crisis made very evident is that the current financial crisis became truly global due to the progress of financial globalization. For now, the current crisis has slowed the march of the world economy toward complete financial integration via additional financial opening, liberalization, and deregulation. We should also pay attention to the other global aspect of the crisis, that is, the global imbalances problem, which is discussed in the next section.

Global imbalances and the financial crisis

The development of global imbalances and debates

Among the contradictions brought about by globalization are serious financial instability and global economic imbalances. Because of the ongoing increase in the U.S. current account deficit and the continuing capital inflows into the U.S. in the 2000s, the global economy became highly unbalanced. This has generated hot debates about what structural global problems these imbalances reveal.

As Figure 13.1 shows, the U.S. current account deficit kept rising from the early 2000s until the outbreak of the global financial crisis, as did foreign capital inflows into the U.S.

The main reasons for imbalances in the U.S. are excessive consumption and the recent fiscal deficit under Bush administration – that is, overspending in both the private and the public sector. Figure 13.2 demonstrates the gap between domestic investment and domestic saving by the private and public sectors. In

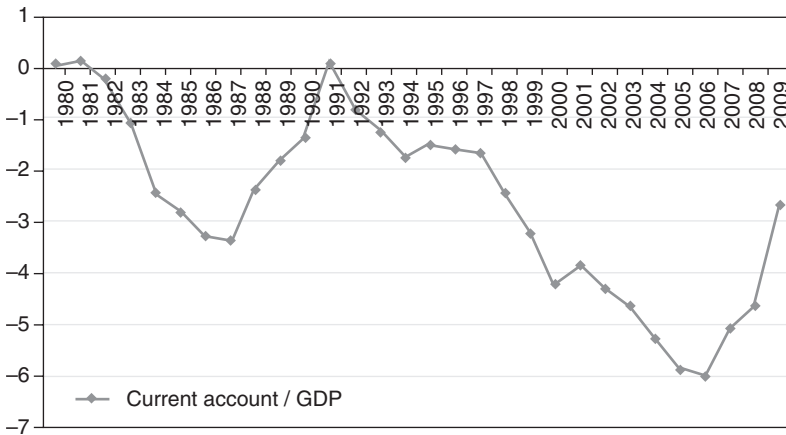


Figure 13.1 Current account deficit/GDP in U.S. (percent) (source: Bureau of Economic Analysis (BEA)).

the 1980s, the main cause of the current account deficit was the fiscal deficit, whereas after 2000, the main contributing factors were the decline of savings relative to investment and the large government deficit.² These new U.S. twin deficits lay at the heart of global imbalances.

As Figure 13.3 shows, the surplus countries are mainly East Asian, including China, and oil producers. These countries have pursued export-dependent growth

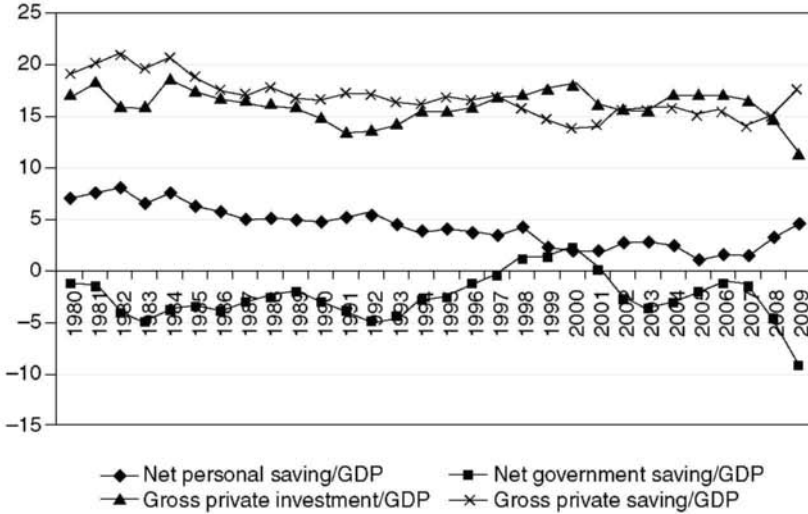


Figure 13.2 Investment and saving in U.S. (percent) (source: Bureau of Economic Analysis (BEA)).

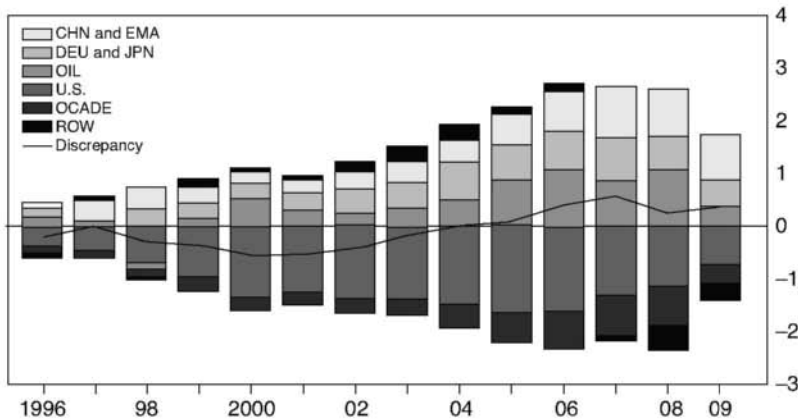


Figure 13.3 Global dimension of global imbalances (source: IMF, 2010).

Note

- 1) Current account balance, percent of world GDP.
- 2) CHN: China, EMA: emerging Asian countries, DEU: Germany, JPN: Japan, OIL: Oil producers, US: United States, OCADE: Other-current-account-deficit countries, ROW: rest of the world.

strategies rather than stimulating domestic demand after the 1997 East Asian crisis. They accumulated huge trade surpluses and foreign reserves, and recycled these dollars to the U.S. by purchasing U.S. Treasury bonds. For instance, the foreign reserves of China jumped from \$212 billion in 2001 to over \$1 trillion in 2006, more than \$2 trillion in 2009 and over \$3 trillion in March 2011.

Debates in the early 2000s about this global imbalances problem (Eichengreen, 2008) involved disagreements between two broad positions. Optimistic views located the source of global imbalances in foreign countries, emphasizing the strength of the U.S. economy. For example, one view attributed global imbalances to the “global saving glut:” excessive saving in surplus countries was invested in the U.S. because of these countries’ underdeveloped financial systems (Bernanke, 2005). Others argued that East Asian countries adopted an export-dependent growth strategy; they kept their currencies weak so as to increase exports to U.S. consumers and earn surpluses. This is the argument of the Bretton Woods II system, in which both the U.S. and East Asia fared well (Dooley *et al.*, 2004). Another view is that major imbalances were not in trade but in financial assets, and the attempt of emerging market countries to invest in safe assets in the U.S. generated global imbalances (Caballero and Krishnamurthy, 2009). These arguments posit that global imbalances reflect structural features and policy choices made within the global economy, and thus could be sustainable (Serven and Nguyen, 2010).

However, these ideas are based on the unrealistic efficient market hypothesis, according to which global savers choose among global assets. Analysis of the real situation suggests this view is naïve: in particular, foreign investment flows into the U.S. were not just seeking safe assets; they were strongly induced by U.S. financial institutions striving to expand their leverage (Shin, 2009).

Another, more pessimistic (and in this author’s opinion, more reasonable) view argued that the huge U.S. current account deficit was due primarily to domestic U.S. problems, including the decline of saving, the rising government deficit, and overconsumption related to the asset market bubble. This situation was not sustainable because the U.S. foreign debt burden grew too much and too fast, leading surplus countries to lose trust in U.S. assets which were at increasing risk of dollar depreciation (Roubini and Setser, 2004; Obstfeld and Rogoff, 2004). Many scholars acknowledged that a sustained depreciation of U.S. dollars and a reduction of the U.S. saving-investment gap would be needed to correct imbalances. Without these measures, disorderly adjustment involving a sharp depreciation of the dollar – similar to financial crises in emerging market countries – might occur.

It is important in unfolding this argument to investigate more extensively the other pillar of global imbalances, East Asia. That region has experienced an “investment drought,” and not just a “saving glut” (Lee and McKibbin, 2006). In fact, most East Asian countries including Korea and the ASEAN experienced a significant decline in the investment rate after the 1997 East Asian crisis, in part due to neoliberal economic restructuring. China experienced an increase in its investment rate. But its saving rate grew faster – in part because of its active promotion of exports, but also because its domestic consumption was depressed and its social welfare and financial systems remain underdeveloped.

Another aspect of global imbalances is the “Lucas Paradox:” foreign capital has continuously moved to the U.S., contrary to the expectations of theoretical equilibrium growth models. Of course, many factors – including institutions, risk, and the level of financial development – may affect the level of returns and explain why capital may not move to poorer countries. But it is also true that countries that really need capital for development may not realize benefits from international capital inflows. This is unfair as well as inefficient from the perspective of balanced growth in the world economy. The more serious problem is that foreign capital flows into the U.S. had not been utilized productively. Continuous foreign capital inflows into the U.S. economy went hand in hand with asset-market bubbles in feeding an American spending binge well beyond what their income could sustain. This suggests the importance of understanding the current global crisis from the perspective of global imbalances.

Global imbalances and the global financial crisis

Following the global financial crisis, the second round of the debate on global imbalances began, focused on the role of the global imbalances in that crisis. A commonly expressed view, argued in particular by U.S. officials, was that global imbalances were one of the direct causes of the crisis. Foreign capital inflows to the U.S. stimulated the asset market bubble by lowering interest rates, thus propping up overspending (Portes, 2009). Lower interest rates also forced competition for higher yields among financial institutions, encouraging them to seek out the risky financial products generated by securitization process and to increase leverage (Bernanke, 2009). Others point out that the development of globalization and global imbalances together brought about the financial crisis, since low-wage workers in China depressed the wages of U.S. workers, who relied more heavily on borrowing which was supported by capital inflows from China, aggravating the bubble (Jagannathan *et al.*, 2009). Thus the financial crisis is thought to be not the cause of the economic problem but the syndrome of deeper problems of a globalized world economy.

However, the direct causality from global imbalances to the financial crisis is not easily established. Some have observed that gross foreign capital inflows are more crucial in U.S. financial vulnerabilities; but these were not directly related to the U.S. trade deficit or to net capital inflows after the early 2000s (Whelan, 2010; Serven and Nguyen, 2010). In particular, banks in EU countries were involved in making large investments in U.S. toxic assets; so there is no close relationship between global imbalances and the geography of the financial crisis (Acharya and Schnabel, 2010).

The second extreme view posits that global imbalances had little to do with the financial crisis (Dooley *et al.*, 2009; Whelan, 2010). The evidence for this view is that the crisis did not occur in the way that was expected by alarmists, that is, capital flight from the U.S. and the collapse of the dollar. In fact, international capital flew into the U.S., seeking safe assets, and the dollar strengthened when the crisis broke out. In this view, the financial crisis was mainly due to

failures in financial regulation; the expectation is that global imbalances will continue after the crisis calms down. Thus, the role of the U.S. financial sector in producing safe assets should be encouraged so long as financial development in surplus countries remains still weak (Caballero, 2010). So the so-called Bretton Woods II system, which is essentially a stable and benign phenomenon, could be more intensified following the crisis (Dooley *et al.*, 2009).

This view, like the first, is problematic. These authors certainly go too far in arguing that current imbalances represent a sustainable equilibrium, because it is based on the untenable assumption that U.S. financial markets are perfect. The prospect of dollar instability remains because of rising external debts, and U.S. foreign borrowing is likely to become more difficult due to global reserve diversification and the worsening U.S. net external position (Obstfeld and Rogoff, 2009). Borio and Disyatat (2011) refute the connection between global imbalances and the financial crisis by underscoring that financing and saving are different dimensions; consequently, gross capital inflows for financing are not directly related to trade imbalances. These authors also argue that because market interest rates are not determined by the saving-investment framework, global imbalances cannot affect them directly. We might note that while these points have some theoretical basis, it remains true that Chinese investment in Treasury bonds in the early 2000s influenced prices and outcomes in financial markets.

More nuanced arguments argue that failures in domestic distortions in macroeconomic management led to both the financial crisis and to global imbalances (Obstfeld and Rogoff, 2009; Blanchard and Milesi-Ferreti, 2009). These macroeconomic distortions include too-low interest rate policy, financial deregulation, and U.S. asset-market bubbles, as well as the effort of emerging-market countries, especially China, to maintain favorable exchange rates. The U.S. net external deficit permitted interest rates conducive to housing-price appreciation and lax lending practices, credit expansion, and high leverage, and consistent with an apparently low rate of price inflation. A recent study examines foreign capital inflows and their effects on interest rates by extending the global saving glut argument (Bernanke *et al.*, 2011). The authors find that global saving glut countries, including all emerging Asian countries and Middle East exporters, acquired a substantial share of the new issues of U.S. Treasuries, Agency debt, and Agency-sponsored mortgage-backed securities from 2003 to 2007. At the same time, European countries, without a large current account surplus, purchased large volumes of private-label mortgage-backed securities and other fixed-income products.³ Thus, capital flows from surplus countries such as China went to the U.S., seeking safest securities issued by the U.S. government, while European investors made rather risky investment including equity, as Figure 13.4 highlights.

This study suggests that strong demand for apparently safe assets not only served to reduce yields on these assets, but also encouraged the U.S. financial industry to develop structured investment products that transformed risky loans into highly rated securities. However, the excess growth and increasingly capital-market structure of the U.S. financial system may have aggravated imbalances

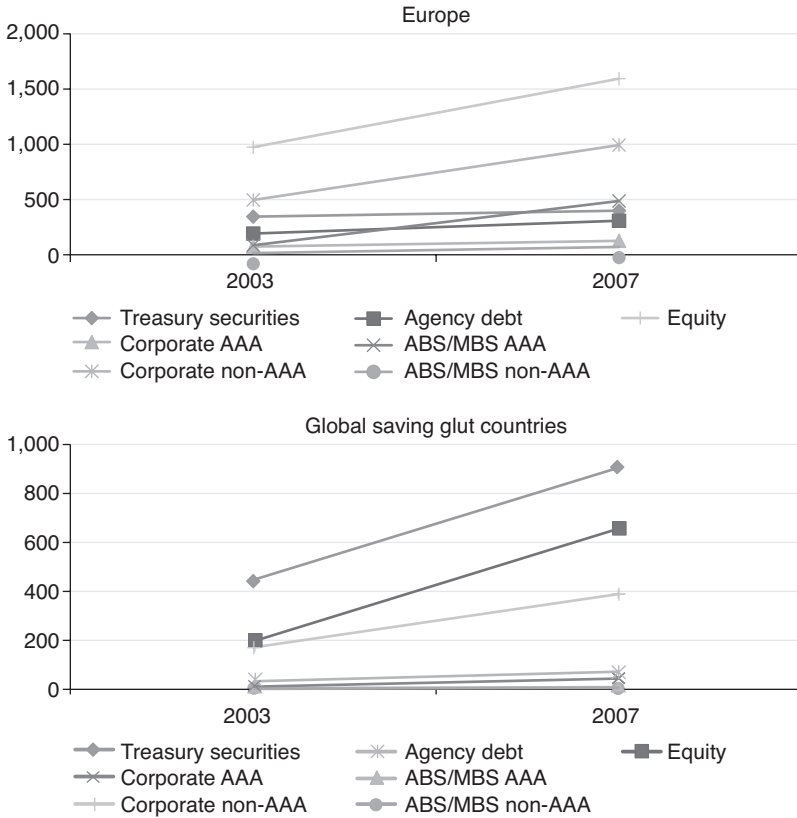


Figure 13.4 Changes in U.S. securities outstanding, 2003 and 2007 by country group (\$ billion) (source: Recalculated by author from Table 1 in Bernanke *et al.* (2011)).

Note
 ABS means Asset Backed Securities, MBS means Mortgage Backed Securities.

(Shin, 2009). For example, foreign investors’ holding of asset-backed securities based on subprime mortgage loans soared after 2003, suggesting that the supply of unsafe assets by the U.S. financial sector may have driven foreign investment.⁴ This demonstrates some evidence for a “supply push” theory of global imbalances, not the “demand pull” argued by the excess saving theory. It should be noted that there were also important and complex two-way interactions between global and U.S. domestic macroeconomic imbalances – for instance, the current account deficit and housing appreciation (Smaghi, 2008).

In sum, these studies suggest that the global imbalances in trade had a limited role in the global financial crisis, and the broader financial imbalances were indeed crucial. However, most of those arguments do not recognize the underlying institutional changes behind the U.S. macroeconomic imbalances and

global financial imbalances. A more complete understanding of global imbalances vis-à-vis the current crisis requires understanding the role of globalization and neoliberal growth regime in both the U.S. and East Asia from the political economy perspective.

The political economy of global imbalances in the U.S. and East Asia

Institutional and political changes under the neoliberal growth regime in both the U.S. and East Asia played an essential role in worsening global imbalances. Neoliberalism became dominant in the U.S. after the 1980s and East Asia after the 1990s, but its effects on external balances were quite different. In the U.S., neoliberal economic policy after the Reagan administration resulted in more unequal income distribution on one hand and more financial deregulation on the other hand. Real wages growth had been depressed, remaining below productivity growth after the early 1970s (Kotz, 2009); and reductions in social welfare expenditures increased income inequality. Meanwhile, financialization of the economy also encouraged the asset market bubble and this enabled the debt-led overconsumption and economic boom. Recent financial innovations, such as securitization, along with financial deregulation, stimulated the excessive growth of market-based financial intermediation, including subprime lending in the mortgage market (Adrian and Shin, 2008). Consequently, increasingly poor Americans could continue excessive debt-financed spending, including the purchase of homes after the early 2000s that required mortgage loans larger than their incomes could support. This enlarged the current account deficit as the saving rate fell steadily.⁵

Furthermore, cheap imports from China were essential to the U.S. as these both checked the growth of real wages and allowed workers to sustain their living standards. International trade and foreign direct investment also contributed to weakening workers' power and strengthening the neoliberal growth regime, causing more intensive competition and "threat effects." This suggests that neoliberalism, globalization, and global imbalances interacted closely in the U.S. While neoliberal changes provided the background for the increase in U.S. macroeconomic imbalances (and hence global imbalances), globalization and global imbalances reinforced neoliberalism in the U.S. This neoliberal growth regime resulted in rising income inequality, financialization, and the asset-market bubble, leading to global imbalances in the early 2000s. Global imbalances also worsened internal domestic imbalances and financial vulnerability before the crisis.

Neoliberalism in East Asia went hand-in-hand with the export-dependent growth strategy as these countries strove to increase exports and capitalize on the opportunity provided by globalization for maximum growth. Most East Asian countries also observed that as in the U.S., income inequality became higher after the introduction of more economic liberalization, market opening, and neoliberal economic reforms. China saw the income gap between the rich and the poor widening, with the Gini coefficient rising from less than 0.3 in 1985

to 0.4 in 2000, and about 0.5 for now. The wage share out of GDP also fell from about 51 percent in 2000 to 40 percent in 2007 (Hung, 2009). Crisis-hit countries including Korea and Thailand experienced worsening distributions because of the neoliberal economic restructuring and further financial opening imposed by the IMF after the 1997 crisis. These countries struggled to globalize and export more, and their surpluses rose sharply after 1998 with currency depreciation and the investment decline. In China, the rise in the saving-investment gap and international competitiveness, supported by currency depreciation and low wages, increased the trade surplus tremendously after the early 2000s.

Workers' low wages in East Asia indeed were a prerequisite for an export-market competition that grew more and more intensive. Growing inequality and low wages have repressed consumption and domestic demand, thus contributing further to the large trade surpluses. Furthermore, financial restructuring in the direction of more liberalized and open financial markets reduced corporate investment considerably in crisis-hit countries. Therefore, neoliberalism and worse income distribution in East Asia led to a decline of investment and consumption, and to the consequent increase in trade surpluses. This suggests that similar changes in the political economy, driven by different economic growth strategies, created diametrically opposite results in external balances on the two sides of the Pacific.

In East Asia, holding a large amount of foreign reserves was both a policy goal and a tool associated with global imbalances. Many emerging market countries became concerned about instability of globalized financial markets (Aizenman and Lee, 2007). This precautionary motive led East Asian countries to keep exchange rates undervalued, so as to increase the trade surplus and reserves. But the accumulation of reserves by state intervention in exchange markets as such kept their currencies weak. This currency depreciation was functional for East Asian nations' mercantilist motive as well, as it helped them achieve faster economic growth based on increased exports, as per the Bretton Woods II system argument (Dooley *et al.*, 2004). Finally, the portfolio choice of East Asian central banks regarding reserve holding was to invest in low-risk debt instruments in the U.S. in search of safety. This was, as noted earlier, partly due to the underdevelopment of their financial systems (Mendoza *et al.*, 2009).

In sum, global imbalances are apparently an outcome of the asymmetric savings-investment gap; but it was the development of neoliberalism along with globalization that lay behind imbalances. In this neoliberal growth regime, global economic growth was led by overspending in the United States, which held a key currency, benefitting East Asian growth. But this was possible only with the rise of debts and serious financial vulnerability in the U.S., leading eventually to the financial collapse. Mainstream economists argue that global imbalances and the global financial crisis have common origins in economic policies and distortions that influenced the transmission of these policies (Obstfeld and Rogoff, 2009). However, our analysis emphasizes that the underlying causes of global imbalances and the global financial crisis were structural changes in institutions and political economy linked to the global neoliberal growth regime.

Global rebalancing and future prospects

Changes and prospects of global imbalances

After the crisis broke out in late 2007, it appeared that the decrease in U.S. imports, due to the serious economic recession in that nation, would start the process of correcting global imbalances. Figure 13.5 portrays quarterly changes of the U.S. current account deficit. This started to shrink after reaching a peak of 6 percent of GDP in 2006, and began a significant decline from late 2008 onward. Its level in the second quarter in 2009, 2.4 percent of GDP, was the lowest in the 2000s (though it increased somewhat after that).

These changes are related to the rise in saving and fall in investment in the U.S. after early 2008. The household net saving rate out of disposable income rose continuously from 2.7 percent in the first quarter of 2008 to 7.2 percent in the second quarter of 2009, recording some 6 percent in 2009. The domestic private saving rate rose to 17.6 percent, much higher than the domestic investment rate (11.3 percent) in 2009. This contributed significantly to the reduction of the trade deficit, as did the sharp fall of net asset values due to the financial crisis. However, these factors were offset by the huge drop in government net saving, which fell from -1.7 percent in 2007 to -9 percent in 2009 due to the expansionary government spending in response to the financial crisis. The U.S. government announced a fiscal deficit of \$1.4 trillion for the 2009 fiscal year (9.9 percent of GDP), three times larger than that in 2008. In 2009, the total domestic saving rate including the government sector was still about 2.7 percent point lower than the total investment rate. Thus, despite the surplus in its private balance, the U.S. relied on foreign saving in 2009 due to the increased deficit in its government balance.

It is not very certain whether the reduction of the current account deficit in the U.S. will continue with the end of overspending. The decline in consumption,

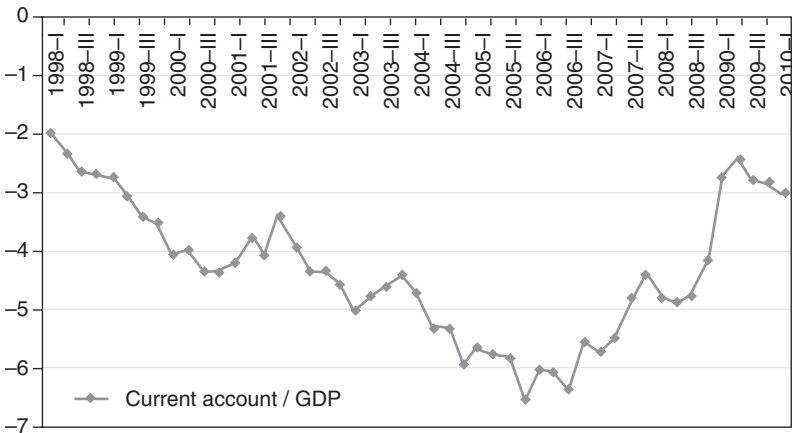


Figure. 13.5 Recent changes in current account deficit of U.S. (percent) (source: Bureau of Economic Analysis (BEA)).

which reflects the crisis-induced deleveraging of households and financial institutions, might be only temporary. Overall, the U.S. economy began to recover with 2.8 percent growth in the third quarter of 2009, after recording four consecutive negative growth rates.

Foreign capital inflows have also changed to some extent. Net foreign lending to the U.S. fell sharply in the recent period due to the drop of the current account deficit after 2007. In 2007, the behavior of foreign central banks also changed: concerned about future dollar depreciation, they began to reduce dollar assets and increase the proportion of other currencies in their reserve holdings. However, the demand for safe assets such as U.S. government securities increased in the midst of the financial crisis; so foreign holding of these bonds rose significantly in 2008. This also kept the value of the dollar higher than had been expected. It was not until late 2009 that the dollar began to depreciate, reflecting the huge increase in the U.S. money supply due to the adoption of a quantitative easing policy. Dollar depreciation may help the U.S. further reduce its current account deficit, but if this occurs too abruptly global economic disorder may worsen.

Thus, the period after 2008 has witnessed a partial correction of global imbalances. Some critics have argued that this may only be temporary. U.S. economic recovery may deter further global rebalancing (Lee *et al.*, 2010). Indeed, a recovery in U.S. consumption and growth in post-crisis international trade, along with an increasing fiscal deficit and strong dollar, may aggravate imbalances again (de Mello and Padoan, 2010). Others disagree, arguing that the rebalancing will continue because of a fall in potential growth rates and a reduction in the U.S. saving-investment gap (Blanchard and Milesi-Ferretti, 2009). Also, declining trust in the dollar and a rising risk premium and cost of capital in the U.S. would make sustaining a large U.S. current account deficit more difficult (Obstfeld and Rogoff, 2009).

For now, factors that will both reduce and enlarge global imbalances are at work. These imbalances will shrink due to changes in consumption in both in the U.S. and China. In the U.S., the rapid rise in private consumption in the 2000s, backed by rising housing prices, is not sustainable any more; and consumption will rise in the long run in China as that nation's policies enhance social welfare and domestic demand. Further, efforts to correct global imbalances have recently emerged at several international meetings, such as G20. But at the same time, the financial crisis has strengthened emerging-market countries' need to hold foreign reserves and seek safe U.S. assets (Serven and Nguyen, 2010). In general, global imbalances after the global financial crisis will continue, though at levels below those of the pre-crisis period (IMF, 2010).

Correcting global imbalances systematically and without heightening global disorder will require establishing a new and more equal growth regime, since the current imbalances reflect the structural features of the neoliberal growth regime. What is called for is the end of the neoliberal debt-led growth regime in the U.S. and of the export-dependent growth strategy in emerging market countries, along with more equal income redistribution and effective financial regulation. Only if

these changes are made can global imbalances be reduced without a serious global recession. In the face of Wall Street's strong opposition, the tight regulation of financial institutions that is required could be especially hard, as the current experience of the Obama administration makes clear. The dominant role of finance in the operation of the U.S. economy is clearly indicated by the fact that financial institutions' share of all U.S. firms' profits rose from 21.1 percent in 1979 to 41.2 percent in 2003 (Kotz, 2009). Nonetheless, if these needed changes in the U.S. political economy are not made, U.S.-led financial capital may stimulate another bubble-led boom, induce a new round of U.S. overconsumption, and delay global rebalancing for still more years.

The role of East Asia for balanced globalization

Economies such as China, which accumulated huge trade surpluses and recycled the dollars earned to the U.S., are partly responsible for global economic imbalances. It is thus certain that structural changes in economies across the Pacific are also needed to resolve global imbalances. In 2008, amidst the financial crisis, China's current account surplus as a share of its GDP fell slightly. Nonetheless, this ratio was still much higher than in the early 2000s: the export/GDP ratio in China rose from 22.6 percent in 2001 to 34 percent in 2004 and then 39.9 percent in 2006, before declining slightly to 36.6 percent in 2008. Meanwhile, the share of household final consumption out of GDP in China stood at 34 percent in 2008, lower than the 40–45 percent levels recorded between the late 1990s and early 2000s (and much lower than in other countries).

As we saw, most East Asian countries pursued the export-dependent growth strategy by keeping their currencies relatively depreciated and increasing exports to the U.S. For example, the Chinese government maintained the effective peg system between *renminbi* and dollars until mid-2006, after which it introduced a more flexible exchange rate system which allowed some RMB appreciation. After mid-2008, however, it again pegged the RMB exchange rate to the U.S. dollar so as to increase exports. While this strategy has been successful in the past, it is unlikely to remain feasible, given the U.S. economy's collapse and increasing U.S. pressure on China.⁶

The unsustainability of the current pattern of flows is why many call for the fundamental change of the growth strategy of East Asia. Countries in this region should do more to make domestic demand, not exports to the U.S., an engine of growth. They need to stimulate the purchasing power of people in their nations by enhancing social welfare and improving income distribution.⁷ A slow and orderly adjustment of exchange rates, especially between the Chinese RMB and the U.S. dollar, will also help resolve global imbalances. Also, South–South cooperation should be developed so that emerging countries reduce their dependence on the U.S. Fundamentally, as in the U.S., changes in the political economy that support workers and restrain export companies are required if East Asia is to end neoliberalism and introduce a more progressive and Keynesian economic policy. The Chinese government appears to recognize the needs to improve

income distribution, and there is growing concern about it in Korea and Japan as well.

A more balanced global economy can be realized only when the movement of international capital flows can help the stable growth of the global economy. International investment flows to the U.S. under the current global imbalances have certainly had the opposite effect. Reform of the global financial system in the direction of more desirable forms of financial globalization would direct international capital flows much more into poor countries in need of development finance (Ocampo, 2009). East Asia can play a key part in this shift. Since this region holds the largest foreign reserves, it can devise a way to make more productive use of them. Countries with large reserve holdings should not only diversify them from dollars to other currencies, but also plan and establish institutions that help finance developing countries and stabilize the regional economy. Closer regional economic and financial cooperation in East Asia is necessary for this. East Asian countries have already agreed on a plan for a multilateral fund by developing the Chiang Mai Initiative. A changed course in East Asian countries' economic growth strategies, and these nations' assistance to developing countries, will make a huge contribution to a more balanced – as well as prosperous – global economy.

Conclusions

The global financial crisis that erupted after 2007 shed light on the problematic features of the global economy, and especially on global imbalances. Growing financial imbalances in the global economy along with worsened financial vulnerability in the U.S. became the defining backdrop for the global financial crisis. The crisis rapidly spread from the U.S. to other developed and emerging market countries and became truly global because financial globalization had created the preconditions for widespread financial instability in the world economy.

This chapter has used a political economy perspective to examine the development of the current global financial crisis, as well as the relationships between this crisis and global imbalances. After the 1980s, neoliberalism and financialization developed in the U.S.; more recently, a neoliberal growth model based on an export-dependent strategy was established in East Asia. These changes resulted in higher inequality in both regions and opposite trade outcomes for U.S. and East Asian trade balances, leading to imbalances in the global economy. Unsustainable finance-led growth in the U.S. was encouraged not only by financial deregulation and lax monetary policy but also by the ongoing capital inflows associated with these global imbalances. The bursting of the resulting bubble caused a collapse of the market-based financial system in the U.S. and the global financial crisis. This chapter underscores the fact that the underlying causes of global imbalances and the global financial crisis were structural changes in institutions and in the political economy, in both the U.S. and East Asia, which established a neoliberal growth regime.

After the global financial crisis, global imbalances have been corrected to a limited extent: the U.S. current account deficit and capital inflows to the U.S. have fallen substantially. But without a structural transformation of both the U.S. and East Asian economies, it will be difficult to resolve the problem of global imbalances. The U.S. economy should curtail excessive debt-financed spending and reduce the deficit both of government and households. East Asian countries should change their export-dependent growth strategy in favor of a domestic-demand-based growth strategy with better income distribution and reduced U.S.-dollar recycling. Many argue that more effective financial regulation in the national and global level is needed to prevent future financial crisis. However, what will stabilize the global economy and bring about global rebalancing fundamentally is to end the current neoliberal growth regime at the global level.

Notes

- 1 After the bankruptcy of Bear Sterns in March 2008, the fifth largest investment bank in the U.S., the third and fourth largest, Merrill Lynch and Lehman Brothers, effectively went bankrupt. The first and second largest ones, Goldman Sachs and Morgan Stanley, did not have so much exposure to problematic subprime assets.
- 2 The identity of GDP is $C+S+T=C+I+G+(X-M)$. If we rephrase this equation, $(X-M)=(S-I)+(T-G)$. Therefore, the current account deficit could be decomposed into two parts, the private balance and the government balance. Both balances recorded negative after the early 2000s and aggravated the current account deficit in the U.S.
- 3 Between year-end 2003 and year-end 2007, the value of total U.S. securities outstanding rose about \$10 trillion, of which roughly \$4.5 trillion was absorbed by foreign investors. The supply of Treasuries and Agencies outstanding rose \$1.6 trillion, and this was fully taken up by foreigners, of which \$0.9 trillion was purchased by the GSG countries and less than \$0.2 trillion by Europeans. The amount outstanding of AAA-rated asset-backed securities rose \$1.7 trillion, of which U.S. residents took \$1.1 trillion and Europeans \$0.4 trillion (Bernanke *et al.*, 2011, pp. 12–13.). Also, see Figure 13.5.
- 4 Foreign share of GSE-backed securities rose from about \$0.6 trillion in 2002 to \$1.6 trillion in 2008. However, foreign holding of U.S. securities in private capital markets, in which asset-backed securities backed by subprime mortgage were important, skyrocketed from 2002 to 2007 by a factor of about 29 (Shin, 2009). The author also argues that the increased lending driven by growth of U.S. intermediary balance sheets “sucked in” funding from abroad. The increased funding has originated (at least in part) from abroad, so that in the final accounting relationship given by the current account, there is a surge in the current account deficit.
- 5 Some argue that this easy lending was encouraged by the government as a wrong solution to rising income inequality (Rajan, 2010).
- 6 The more countries join export markets, the harder to be successful this strategy is. Thus, there is a sort of fallacy of composition in the export-dependent growth strategy of individual countries when it comes to the whole world.
- 7 In this sense, the rise in infrastructure investment by means of government spending in China is not desirable because it will add more production and needs more demand in the future.

Bibliography

- Acharya, V. and Schnabel, P. (2010) "Do Global Banks Spread Global Imbalances? The Case of Asset-Backed Commercial Paper during the Financial Crisis of 2007–09," Presented at the 10th Jacques Polak Annual Research Conference.
- Acharya, V., Philippon, T., Richardson, M., and Roubini, N. (2009) "Prologue. A Bird's Eye-View. The Financial Crisis of 2007–2009. Causes and Remedies," in Acharya, V.V. and Richardson, M. (eds) *Restoring Financial Stability: How to Repair a Failed System*, John Wiley.
- Adrian, T. and Shin, H.S. (2008) "Financial Intermediation, Financial Stability and Monetary Policy," Federal Reserve Bank of New York Staff Reports, 346.
- Aizenman, J. and Lee, J. (2007) "International Reserves: Precautionary vs Mercantilist Views," *Open Economies Review*, 18.
- Bernanke, B.S. (2005) "The Global Saving Glut and the U.S. Current Account Deficit," at the Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia.
- Bernanke, B.S. (2009) "Financial Reform to Address Systemic Risk," Speech at the Council on Foreign Relations, Washington, D.C.
- Bernanke, B.S., Bertaut, C., DeMarco, L.P., and Kamin, S. (2011) "International Capital Flows and the Returns to Safe Assets in the United States, 2003–2007," Board of Governors of the Federal Reserve System, International Finance Discussion Papers, 1014.
- Borio, C. and Disyatat, P. (2011) "Global Imbalances and the Financial Crisis: Link or No Link?" BIS Working Papers, 346.
- Blanchard, O. and Milesi-Ferretti, G.M. (2009) "Global Imbalances: In midstream?" IMF Staff Position Note 09/29.
- Caballero, R. (2010) "The Other Imbalance and the Financial Crisis," NBER Working Paper, 15636.
- Caballero, R. and Krishnamurthy, K. (2009) "Global Imbalances and Financial Fragility," NBER Working Paper, 14688.
- Crotty, J. (2009) "Structural Causes of the Global Financial Crisis: A Critical Assessment of 'New Financial Architecture'," *Cambridge Journal of Economics*, 33(4).
- De Mello, L. and Padoan, P.C. (2010) "Are Global Imbalances Sustainable? Post-Crisis Scenario," OECD Economics Department Working Paper, 795.
- Dooley, M., Folkerts-Landau, D., and Garber, P. (2004) "The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates and Exchange Rates in Center Countries," NBER Working Paper, 10332.
- Dooley, M., Folkerts-Landau, D., and Garber, P. (2009) "Bretton Woods II Still Defines the International Monetary System," NBER Working Paper, 14731.
- Eichengreen, B. (2008) "Global Imbalances: The New Economy, the Dark Matter, the Savvy Investor and the Standard Analysis," *Journal of Policy Modeling*, 28(6).
- Greenspan, A. (2010) "The Crisis," presented at Spring 2010 Conference of the Brookings Papers on Economic Activity.
- Hung, H-F. (2009) "America's Head Servant? The PRC's Dilemma in the Global Crisis," *New Left Review*, November-December.
- IMF (International Monetary Fund) (2009) *World Economic Outlook*, April 2009.
- IMF (International Monetary Fund) (2010) *World Economic Outlook*, April 2010.
- IMF (International Monetary Fund) (2011) *World Economic Outlook*, April 2011.
- Jagganathan, R., Kapoor, M., and Schaumburg, E. (2009) "Why are We in a Recession? The Financial Crisis is the Symptom Not the Disease!" NBER Working Paper, 15404.

- Kotz, D. (2009) "The Financial and Economic Crisis in 2008: A Systemic Crisis of Neo-liberal Capitalism," *Review of Radical Political Economics*, 41(3): 305–317.
- Lee, J.-W and McKibbin, W.J. (2006) "Domestic Investment and External Imbalances in East Asia," *Brookings Discussion Papers in International Economics*, 172.
- Lee, J.-W., Rabanal, P., and Sandri, D. (2010) "US Consumption after the 2008 Crisis," IMF Staff Position Note.
- Mendoza, E., Quadrini, V., and Rios-Rull, J. (2009) "Financial Integration, Financial Deepness and Global Imbalances," *Journal of Political Economy*, 117.
- Obstfeld, M. and Rogoff, K. (2004) "The Unsustainable US Current Account Position Revisited," NBER Working Paper, 10869.
- Obstfeld, M. and Rogoff, K. (2009) "Global Imbalances and the Financial Crisis: Products of Common Causes," mimeo.
- Ocampo, J. (2009) *Reforming the Global Reserve System*, Oxford University Press.
- Portes, R. (2009) "Global Imbalances," mimeo.
- Rajan, R. (2010) *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, Princeton: Princeton University Press.
- Reinhart, C.M. and Rogoff, K. (2009) *This Time is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press.
- Roubini, N. and Setser, B. (2004) "The US as a Net Debtor: The Sustainability of the US External Imbalances," mimeo.
- Serven, L. and Nguyen, H. (2010) "Global Imbalances before and after the Global Crisis," World Bank Policy Research Working Paper, 5354.
- Shin, H.S. (2009) "Global Imbalances, Twin Crisis and The Financial Stability Role of Monetary Policy," presented at the KIEP/CEPR conference.
- Smaghi, B.L. (2008) "The Financial Crisis and Global Imbalances: Two Sides of the Same Coin," Speech at Asia-Europe Economic Forum.
- Whelan, K. (2010) "Global Imbalances and the Financial Crisis," Briefing Papers for the European Parliament's Committee on Economic and Monetary Affairs.

14 East Asia's integration and structural shift

The shift from newly industrializing economies to potentially bigger market economies under the global economy¹

Hitoshi Hirakawa

Introduction

The economic development of the Asian region, which has centered on East Asia for the past half century, illustrates a new stage in the history of capitalism. In 2010, China surpassed Japan in terms of GDP to take second place in the world behind the U.S. Changes in China's foreign policy have attracted considerable attention, and these have generated new responses from and created issues for neighboring countries as well as those further afield. However, economic development has not been limited to China alone. In forums monopolized by advanced countries to discuss international economic and financial matters, the influence of emerging countries has strengthened to the extent that global issues cannot be effectively addressed without including them as members.

The way scholars look at developing regions has dramatically changed in the past half century. This is confirmed by the change in the theoretical issues of development economics. In development discourse until the 1970s, the "vicious cycle of poverty" of Ragnar Nurkse, the imbalance growth of Albert Hirschman, the population theory of Thomas Malthus, and the Marxist neocolonialism and center-periphery of the dependency school were among the pressing research issues.

The poverty suffered by developing regions was often discussed by linking capital scarcity to population growth. Although this specific issue has not vanished from all developing regions, the attention paid to emerging countries has taken a 180-degree turn. Comparisons between advanced and developing economies now focus on the rate of gross capital formation, which shows a tendency to be higher in developing regions than in advanced countries. Furthermore, the alleged main culprit of poverty, namely population growth, is now viewed as a major factor in improving the competitiveness of the region.

In explaining economic growth, the term "population bonus," meaning the increase in the working-age population, is even often used nowadays. Partly because of the rapid expansion of BRICs, a term coined by Goldman Sachs, during the past decade or so, interest has intensified on population as one of the important standards for selecting promising developing countries. Even the

linkage in business cycles between advanced and developing economies has been considered to have shifted from previous coupling to decoupling/uncoupling (IMF 2007; ADB 2007). Incidentally, this author considers that the current mechanism of developing emerging economies based on such an international environment could be conceptualized as a “potentially bigger market economies” (PoBMEs)² type of development.

In this chapter, we aim to confirm the growth and structural change in East Asia based on the aforementioned problem. We also consider the background to these changes and explain the features of modern economics from the perspectives of developing countries. We start by investigating the structural change accompanying the growth witnessed in East Asian countries and analyzing the background of such changes. Finally, we consider the stages in the history of capitalism.

East Asian economic development and regional integration

For almost the past half century, East Asia has been the center of global attention because of its levels of economic growth. As such, regional integration became a major point of discussion in the 1990s. Up to that time, East Asia's mechanism for development was for the U.S. to be a major export destination, and low wages were the source of East Asia's competitiveness in the world market. Even during Japan's high growth that started in the 1960s, the U.S. market and low-wage mechanism was in effect. This development mechanism was strong even in newly industrializing economies (NIEs), consisting of Hong Kong, Singapore, South Korea, and Taiwan; Association of Southeast Asian Nations (ASEAN) countries; and China. Until now, the importance of the U.S. market had been overwhelmingly large. However, through such a development emerged the East Asian intraregional market, the independence and prospects of which came to be discussed in the second half of the 1990s. Figure 14.1 shows the movement of the intraregional export rate of the world's major regions. This figure demonstrates that the intraregional export rate of East Asia – consisting of Japan, NIEs, ASEAN^{4,3} and China – was below 30 percent in 1970 but rose to almost 50 percent in the middle of the 1990s.

Incidentally, from the second half of the 1980s to the 1990s, there was also accelerated movement in regional integration in Europe and America through the European Union (EU) and the North American Free Trade Agreement (NAFTA), respectively. Bereft of an institutional framework, the integration of East Asia was perhaps *de facto* or “market-led,” and from the second half of the 1990s to the beginning of this century, a gap temporarily appeared in the degree of integration because of the implementation of NAFTA in 1992. However, since then, East Asia's regional integration has been catching up to the point that its import-augmented intraregional trade rate has already exceeded that of NAFTA.

At the same time, the resulting intraregional integration of East Asia that is currently shifting to a new stage of institutionalization through free trade

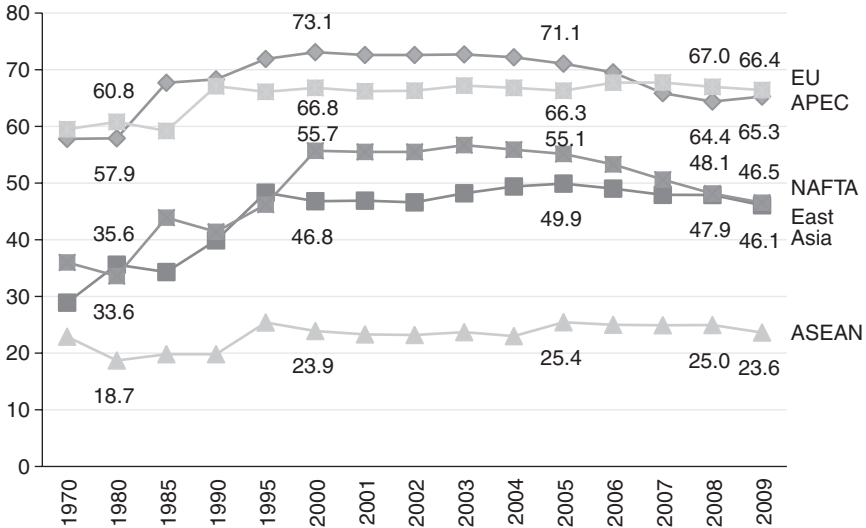


Figure 14.1 Intraregional export ratio by region, 1970–2009 (source: World Bank (2011); World Development Indicators 2011; Ratios of East Asia since 2004 calculated from JETRO's World Trade Matrix).

agreements is becoming more active. However, although the degree of intraregional integration in East Asia seems to have reached a ceiling and dropped especially after the global financial crisis of 2008, East Asian regional integration continues to progress. Furthermore, such a development would bring about dramatic changes in the internal composition in the regional GDP of each country.

Let us look at the GDP composition by country or region, including India within East Asia (Figure 14.2). Up to the 1990s, Japan possessed a dominant share of East Asia. Since 2000, this has started to drop dramatically and, by 2009, it had declined 30 percentage points from 66 percent in 1990 to 36 percent. China has shown the opposite trend. From below 10 percent in 1990, it came neck and neck with Japan in 2009 at 35.1 percent and reached 35.3 percent in 2010, exceeding the 34.7 percent of Japan. The size of China's economy has gone from half to beyond that of Japan in a mere five years. Incidentally, one major feature of the change in the intraregional composition of GDP is the remarkable expansion of China. At the same time, NIEs, ASEAN countries, and India have been able to maintain their high levels of growth so that their shares have either steadied or slightly increased. This fact confirms that the region has developed together with the growth of China.

Figures 14.3 and 14.4 show the movement in the GDP and per capita GDP of East Asian countries, using Japan as a reference. They confirm that the catching up of GDP and per capita GDP has displayed an inverse relationship on a

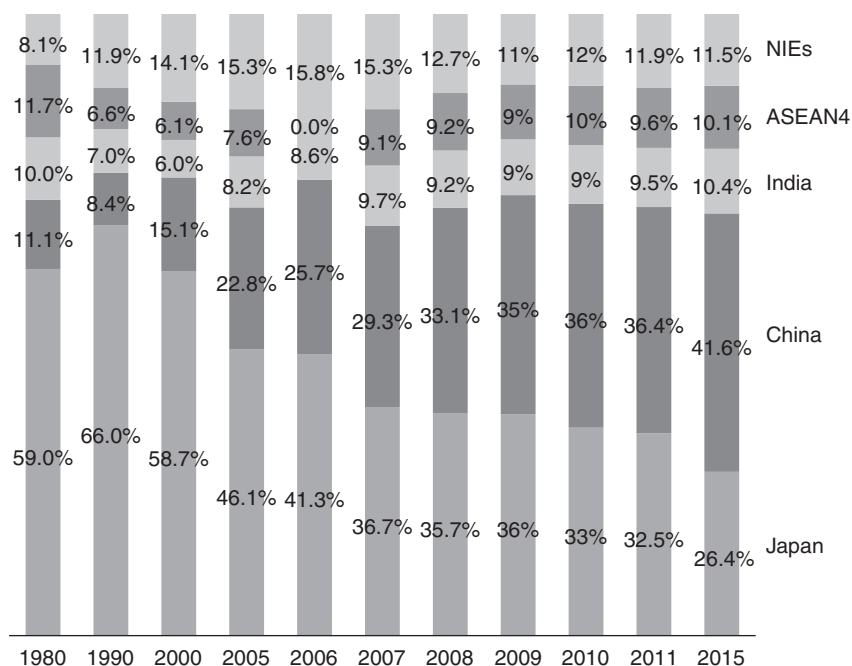


Figure 14.2 Composition of each country or group in total GDP of East Asia + India, 1980–2015 (source: created by IMF, *World Economic Outlook*, April 2007, estimates start after 2011).

Note

NIEs consists of Hong Kong, Korea, Singapore, and Taiwan. ASEAN4 consists of Indonesia, Malaysia, Philippines, and Thailand.

per-country basis. In terms of the size of the economy, during the past 20 years China has caught up with and passed Japan, while countries such as India, Korea, and Indonesia have also caught up, albeit more gradually. However, in terms of per capita GDP, the reverse is true. Singapore is at about the same level as Japan, followed by Hong Kong, Korea, and Taiwan (i.e., NIEs), and then by Malaysia, China, Thailand, and so forth.

This structural change has given birth to a regional economic zone that has an enormous potential for growth in East Asia. NIEs and ASEAN countries seem to be catching up with Japan in terms of indicators of affluence, as do highly populated countries such as China and India in terms of scale indicators. This is a rough sketch of industrialization and market formation in Asia having an enormous population. Although how to overcome ongoing problems such as resources, energy, food, global warming, and environmental problems remain serious issues, East Asia is manifesting its potential for economic growth, and even though short-term business fluctuations are unavoidable, this could lead to the emergence of a potentially large market economic zone.

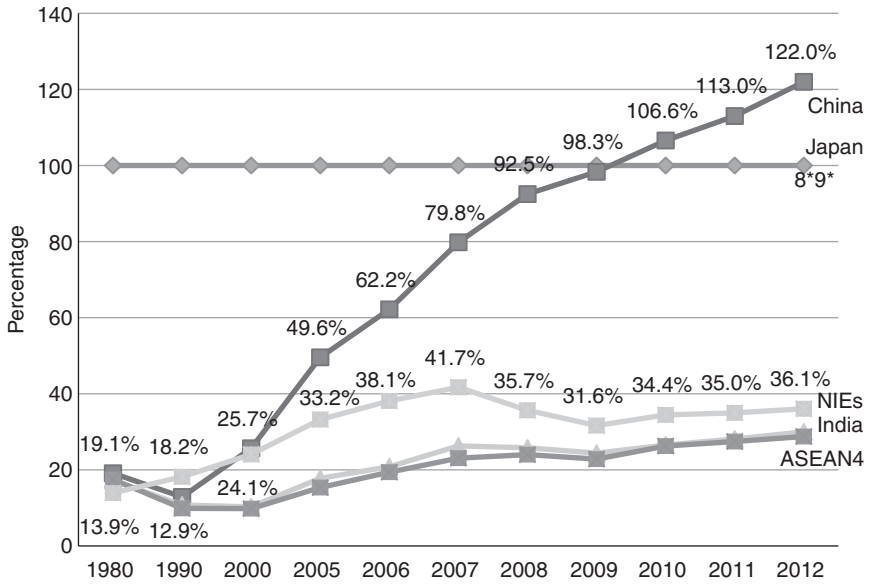


Figure 14.3 GDP catch-up ratio of country or group with respect to Japan, 1980–2012 (source: created from IMF, *World Economic Outlook*, October 2010, estimates start after 2009).

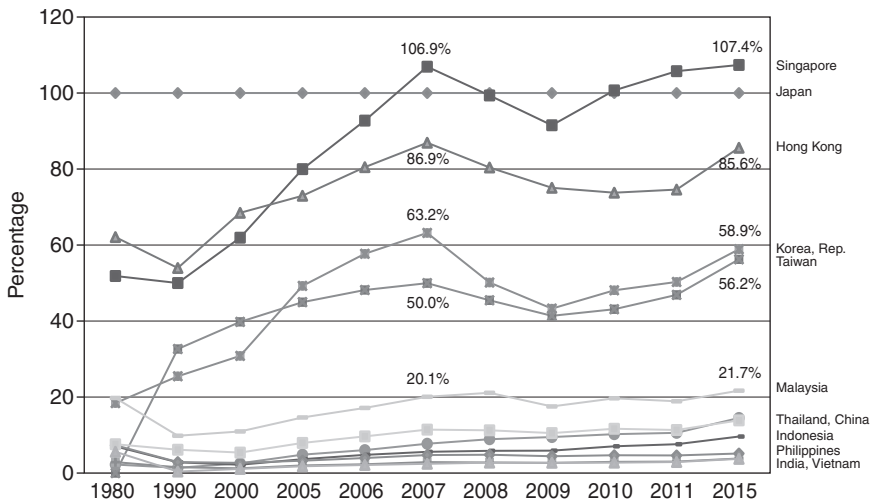


Figure 14.4 Per capita GDP catch-up ratio of East Asia and India with respect to Japan, 1980–2015 (source: created from IMF, *World Economic Outlook*, April 2011, estimates start after 2011).

Indeed, East Asia is already the world's biggest manufacturing and exporting region of manufactured goods that have rapidly implemented high-level technology. According to trade statistics from the Institute of International Trade and Investment in Tokyo, East Asia's global share of the export of merchandise goods accounted for 27.2 percent in 2007, and its share of machinery exports accounted for 37.1 percent, a rise of 10 percentage points. East Asia's share of global IT-related exports has also reached 56.7 percent, implying that the East Asian region is becoming a manufacturing base for IT-related goods (ITI 2008).

Moreover, according to the World Trade Organization (WTO 2007), Asia's manufacturing goods export to total export ratio was 84 percent, and its shares of other goods were 10 percent for minerals and 4 percent for agricultural goods. However, the manufacturing goods export to total export ratio was 80 percent for Europe and 77 percent for North America, making Asia's share the highest in the world. It is natural that East Asian countries are producing most of the manufacturing goods exported from Asia. Furthermore, it should be noted that intermediate goods trade is increasing (WTO 2007). Indeed, the intermediate goods export ratio in East Asia has been higher than 60 percent, which contrasts with the EU and NAFTA, which are both less than 50 percent (Sekine 2009).

Table 14.1 shows the distribution of IT-related goods trade consisting of total, parts, and final goods. The IT goods export of East Asia was worth \$1.12 trillion in 2007, of which 58 percent was exported within the region. This shows a steady increase from the 50 percent intraregional exports in 2000. Looking at this in terms of the intraregional trade ratio of parts and final goods, in 2007 parts accounted for 56 percent (\$624 billion) and final goods accounted for 44 percent (\$496 billion). Looking at the intraregional shares, parts possessed 73 percent, while final goods occupied only 40 percent. In short, final goods have a high extra-regional dependence and the intensification of intraregional trade activities depends on the large extra-regional trade of final goods. Nevertheless, even in the case of final goods exports, the intraregional export share was higher in 2007 compared to 2000, and it also surpassed the U.S. share in 2007, confirming the East Asian region's increasing independence.

Incidentally, such a development trend did not stagnate during the recent financial crisis; if anything, it accelerated. Based on the United Nations Conference on Trade and Development (UNCTAD) data, Asia's export share of IT goods in 2009 (referred to as ICT goods in UNCTAD) increased from 63.8 percent in the previous year to 66.3 percent, more than one-third of which was exports from China and Hong Kong. The financial crisis thus seemed to strengthen the concentration of the world's IT exports in Asia (UNCTAD 2011).

Through such a structural development, East Asia now provides the largest value-added in the world. The development of NIEs up to the 1980s placed much attention on the triangular trade structure, wherein NIEs imported capital goods and raw materials and then exported final products to advanced country markets, centering on the U.S., after taking advantage of the relatively low wages paid to assembly and production staff. However, an upgrading of this structure could be seen. The 2005 version of Japan's METI White Paper

concluded that NIEs together with Japan now produce high value-added intermediate goods that are exported to China and ASEAN countries; in turn, China and ASEAN countries use them in their final exported goods to the U.S. and EU (METI 2005: 166–167). According to the 2008 version of the same report, the gross value-added of Manufacturing industry in East Asia (ASEAN+6)⁴ was \$2.55 trillion, exceeding the \$1.83 trillion of NAFTA and the \$2.05 trillion of the 27 countries of the EU (METI 2008: 143).

Without doubt, East Asia is shifting from a low-wage-based labor-intensive manufacturing base to a region with production and trade structures that are rapidly delivering higher levels of value-added. According to the U.S. National Science Board (2010), the world's total value-added in what is defined by the Organization for Economic Co-operation and Development (OECD) as the advanced manufacturing sector (i.e., communications and semiconductors, pharmaceuticals, scientific instruments, aviation and space, computers, and office instruments) grew from \$720 billion to \$1.2 trillion between 1995 and 2007. The share of the EU and U.S. remained constant through this period at 27 percent. By contrast, China, which included Hong Kong, rapidly increased its value-added share from 2.6 percent (\$18.7 billion) to 13.7 percent (\$167 billion). Moreover, the Asia 9⁵ increased from 8.9 percent (\$64 billion) to 10.3 percent (\$126 billion). In short, Japan was the only country rapidly decreasing its share (by 16 percentage points from 27 percent to 11 percent), which was taken up by China (including Hong Kong) and the Asia 9.

Furthermore, according to the 2010 METI White Paper, middle-income households (i.e., those with disposable incomes of \$5,000 to \$35,000) in Asia's emerging countries remarkably expanded from 220 million in 2000 to 940 million in 2010. This exceeds the combined population of the U.S. and EU, and it is forecast to break through the two billion barrier by 2020. Moreover, the affluent class (households that have more than \$35,000 in disposable incomes) will expand from 30 million in 2000 to 230 million in 2020 (METI 2010: 187). Thus, the internal conditions are being set for the intraregional integration of East Asia.

The emergence and limits of BRICs

Interest in highly populated countries started in the last decade of the twentieth century with China at the top of the list. Upon entering this century, this interest quickly spread after the term “BRICs” was coined by the U.S. investment bank Goldman Sachs. A 2001 report by the head of the bank's global economic survey division, Jim O'Neill, first coined the term from the initials of Brazil, Russia, India, and China. This report stressed a number of points. BRICs had a real economic growth rate in 2001–02 that surpassed that of the G7, reaching 23 percent in Purchasing Power Parity (PPP) terms or 8 percent in absolute value terms at the end of 2000. Over the ensuing decade, its importance has further increased, making it necessary to include these countries in international discussions based on their influence on world fiscal and financial policies (O'Neill 2001).

For example, G20 meetings of fiscal ministers and central bank governors, including those from BRICs, started in 1999. Since then, regular meetings have been held.

In 2003, a simulation analysis predicted that China will overtake the U.S. by 2050 and that the only advanced countries remaining in the G6 would be the U.S. and Japan (Wilson and Purushothaman 2003). By using the growth environment score (GES)⁶ of developing countries in 2005, the notion of the so-called Next Eleven (N-11) that focuses on countries beyond BRICs was also introduced. In addition, the Goldman Sachs Global Economics Group published a book in 2007 related to BRICs (GS Global Economics Group 2007).

Amid the focus on the economic growth of China, there is acceptance in the U.S. of the importance of BRICs at a global level. The National Intelligence Council, in its 2004 report, mentioned the possibility of the growth of China and India rivaling the rise of an integrated Germany in the nineteenth century and the U.S. at the start of the twentieth century. In the council's 2008 report, the structure of the world in 2025 was predicted. This report highlighted the three economic areas of North America, Europe, and East Asia, but at the same time suggested that the world would go through a period of multipolarization and destabilization. It predicted that in the next 15 to 20 years, more and more developing countries would adopt Beijing's state-centric model instead of the Western model based on markets and democracy (National Intelligence Council 2004, 2008). China's remarkable economic growth and increase in state power during the past several decades are huge concerns for the U.S. There has been strong interest in the development potential of a huge population, which in the past was taken as a negative indicator. This is perhaps an extreme feature of the current era.

However, would a researcher be satisfied with putting countries in groups, such as BRICs and N-11, from a selection of newly emerging economies that have growth potential by developing their GES? This approach would assign points to development potential based on various indicators, such as economic stability, technological capability, human capital, and political conditions. The terminologies coined by Goldman Sachs are naturally aimed at providing investors with investment opportunities, and these target particular countries. These terms are by themselves blunt and they do not necessarily include a concept. For example, because Thailand and Malaysia are not included in either BRICs or N-11 does not necessarily mean that their growth potentials are not high. Eventually, it becomes necessary to create a conceptual vocabulary that refers to economic groups that have growth potentials, with BRICs at the top of the list. This study proposes the term PoBMEs to describe an economy that shows such development potential. The economic growth of developing countries is deeply related to the world economy and, consequently, to the capital and technology flows into this economy owing to the increasing interest in potential markets. This concept is applicable to many countries in East Asia.

Changes in the growth mechanism of developing regions: from NIEs to PoBMEs

Emerging markets and economies are appearing in the developing world, and interest in highly populated countries is growing. How should we comprehend these events? This study uses PoBMEs as a qualitative concept to replace BRICs, as described below.

We can confirm that the current features of PoBMEs are typical of those of BRICs through a comparison with the development of NIEs during the second half of the twentieth century. Table 14.2 compares the 1970s, during which NIEs grew, with the second half of the 1990s, which focused on BRICs, in terms of population, trade rate, share of export of manufactured goods, and share of export of services.

First, it must be noted that the population scales are completely different. The largest for NIEs is in the order of tens of millions, while the smallest for BRICs is in the order of hundreds of millions. In terms of trade ratio, NIEs are extremely high, while BRICs are low. In terms of shares of manufactured exports, BRICs, with the exception of China, are relatively low. The importance of services is nowadays increasing. We see that India, in particular, has amassed a high share in the trade of services. As is well known, India has rapidly expanded its exports of software services under the recent wave of IT-ization and globalization. Almost three-quarters (72 percent) of India's services exports in 2008 actually fell under computer- and ICT-related business activities (World Bank 2010).

This comparison evidences the growth of NIEs developed through manufactured exports. By contrast, the dependence of BRICs on trade was small, while domestic demand was relatively important. The diversity in the content of exports was also broad.

How was the development of BRICs thus supported? In the development of today's emerging regions, the role of capital and technology transfer through direct investment is without doubt considerable. Indeed, these two groups were the major destination regions for foreign direct investment during the analyzed periods. Simple computations of three-year moving averages of UNCTAD's direct investment statistics reveal the following facts. Since the 1970s, four NIEs have received \$1 billion of direct investment, which is on a par with the level of BRICs at that time. The received investment in the 1980s exceeded that received by BRICs. However, after the 1990s, BRICs received several millions of dollars, which greatly exceeded that received by NIEs. This investment helps developing countries expand, and NIEs continue to be investment destinations despite the focus on BRICs. Direct investment provides BRICs with the capital, technology, and managerial skills to support their growth.

Since the start of the 1990s, the Japan Bank for International Cooperation (JBIC) has surveyed firms about their favorable investment destination countries and regions for the medium term. China has long been chosen as a preferred country by many firms. However, from 2003, other countries, such as India,

Table 14.2 Comparison of NIEs and BRICs: population, trade ratio, trade ratio, share of export of manufactured goods and share of export of services

	Population (million)		Trade ratio* (%)		Manufactured export ratio** (%)			Service export ratio*** (%)		
	1970	1970	1970	1976	2008	1970	1976	2008	1995	2008
Singapore	2.1	225	252	362	31	43	70	18	20	20
Taiwan	14.7	63	90	123	79	85	99	12	12	12
Hong Kong SAR	3.9	182	183	354	93	97	83	16	16	20
Korea, Republic of	31.9	38	68	92	77	82	89	15	15	15
	2000	1995	2000	2008	1995	2000	2008	1995	2008	2008
Brazil	170.4	16	23	24	54	59	45	11	13	13
Russian Federation	145.6	44	71	46	26	22	17	12	10	10
India	1,015.9	23	28	41	74	79	63	18	36	36
China	1,262.5	44	50	59	84	88	93	11	9	9

Sources: Calculated from World Bank (2010) *World Development Indicators 2010* and Council for Economic Planning and Development, Republic of China (2010) *Taiwan Statistical Data Book 2010*.

Notes

* Merchandise trade/GDP.

** Manufactured exports/merchandise exports.

*** Service exports/(merchandise + service exports).

Vietnam, Thailand, Brazil, Indonesia, and Russia, have been increasing because they are considered to have “good future growth of domestic markets.” In the 2010 survey, China was followed by the aforementioned six countries, whose inclusion was based primarily on their prospects for “good future growth of domestic markets” (JBIC 2010). These investment destination countries and preferred countries more or less match with the PoBMEs conceptualized in this study.

The different stages in the spatial relations between capital, labor, and markets

We tend to comprehend the economy of a country in terms of a conceptual framework of an autonomous national economy. However, we invite misunderstandings when we simplify the economic development of emerging regions through such a framework. Capital, labor, and markets do not necessarily spatially coincide with a national economy in developing regions such as East Asia.

Figure 14.5 conceptualizes the changes in the spatial relationships of these three factors in advanced and in developing regions. The traditional relation was that the laborers of developing (poor) regions move to advanced regions in search of employment, and manufactured goods were supplied to the advanced region markets. This basic spatial relationship between capital and labor has been reversed since the second half of the 1960s. Firms now move to developing regions in search of low-cost labor. However, the markets remain in the advanced regions, meaning that produced goods are now exported. The export-oriented growth of NIEs materialized under such an international structure (termed the “NIEs stage”). However, from the end of the twentieth century until now, a new relationship has appeared, namely a shift toward a relationship that seeks new markets in developing regions because of the maturation of advanced economy markets and the existence of relatively excessive capital in the background. Even though the NIEs stage continues to be as effective as

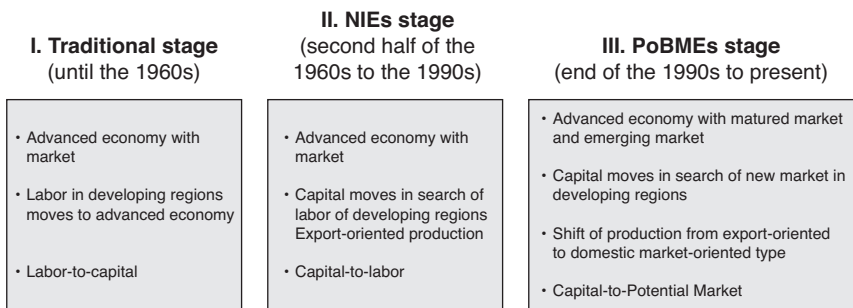


Figure 14.5 Transition of spatial relationships of capital, labor, and markets: conceptual chart (source: author).

Note

To be more precise, between stages I and II could be found the traditional import-substituting stage, wherein capital enters the domestic market in mind.

before, a more characteristic relationship is moving capital toward developing regions in search of markets. This is a change in the objective of the investment behavior of firms. If we were to summarize this change in relationship, it would be labor to capital, to capital to labor, and to capital to potential market.

Therefore, why have highly populated countries such as BRICs attracted so much attention? Are there other reasons in addition to simply having a large population? This increasing attention might be the result of firms trying to avoid risk amid the instability that accompanies globalization. If developing regions were uniform economies without borders, such a phenomenon would most certainly not occur. However, the reality is different. Various factors such as foreign exchange movement risk and the possibility of procuring human capital strengthens the preferences of firms for relatively stable economies. When any kind of growth potential in such economies is found, capital moves, and the economies that receive such capital are able to achieve growth. As shown in the previous section, trade and exports are not characteristics that are shared by BRICs. Once the growth potential has in some way been recognized by the export of manufactured goods, resources, business process outsourcing/offshoring (BPO) services, and others, capital would pour in from advanced regions. The existence of potentially bigger markets attracts firms. Such a setup created BRICs. Excess capital and the intensification of market competition expanded the growth space to the next rank of developing economies beyond BRICs.

Eventually, the above relationship could be called the PoBMEs mechanism of development. However, this mechanism is founded on external factors, namely capital, technology, and advanced economies, which might not allow the eternal perpetuation of dominant-dependent relationships. Even though self-reliance is a difficult path, it provides growth opportunities to developing economies, after which the possibility of industrialization and technology acquisition arises.

However, the recent emergence of the PoBMEs market has generated the possibility of a new innovation that is different from those of advanced economies. PoBMEs, which support growth in potential markets, have raised their values as veritable markets and have intensified R&D activities that have taken root therein. The emergence of such markets might also increase the bargaining power of PoBMEs.

A new stage of capitalism?

East Asia was strongly affected by the currency crisis of 1997 and the global financial crisis of 2008. The discussions right before the occurrence of the global financial crisis on decoupling related to the linkage of business cycles between advanced and East Asia's developing economies seems to have been rejected by the global financial crisis. However, the recovery of East Asia from both crises took the form of a V-curve recovery path that widely surpassed expectations. It was through these crises that East Asia instead displayed its toughness.

In 2008, although East Asia had lower growth rates because of the crisis, since the second quarter of 2009, it once again headed for a recovery.

The English publication, *The Economist*, in August 2009 described the business recovery of East Asia as “an astonishing rebound” (*The Economist*, 2009). In particular, the number of automobiles sold in China dramatically increased. According to the China Association Automobile Manufacturers (www.caam.org.cn/english), the number of units sold in 2009 greatly exceeded the initial forecast of 9.4 million units to 10.2 million units and broke through the 18 million barrier in 2010. This rapid expansion of the automotive market is often considered a result of government policies such as the four trillion yuan economic stimulus package that ironed out the country's serious downturn in November 2008. However, this expansion in car ownership also seems to be supported by the rise in the purchasing power of Chinese individuals and the huge purchasing appetite of the Chinese middle class. Firms from all over the world are heading toward this market, which is also accelerating the growth of domestic firms (Seki 2011).

Based on projections of global economic growth, advanced countries will be confined to low growth even after the crisis. According to the 2010 METI White Paper, the rate of contribution to world growth by emerging economies was 43 percent between 2003 and 2008, and this will increase to 58 percent between 2010 and 2015. “The newly emerging countries are considered as adequate drivers of the world economy. Expectations regarding its growth have been mounting” (METI 2010: 2–3).

In the second half of the twentieth century, during the recovery of Japan and Europe after the war, the manufacturing sector of the U.S. was becoming more multinational and the advance in the international division of labor in new countries was started. This was the clue to the industrialization of developing regions, which brought about the development model of NIEs. This was the realization of the growth of an export-led industrialization that depended on low wages. Within this structural change, there was an upgrading of the industrial structures of advanced countries, which pushed IT-ization and globalization. Financial liberalization by the U.S. created the foundation for liberal activities with U.S. financial capital, but at the same time forced the transfer of the manufacturing sector to developing regions where the profit margins were relatively higher. However, the Asian currency crisis and the world financial crisis intensified competition in manufacturing and accelerated the production shift from mature and low-growth advanced economies to PoBMEs.

Thus, together with the creation of new markets, the development process of PoBMEs may also be one wherein the energies of the people and governments of developing regions are embedded in capitalist world economies. In this way, such a development becomes the reinstatement of a society such as China and India that is highly populated. This poses a new issue in the form of the current economic and social structure of advanced economies as well as the framework for peace and affluence as a region. This must be considered a huge structural change in political economies, which are beginning to show a new stage.

Notes

- 1 This chapter is a revision of the paper presented at the 15th conference of the Japan Society for Evolutionary Economics (March 19–20, 2011, Nagoya University, Nagoya, Japan). The original paper on which this article was based was published in *Evolutionary and Institutional Economic Review*, Vol. 8, No. 1, under the title, “Globalization and the Emerging Economies: East Asia’s Structural Shift from the NIEs to Potentially Bigger Market Economies (PoBMEs).” However, the focus of this chapter is different. In this connection, the figures and tables used in this chapter are the same as the aforementioned paper (with the approval of the *EIER* editorial committee), although the main figures have been updated using the latest data.
- 2 The author, in a paper presented in October 2009 (Hirakawa 2009), considered this third stage to be the “BRICs Stage.” However, as discussed in this chapter, “PoBMEs Stage” is more appropriate.
- 3 ASEAN4 consists of Indonesia, Malaysia, the Philippines, and Thailand.
- 4 ASEAN+6 consists of ASEAN member-countries, China, South Korea, India, Australia, New Zealand, and Japan.
- 5 The Asia 9 consists of India, Indonesia, Malaysia, the Philippines, Singapore, Korea, Thailand, Taiwan, and Vietnam.
- 6 GES is a score converting growth potential into reality introduced by Goldman Sachs. It is constructed based on 13 subindices, which can be divided into five basic areas: macroeconomic stability, macroeconomic conditions, technological capabilities, human capita, and political conditions (O’Neill *et al.* 2005, 10).

References

- ADB (Asian Development Bank) (2007) *Asian Development Outlook 2007*, Manila.
- The Economist* (2009) “An Astonishing Rebound,” 15–21 August, London.
- Goldman Sachs Global Economics Group (2007) *BRICs and Beyond*, Goldman Sachs.
- Hirakawa, H. (2009) “Chiiki Kyoryoku No Jidai [The Era of Regional Cooperation]” in *Higashi Ajia no Chiiki Kyoryoku no Kyodo Sekkei [Co-Design of East Asia’s Regional Cooperation]*, Tokyo: Nishida Shoten (in Japanese).
- IMF (International Monetary Fund) (2007) *World Economic Outlook: Spillovers and Cycles in the Global Economy*, April, Washington, D.C.
- ITI (International Trade and Investment Research Institute) (2008) *IT Goods International Trade Matrix*, Tokyo (in Japanese).
- JBIC (Japan Bank for International Cooperation, Research Group of Overseas Investment) (2010) “Survey Report on Overseas Business Operations by Japanese Manufacturing Companies: Results of JBIC FY2009 Survey: Outlook for Japanese Foreign Direct Investment,” *Journal of JBIC International Research Office*, No. 4, March.
- METI (Ministry of Economy, Trade, and Industry, Japan) (2005) *White Paper on International Trade*, Tokyo.
- METI (Ministry of Economy, Trade, and Industry, Japan) (2008) *White Paper on International Trade*, Tokyo.
- METI (Ministry of Economy, Trade, and Industry, Japan) (2010) *White Paper on International Trade*, Tokyo.
- National Intelligence Council (2004) *Mapping the Global Future*, December, Washington, D.C.: Office of the Director of National Intelligence, Public Affairs Office.
- National Intelligence Council (2008) *Global Trends 2025: A Transformed World* (2008–003), November, Washington, D.C.: Office of the Director of National Intelligence, Public Affairs Office.

- National Science Board (2010) *Key Science and Engineering Indicators 2010*, National Science Foundation (www.nsf.gov/statistics/seind10).
- O'Neill, J. (2001) Building Better Global Economic BRICs, *Global Economics Paper*, No. 66, November (www.goldmansachs.com/our-thinking/brics/brics-reports-pdfs/build-better-brics.pdf).
- O'Neill, J., D. Wilson, P. Purushothaman, and A. Stupnytska (2005) "How Solid Are the BRICs?" *Global Economics Paper*, No. 134, December (www.goldmansachs.com/our-thinking/brics/brics-reports-pdfs/how-solid.pdf).
- Seki, S. (2011) "Jidosha Sangyo kara mita Oseina Chugoku no Kokunaijuyo [The Vigorous Domestic Demand of China from the Viewpoint of the Automotive Industry]," *RIM*, No. 40, February, Tokyo: Japan Research Institute.
- Sekine, H. (2009) "Sekai Keizai Kiki go no Higashi Ajia no Boeki Doko [Recent Trade Development of East Asia after the Global Economic Crisis]," Material for JETRO and ERIA's international conference (www.ide.go.jp/Japanese/Publish/Download/Other/0912_01.html), Tokyo: JETRO (in Japanese).
- UNCTAD (United Nations Conference on Trade and Development) (2011) Press Release: "In the Wake of Financial Crisis, Asia's Share of Global ICT Exports Surges to Record High" (UNCTAD/PRESS/PR/2011/004), Geneva.
- Wilson, D. and R. Purushothaman (2003) "Dreaming with BRICs: The Path to 2050," *Global Economics Paper*, No. 99, October (www.goldmansachs.com/our-thinking/brics/brics-reports-pdfs/brics-dream.pdf).
- Wilson, D. and A. Stupnytska (2007) "The N-11: More than an Acronym," *Global Economics Paper*, No. 153, GS Global Economic Website.
- World Bank (2010) *World Development Indicators 2010*, Washington, D.C.
- WTO (World Trade Organization) (2007) *International Trade Statistics*, Geneva.

15 Financialization, structural change, and employment in the U.S. and Japan

James Heintz

In the early 1990s, the bubble which had built up in Japan's real estate and stock markets burst, ushering in a protracted period of economic malaise. The Japanese economy, despite concerted efforts to revive it with fiscal and monetary stimuli, failed to recover its previous vibrancy. Its lackluster performance has persisted for nearly two decades. The collapse of Japan's bubble economy had relatively few global ramifications; some considered the country's prolonged economic slump to be a malady specific to Japan. This assumption that Japan represents an exception is no longer valid. The collapse of Lehman Brothers in September 2008 revealed the true extent of a global crisis whose epicenter lay in U.S. financial markets. Unlike the bursting of the Japanese bubble, the reverberations of this collapse have been felt around the world, and the crisis has resulted in protracted downturns in a range of countries. At this point in time, it is difficult to assess the long-term consequences of the financial crisis; but if we are to draw lessons from Japan's experience, the fallout from the crisis could be evident for years to come.

In the case of both the U.S. and Japan, the collapse of the bubble economies and the ensuing economic crises had immediate and devastating effects on employment. In Japan, the unemployment rate, which had remained at very low levels for decades – and stood at 2 to 3 percent in the years immediately preceding the bubble – has effectively doubled and has remained at its new higher level for years, averaging 5.1 percent in 2010. “Non-regular” employment, which includes temporary and part-time work, has grown and represented 32 percent of all jobs in 2010, compared to just 15 percent in 1985. In the U.S., the crisis has produced record levels of unemployment, with the unemployment rate averaging 9.6 percent in 2010, compared to 4.6 percent in 2007 before the crisis. The number of individuals employed part-time for economic reasons grew from 4.4 million in 2007 to 8.9 million in 2010.¹ Clearly, financial crises can have significant negative impacts on employment outcomes, and these outcomes may be long-lived.

This chapter examines how processes of financialization in capitalist economies affects the structure of employment using Japan and the U.S. as specific examples. This exercise provides us with valuable insights into how these dynamics have played out in two important high-income economies. A central

thesis of the paper is that common factors emerging during the neoliberal era of globalization have affected the structure of employment. One feature of the recent period of globalization is the pronounced “financialization” of national economies and the periodic occurrence of economic crises. The dynamics of financialization also affect the structure of employment, but in ways that fail to come to grips with underlying structural changes and lead to policies which have not addressed serious employment problems.

The chapter is organized as follows. The next section introduces the concept of the structure of employment, which will be used as an organizing framework throughout the paper.

The chapter then discusses structural change, with a focus on the traditional view of structural transformation as a process of industrialization and how this standard scenario has shifted in recent years. Broad trends affecting labor demand and labor supply in the period of neoliberal globalization are examined. Aggregate shifts in the balance between labor demand and supply have a direct impact on the structure of employment. After having established this analytical foundation, the process of financialization, the formation of asset price bubbles, and the subsequent crises in Japan and the U.S. are discussed. The paper concludes with a brief discussion of policy implications in “post-industrial” economies.

The structure of employment

The term “structure of employment,” as used here, describes the distribution and types of employment and employment arrangements in a particular country. The structure of employment is defined across three dimensions: (1) sector of employment; (2) status in employment; and (3) the degree of formality.

The use of sectoral divisions to describe patterns of employment and relate these patterns to developmental dynamics has a long history – i.e., the process of “industrialization” is frequently described as the movement of labor out of agriculture and into industrial employment (Kaldor, 1967). Economies undergo changes in the structure of production due to shifts in the global economic environment and through the process of economic development at the national level. These structural changes have direct implications for the quality and quantity of employment opportunities. An evolving structure of production implies an evolving structure of employment.

One structural dimension emphasized here is status in employment. The International Classification of Status in Employment (ICSE-93) provides a set of standard categories for classifying employment based on two criteria: (1) the type and degree of economic risk and (2) the type and degree of authority/autonomy that workers have in a particular employment situation. Five primary employment status categories are identified: employees, employers, own-account workers, members of producers’ cooperatives, and contributing family workers.

Many forms of employment can easily be placed within these five main groups. However, the lines between these employment status categories is

blurred for many forms of nonstandard employment. Consider the following examples:

- Employees who are hired for short durations and who work for a variety of different employers;
- “On-call workers” who only come into work when called to do so;
- Day laborers hired for a single day and whose employer changes frequently;
- Employees whose earnings rely primarily on commissions;
- Self-employed workers who depend on others to supply key factors of production (e.g., taxi drivers who must rent their vehicles);
- Self-employed individuals with only one client; and
- Forms of “disguised wage employment” in which employees are hired as independent contractors and are therefore classified as self-employed, allowing employers to avoid regulations.

The concepts that underpin the idea of “employment status” – that is, the allocation of economic risk and the allocation of control – are particularly relevant for analyzing categories of nonstandard employment. The degree of authority refers to the amount of control individuals have over their own work activities, the enterprises in which they work, and other workers in that enterprise. For example, it is generally assumed that the self-employed enjoy greater authority than wage employees because they have control over their workplace activities and may hire employees over whom they exercise control. The degree of risk refers to various dimensions of uncertainty associated with the employment arrangement, including attachment to the job and volatility in earnings. For example, the earnings of paid employees are assumed not to directly depend on the revenues of the enterprise, but are rather specified by a contractual arrangement. Therefore, paid employees face different risks than the self-employed. The emergence and growth of non-standard employment involves a reallocation of economic risk and authority in ways that do not correspond to the standard categories. For the purposes of this chapter, when we speak of “status in employment,” we mean a broader concept, one that includes various atypical employment arrangements but remains focused on the core issues of the allocation of economic risk and the allocation of authority and control.

The third aspect of the structure of employment emphasized here is the distinction between formal and informal employment. The concept of informal employment is meant to capture employment relationships that are not governed by formal economic regulations or social protections. Because such employment falls, either wholly or partially, outside of the formal regulatory sphere, it tends to be more precarious, with lower earnings and higher poverty risk than employment which enjoys formal regulatory protections (Chen *et al.*, 2005). Note that this definition of informal employment is related to, but distinct from, the other dimensions of the structure of employment. For example, non-standard work has a higher probability of being informal, but this does not imply that atypical employment arrangements must be informal.

The conceptual framework of the structure of employment can be applied to the U.S. and Japan. In both countries, the structure of employment has evolved dramatically over the years. The ways in which the structure of employment has changed are similar, although the precise timing and the details vary. Both the U.S. and Japan experienced what could be called a traditional Kaldorian path of industrialization. There was a movement of labor out of agriculture and into manufacturing, with rising standards of living. As incomes expanded, so did demand for services and service employment. Manufacturing employment peaked in the U.S. during the 1950s, at approximately 30 percent of total employment. The peak in Japan occurred two decades later, in the 1970s, when manufacturing accounted for up to 35 percent of the total number of paid employees (JILPT, 2010). In contrast, manufacturing employment comprised 18.6 percent of Japanese employees in 2009 and 8.9 percent of U.S. employment in 2010.²

The structure of employment continued to evolve in both countries from the 1980s onwards. Status in employment changed with a decline of relatively permanent, full-time employment. We have already discussed the rise of “non-regular” employment in Japan. Statistics that describe detailed trends in non-regular employment, other than part-time employment, are not available for the U.S. over a long time period, although research suggests that non-regular employment was expanding, particularly in the 1980s (Kalleberg, 2000). With the growth of non-regular forms of employment, there were also signs of declining social protections (i.e., growing informality). In the U.S., for example, the proportion of workers covered by health insurance and receiving pension benefits from their employers declined over this period (Schmitt, 2007). In both Japan and the U.S., union density rates fell significantly – altering the way in which many employment relationships were governed, compared with past practices.

Kaldorian and non-Kaldorian structural change

Sustained growth is associated with structural change, and countries with poor growth performance typically have not experienced transformative changes in their structures of employment (Rada and Taylor, 2007). The Kaldorian path of structural change has already been discussed: a shift away from agriculture towards manufacturing, other types of industrial production, and services. The scope for productivity improvements in manufacturing is assumed to be extensive, largely due to the existence of economies of scale (Kaldor, 1967). As labor and capital move into industrial activities, average productivity in the economy climbs, leading to improvements in living standards.

This sets off a virtuous cycle involving the expansion of markets and growth of average productivity. If demand for agricultural goods is relatively income inelastic and demand for industrial goods and services is more elastic, then we would expect consumption patterns to shift in favor of services and industrial goods as average incomes grow (Kuznets, 1971). The expanding markets for services and industrial goods generate profitable new investment opportunities

and growing demand for labor. Equally important, growing markets are essential for realizing economies of scale. Improvements in average productivity are driven by increased demand for output supported by rising living standards. Economic growth is endogenous in this framework, since the changing structures of production and employment provide an impetus for productivity growth.

In the simple Kaldorian scenario, growth in service employment often outstrips the expansion of industrial employment. Three factors help explain the rapid growth of employment in services. First, marketed services tend to have reasonably high income elasticities. Second, employment tends to expand along with the demand for services, particularly in those activities in which the application of labor-saving technologies is limited. Finally, many types of services are less tradable than manufactured goods – growth in domestic incomes will increase demand for domestic services.

Open economies, globalized production and trade, and shifts in market dynamics have altered this stylized model of endogenous structural change. The link between domestic demand and industrialization often fails to hold. Domestic demand for manufactured goods may also be met through greater imports. Balance of payments and foreign exchange become important constraints on the process of industrialization. With the expansion of global production, competitive pressures among producers of manufactured exports mean that prices matter as much, if not more, than incomes in determining demand for a specific country's output. Access to export markets requires productivity improvements to keep unit labor costs low. However, high rates of productivity growth in industrial activities cause the growth of industrial employment to fall behind industrial production.

As a result, contemporary movements out of agricultural may be associated with little or no growth in industrial employment and a large increase in service employment (Ghosh, 2008). Many countries appear to skip the step of industrial employment growth. The potential for a large scale allocation of labor to services to support capital accumulation and aggregate demand is limited for many activities (e.g., retail sales). This affects the feedback loop in the traditional Kaldorian story of economic development through industrialization. Of course, there are service activities that are highly tradable and exhibit scale economies – e.g., the information/telecommunications sector (Singh, 2008). High levels of global demand have led to the rapid expansion of these activities in certain circumstances. However, it is unclear whether a general expansion of service employment can substitute for industrialization.

The Kaldorian scenario of structural change also has little to say about “post-industrial” economies, economies like the U.S. and Japan in which the share of labor allocated to manufacturing activities has been declining. Will the share of low-productivity and precarious employment continue to grow in the absence of on-going industrial expansion? Or can an allocation of resources to non-industrial sectors serve as a basis for sustainable improvements in the quality of employment, just as the allocation of productive resources to industrial production has done during periods of industrialization? I return to these questions later in the chapter.

Pressures on the structure of employment: global trends in labor demand and supply

Traditional Kaldorian dynamics are deterministic in character, with the level of industrial development determining the structure of employment. However, not all changes in the structure of employment are caused by factors endogenous to national economies. Dynamics at the global level have implications for the structure of employment and social policies in individual countries. Various structural and institutional factors, common to countries at different stages of development and operating at an international level, have impacted the structure of employment in the period of neoliberal globalization. The following analysis identifies a number of these factors, framing them in terms of “labor demand” and “labor supply.”

Specifically, I argue that changes associated with the recent period of globalization have limited labor demand relative to labor supply. There are numerous implications of this imbalance: higher levels of open unemployment, growth of informal employment, reduced bargaining power of workers, downward pressure on the returns to labor, and a redistribution of risk from capital to labor. When demand for labor grows slowly relative to labor supply, bargaining power shifts in favor of employers and the owners of firms. This change in the balance of power at the macro level allows employers to pursue specific strategies to maintain their competitive edge and protect profitability. For example, in a recent study of non-regular employment in Japan, the need to reduce labor costs (both wage and non-wage components) was one of the most common reasons given by firms for hiring part-time or agency workers (Keizer, 2008). In addition, greater volatility and uncertainty lead employers to increase the share of non-regular and flexible employment arrangements as a strategy for managing risks, i.e., risks are transferred from employers to workers. A study by Ono and Sullivan (2010) shows that manufacturing firms facing greater volatility tend to hire more temporary workers.

Labor demand

Neoliberal strategies have dominated the economic policy landscape since the late 1970s. These policies have tended to slow the growth of labor demand through a number of channels. Labor demand increases when production expands, which requires on-going investments in productive capital, such as plant, equipment, and machinery. However, the rate of private capital accumulation declined significantly in many parts of the world during the years in which neoliberal policies were ascendant (Akyüz, 2006). Slower growth of productive investment translates into a slower growth of labor demand. There are exceptions to this trend. China has experienced rapid rates of capital accumulations during the past several decades, but China’s economic policies can hardly be described as neoliberal. Similarly, during the recent period, which involved both a boom in commodity prices and financial bubbles in the U.S. and parts of

Western Europe, the rate of investment in productive capital accelerated. However, as will be discussed in greater detail, these bubble dynamics proved to be unsustainable.

Neoliberal policies affect investment through a number of channels. Monetary policies that target inflation often rely on high interest rates. High interest rates slow economic activity by making credit more expensive and less accessible. High interest rates also increase the return on financial assets, making financial investments more attractive than investments in productive activities. Higher real interest rates that raise the return on financial investments attract short-term inflows of finance from other countries. However, short-term financial flows pose risks, since they can leave as easily as they come. Sudden reversals of financial flows contribute to economic volatility, making long-term investments in productive capital riskier. Inflows of capital can also lead to an appreciation of the exchange rate, causing exports to become more expensive and imports cheaper. An exchange rate appreciation therefore reduces investment in export-oriented industries and in sectors that compete with imported products (Frenkel and Taylor, 2009).

Trade liberalization is a cornerstone of neoliberal policies. However, a sudden freeing up of trade can have adverse consequences for employment. In many cases, rapid trade liberalization leads to a surge in imports, displacing domestic production and therefore lowering the demand for labor. If the growth of imports is not met with a similar upturn in exports, total productive activity in the economy will decline. Neoliberal policies also discourage the kind of targeted industrial policies that have supported productive investment and industrial development in other countries in the past. Industrial policies, including directed credit through financial institutions and development banks, were instrumental in supporting rapid capital accumulation in the newly industrialized countries of East Asia (Amsden, 2001; Chang, 2003, 1994).

Neoliberal policies have led to the downsizing of public sectors and privatization. This reduced the relative contribution of government institutions and agencies as an important source of formal employment in many countries. Hammouya (1999) presents data showing that government employment either declined faster or grew more slowly than private employment in most countries during the 1990s. The reduction in public sector employment has been particularly noticeable in the transition economies of Eastern Europe and Central Asia.

As discussed above, a central feature of the most recent period of globalization is the expansion of international trade and the intensification of competitive pressures. Improvements in labor productivity will negatively impact employment when demand for output does not increase as fast as labor productivity, since this implies that fewer workers are needed to produce the products which will ultimately be purchased. Numerous researchers have documented a reduction in the number of new jobs generated when production expands in many, but not all, countries over time (Ghosh, 2008; Khan, 2006; Kapsos, 2005). One explanation for this change is that, in recent years, labor productivity has grown without a proportionate increase in demand for output. This imbalance is

reinforced by emphasis of many neoliberal policies on the supply-side of the macroeconomy, without support for aggregate demand.

Labor supply

There have also been far-reaching developments with regard to global labor supply. Here we highlight three labor supply issues that are of particular importance: greater integration of the global work force, women's labor force participation, and labor migration (both within-country and between countries). The focus is deliberately on global labor supply: employment outcomes are shaped, not just by trends in the domestic labor supply, but also by changes happening globally.

As the countries of the world re-orient their economies to produce for a more integrated, common global market, the labor forces of individual countries become increasingly consolidated into what could be considered a single global labor supply, albeit still deeply segmented. Freeman (2006) has made this point in terms of what he identifies as the doubling of the global labor pool. With the market reforms in Eastern Europe, Central Asia, and, perhaps most significantly, China, and with India's adoption of more outward oriented economic policies, the number of workers engaged in production for the global market has increased enormously. The increase in the global pool of labor has outstripped the increase in the stock of capital, making labor relatively more abundant and capital relatively scarcer (Freeman, 2006). An abundance of labor relative to capital places downward pressure on labor's terms of trade, particularly if fixed capital accumulation has been sluggish due to neoliberal policies.

Whether the economic and geopolitical changes which Freeman discusses have produced an actual doubling of the global pool of labor is subject to debate and qualification (i.e., substitutability and mobility are highly imperfect), but his general point remains valid: global production for international markets has increased dramatically, effectively implying that the workforce which is integrated, directly or indirectly, into global markets has expanded much more rapidly than the world's population. Different countries and regions are integrated to varying extents. Those with sectors exporting manufactured goods and tradable services will have more integrated workforces.

The growth in industrial production for global markets has transformed the relationship between labor demand and potential sources of labor supply. Demand for production is no longer associated with increased demand for labor among a small set of highly industrialized countries. Production can be sourced and labor services purchased from a wide range of competing countries. Labor in these countries can be said to be integrated, since one set of workers in one geographical location can substitute for an equivalent set of workers elsewhere, if we account for differences in labor costs and productivity. The increase in the global substitutability of labor implies that demand for labor is more responsive to differences in labor costs (Rodrik, 1997). This suggests that it will become more difficult to secure improvements in wages and working conditions without

risking job losses. Faced with higher costs, firms integrated into global supply chains can source production from another country with higher productivity, lower wages, or less regulated labor markets.

Over the past several decades, one of the most significant transformations of the employment situation in a large number of countries has been a notable increase in women's labor force participation (ILO, 2008). The impact of this shift on the total labor force varies considerably, because men's labor force participation rates have often fallen in countries where women's rates have been increasing. Changing demographics and longer time spent in school affect the overall labor force participation rates. Nevertheless, if we focus on the population of prime working age, 25 to 64 years old, estimates from the International Labor Organization suggest that world labor force participation rates have been increasing in recent decades, largely due to women's increased participation.³ Pressures on household incomes often encourage women to enter paid employment, since there is a need to increase the household's total labor supply to generate the income needed for families to sustain themselves.

Women typically spend significantly more time than men in unpaid household and care work. Their increased labor force participation means that women work a "double shift" – part of their day is spent in paid work and part performing unpaid caring labor. However, given a limited amount of time available in a day, women's growing labor force participation will typically represent a reallocation of labor away from non-market activities and to market activities. The impact of this reallocation on the well-being of households is ambiguous, since market work is not a perfect substitute for non-market work. In addition, women who enter the labor force do not have the same employment opportunities available to them as men, i.e., the structure of employment is highly segmented along gender lines. Responsibilities for care work limit women's opportunities to jobs with flexible hours or activities in which care work can be combined with income generation.

Two important global trends with regard to labor mobility are the on-going migration from rural to urban areas and the movement of workers across national borders. The most significant pattern of within-country migration is the rapid growth in urbanization. The U.N. reports that virtually all population growth in the next three decades will be concentrated in urban areas (UN-HABITAT, 2010). As metropolitan areas around the globe have become increasingly interconnected, rapid urbanization contributes to the size of the potential global workforce. Movement across international borders also affects labor supply and the global distribution of human resources. The total number of international migrants has grown steadily in recent decades, reaching nearly 200 million by 2005. Although the total population of international migrants has been expanding, the relationship between the number of migrants and the world's population has been relatively stable. Since 1990, the stock of international migrants as a percentage of the world's population has remained around 3 percent. This implies that international migration has tended to increase with the size of the total population – at least since the beginning of the 1990s.⁴

The current level of international migration may seem modest – e.g., 3 percent of the total population – but it is important to bear in mind that the international migrant population is not distributed evenly across the countries of the world. In addition, countries experience uneven patterns of emigration. For countries with high levels of out-migration, remittances from employment can constitute a sizeable inflow of financial resources, e.g., Mexico, Ghana, and the Philippines, to name a few. In high-income countries, international migrants tend to be concentrated in low-paid, contingent, and unprotected forms of employment. For example, in the U.S., non-citizens account for a disproportionate share of employment as day laborers, part-time workers, and temporary hires – categories of work which tend to be significantly more precarious on average (Carré and Heintz, 2009).

Bubbles, crises, and the structure of employment: reflections on the U.S. and Japan

The trends in labor demand and labor supply discussed above are associated with the recent period of neoliberal globalization. The imbalances between global labor supply and labor demand pose particular challenges for high-income countries like the U.S. and Japan. In both cases, the structure of employment was shaped by a traditional Kaldorian development path. Manufacturing employment, as a share of total employment, had peaked in both countries and employment growth has increasingly occurred in services. Within the manufacturing sector, global integration intensified competitive pressures as manufacturing production expanded in newly industrializing countries.

These changes threatened the implicit social accord that existed in the U.S. and Japan up until the 1980s. Industrial capital was expected to maintain productive, employment-generating investment that would ensure a steady supply of good jobs. In exchange, profitability was assured by sustaining aggregate demand while raising the productivity of labor. In the U.S., improvements in wages and living standards, at least until the 1970s, helped maintain demand in the domestic market. During the rapid growth of industrial employment in Japan, aggregate demand was supported by strong export performance. In both countries, public investments in infrastructure and education provided important complementary inputs into production which enhanced the productivity of private capital. At the heart of this social accord in Japan was the idea of life-time employment (*shūshin kōyō*). Similar social norms had evolved in the course of U.S. industrialization – the idea that the jobs created, at least for men, should earn a “family wage” and would provide permanent, full-time work.

Restructuring of global production and deindustrialization undermined this earlier social bargain. In the U.S., with the rise of international production networks, the link between domestic incomes and the wages paid in production was weakened, since an increasing share of consumer goods was imported. Aggregate demand remained important for the expanding service sector, but aggregate demand could be maintained through other means. Women’s growing labor

force participation meant that two-income families increasingly became the norm. Household incomes increased, even when the average quality of employment was deteriorating, as long as the number of earners per household grew. Growth of consumer credit also helped support aggregate demand. Moreover, the flip side of the globalization of production was a reduction in the costs of imported consumer goods. Low prices helped protect the purchasing power of wages and thereby supported key service industries, such as domestic retailers.

In Japan, the expansion of global production to a wider range of countries intensified competitive pressures and made it increasingly difficult to rely on exports as a primary source of aggregate demand. Moreover, the growth rate of manufacturing employment slowed noticeably in the 1970s, a sign that Japan's period of sustained industrial expansion was drawing to a close. This raised the possibility of future deindustrialization and significant structural change, with far-reaching implications for the quantity and quality of employment opportunities.

Given these developments, both Japan and the U.S. faced a political challenge of maintaining a core set of "good jobs" in the face of these pressures. The fact that the segments of society that had less power, e.g., women and marginalized populations (in the case of the U.S., for example, racial/ethnic minorities and non-citizens), were also the people disproportionately employed in non-regular and poor quality jobs reduced the likelihood that distributive conflicts would become a serious challenge to entrenched economic interests. Nevertheless, the old social accord based on an expansion of industrial employment was clearly not sustainable, given changing global dynamics and patterns of deindustrialization.

As noted earlier, the Kaldorian framework provides little guidance for "post-industrial" economies, i.e., economies which have been through a process of industrialization but allocate a decreasing share of their labor resources to industrial production. These economies face a critical question: does a new driver of post-industrial development exist, one that can replace the process of industrialization as a contributor to capital accumulation, long-run productivity improvements, and aggregate demand? One possible candidate is the financial sector – with financial innovation and deepening becoming the new driving forces for economic development. After all, many post-industrial economies have experienced a rapid increase in the size of the financial sector in recent years. Can "financialization" replace "industrialization" as a foundation for providing quality employment opportunities in the future?

In both Japan and the U.S., rapid expansion of the financial sector, through the growth of financial services, new financial innovations, and the appreciation of financial asset prices, reduced pressures on the structure of employment. For a limited time, it appeared as if a reallocation of resources to the financial sector supported the continued strong performance of the real economy. In Japan, such financialization was associated with the emergence of a bubble economy in the mid 1980s and continued until the early 1990s. In the U.S., a similar bubble economy formed in the mid 1990s and finally ended in 2008, first focused on stock markets and then shifting to include real estate and complex derivatives. There was a brief

interruption of the bubble – around 2001 – accompanied by the September 11 attacks in New York and Washington and a series of corporate accounting scandals. However, the bubble re-formed shortly afterwards.

In both cases, loose monetary policy and high levels of liquidity contributed to asset price inflation which, in turn, supported the domestic economy. In Japan, the appreciation of the yen after the Plaza Accord in 1985 kept consumer price inflation at low levels, as the cost of imported inputs fell. In response, the Bank of Japan lowered interest rates and expanded liquidity (Itoh, 2000). High levels of foreign reserves allowed the Bank of Japan to simultaneously maintain a strong yen and keep interest rates low without causing consumer price inflation to accelerate. In the U.S., the globalization of production meant that low cost imports from developing countries accounted for an increasing share of consumer goods. This kept the prices of goods in tradable sectors low and contributed to low consumer price inflation. With low inflation and low unemployment, the Federal Reserve chose to reduce interest rates. In both countries, inflationary pressures manifested themselves, not in terms of consumer prices, but rather with regard to asset prices – specifically, real estate and financial assets.

The increase in asset prices supported domestic fixed capital investment and domestic demand in both economies during the bubble years. Figure 15.1 shows the growth rate of real fixed investment in Japan from 1966 to 2010 – both actual growth rates and a five-year centered moving average, which mutes year-to-year fluctuations. The economic shocks of the 1970s reduced investment growth from the high rates which prevailed in the 1960s. Despite some fluctuation, average fixed investment growth remained at low levels until the bubble economy of the second half of the 1980s. After 1991, fixed investment growth fell to very low

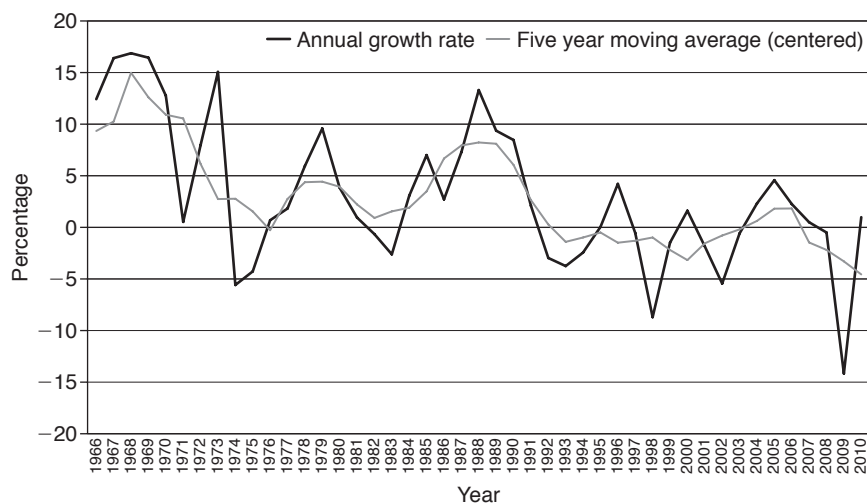


Figure 15.1 Rate of growth of real gross fixed capital investment, Japan, 1966–2010 (source: International Financial Statistics, IMF Database).

levels, as a consequence of the collapse of the bubble economy. Chirinko and Schaller (2001) demonstrate more rigorously that the rise in stock market prices in Japan did constitute a bubble, and that the bubble directly affected fixed capital investment.

The bubble economy in the U.S. also appears to have supported real fixed investment in the U.S. Figure 15.2 shows the growth of fixed capital investment from 1966 in terms of actual growth rates and a five-year centered moving average. The year-to-year growth rate for the U.S. fluctuates significantly; it is easier to discern trends from the five-year average. Investment grew moderately in the 1970s, but the growth rate fell in the early 1980s when the Federal Reserve raised interest rates in order to reduce consumer price inflation brought on by the oil shocks of the previous decade. This marked the shift towards neoliberal policies in the U.S. Investment recovered in the second half of the 1980s, only to decline again with the recession of the early 1990s. With the creation of a bubble economy in the 1990s, the growth rate of investment recovered significantly with a brief interruption, as mentioned above, around 2001. Beginning in 2008, with the bursting of the bubble, investment in the real economy collapsed.

Asset price inflation in Japan and the U.S. kept unemployment low and helped to maintain a core of good quality, relatively permanent jobs. As discussed previously, unemployment rates in Japan were low prior to the financial bubble and remained low until the crisis unfolded. Moreover, during the bubble economy in Japan, the process of de-industrialization appears to have temporarily reversed itself, at least in terms of manufacturing employment. According to the Statistics Bureau of Japan, the number of employees in the manufacturing sector peaked at 12 million in 1973/74. Manufacturing employment began to fall

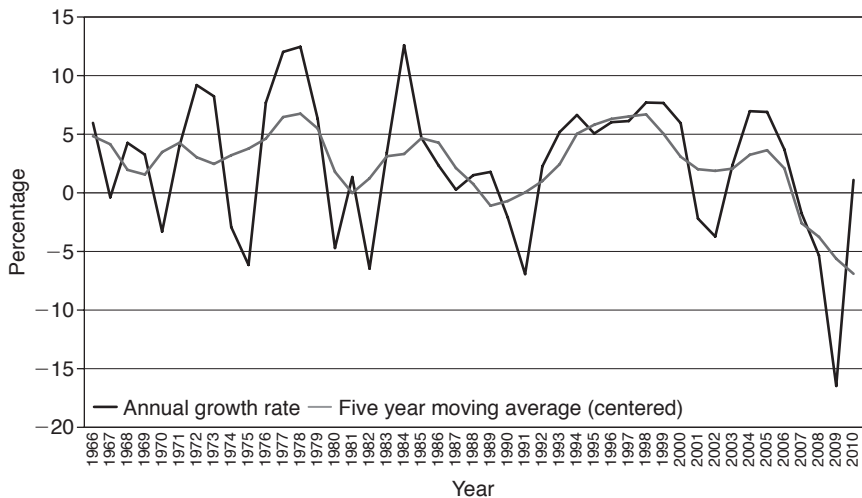


Figure 15.2 Rate of growth of real gross fixed capital investment, United States, 1966–2010 (source: International Financial Statistics, IMF Database).

gradually after that, down to 11 million employees by the end of the 1970s. However, instead of continuing this decline, manufacturing employment stabilized and began to grow again, particularly during the bubble economy, reaching a new high of 13.8 million in 1992. Since that time, manufacturing employment has been falling in Japan. In the U.S., there was no net gain in manufacturing jobs, but unemployment rates did reach low levels by historical standards during the bubble economy of the 1990s. With the bursting of the bubble, unemployment rose dramatically and prevalence of involuntary part-time employment expanded, as has already been documented.

The patterns of financialization observed in the U.S. and Japan were prone to economic instability, as theorized by Hyman Minsky (1986). Minsky argued that the financial sector expands endogenously, in ways that are unsustainable and prone to financial bubbles. However, bubbles invariably burst, leading to economic crises. Therefore, any solution to global pressures on the structure of employment based on speculative asset price inflation can only be temporary. The experiences of the U.S. and Japan bear this out.

Given the positive effect the bubble economies had on employment outcomes, the process of financialization would have helped to hide any structural weaknesses in the U.S. and Japanese economies with regard to their ability to continue to generate quality employment opportunities and sustain relatively low rates of unemployment. By directing resources to the financial sector, both economies experienced asset price inflation which supported fixed capital investment and adequate levels of domestic demand (e.g., through wealth effects) and, as a result, temporarily improved employment outcomes. The collapse of the financial bubbles, in both cases, revealed the structural weaknesses of these economies in maintaining employment opportunities and standard employment arrangements. The earlier case of Japan bears this out. The changes in terms of unemployment and non-regular employment have persisted for years following the collapse. At the time of writing, it is too early to say whether 2008 will reveal similar long-term structural weaknesses in the U.S. economy. There has been some downward movement in unemployment rates from the peak levels experienced at the height of the crisis. Nevertheless, several years after the crisis unfolded, unemployment rates and the level of part-time employment remain far above their pre-crisis levels.

Imagining “post-industrial” policies to support better employment

The argument advanced in this chapter is that processes of financialization leading to asset price inflation helped to mask structural problems in the Japanese and U.S. economies. This allowed policymakers to avoid addressing the challenges emerging in “post-industrial” economies, particularly with regard to employment. Political pressures were muted because distributive conflicts had been defused during the boom years, at least in part, due to rising asset prices, i.e., there was a sense that the middle class was benefiting through stronger

pensions, higher prices for homes, and low unemployment. However, the pattern of financialization proved to be unsustainable; when the bubbles burst, the underlying challenges were revealed.

The role of industrial policies to support structural change, leading to a version of Kaldorian industrialization in countries like Korea and Taiwan, has been well documented (Chang, 2003, 1994; Amsden, 2001). Such policies required a strong role for the state, placing markets in a supportive, not dominant position. This raises the question of whether a similar set of “post-industrial” policies can be developed to support employment in countries in which industrial expansion no longer provides the economy’s driving force. The challenge is to identify allocations of productive resources that can support the kind of virtuous dynamic associated with industrialization, i.e., sustained productivity improvements, productive investments, and sufficient aggregate demand.

One possible candidate is the range of activities lumped together under the broad “service sector” heading. Often service employment is assumed to be a passive by-product of a particular pattern of development, with little potential for productivity growth. However, services provide important inputs for other economic activities – raising the possibility that an expansion of services could raise productivity elsewhere (Tregenna, 2008). A recent empirical study of the U.S. economy found that productivity improvements in services supported broader economic growth (Triplett and Bosworth, 2004). In addition, services need not be intrinsically low-productivity activities. Information technologies frequently exhibit significant economies of scale, as does knowledge production through research and development. The sectors may be more accurately classified as “human capital intensive” rather than “labor intensive” sectors – suggesting a shift in focus away from labor productivity towards the productivity of other factors of production, such as human capital.

For countries that have already achieved high levels of labor productivity, like Japan and the U.S., a continued focus on improving labor productivity may be counter-productive when labor supply has become relatively abundant on a global scale. Instead, economies should emphasize raising the productivity of relatively scarce factors of production. One target for efficiency enhancements is in the use of energy and the capacity of the environment to assimilate the harmful by-products of economic activity. Capitalist development evolved on the basis of relatively unfettered access to non-renewable resources, particularly carbon-based energy. These factors of production will become increasingly scarce in the future, placing a constraint on traditional industrial development. Moreover, the desirability of alternatives, such as nuclear power, has been called into question after the devastating earthquake and subsequent crisis at the Fukushima nuclear reactor in Japan in 2011. In these circumstances, investments in renewable energy and energy efficient technologies could result in structural changes that improve the productivity of the economy with regard to scarce, non-renewable resources and, at the same time, support employment.

These thoughts on “post-industrial” policy interventions are far from comprehensive and are primarily meant to stimulate new thinking by asking relevant

questions about the future of employment in countries like the U.S. and Japan. This chapter has suggested that improving quality work opportunities globally requires a re-orientation of policies: away from the neoliberal approaches that have dominated the economic landscape, and toward policies of structural change focused on employment creation as a central means of reducing poverty, improving human development, and creating a foundation for more egalitarian outcomes.

Notes

- 1 Statistics for Japan are from the Statistics Bureau of Japan. Statistics for the U.S. are from the U.S. Bureau of Labor Statistics.
- 2 Statistics on manufacturing employment in 2010 come from the Statistics Bureau of Japan and the U.S. Bureau of Labor Statistics.
- 3 According to estimates from the International Labor Organization's database, *Economically Active Population Estimates and Projections*, the worldwide labor force participation rate of the 25–64 year old population rose from 74.6 percent in 1980 to a projected 76.8 in 2010. This 2.2 percentage point difference represents 72 million workers, given the 25–64 year old population in 2010. Women's (25–64) labor force participation rate increased from 55.6 percent to 62.0 percent during this period. Men's labor force participation in the same age group and over the same period dropped from an estimated 93.3 percent to 91.4 percent.
- 4 *World Migrant Stock 2005 Revision*, UN Department of Economic and Social Affairs (UNDESA), New York.

References

- Akyüz, Yilmaz (2006) "From liberalization to investment and jobs: lost in translation," Working Paper No. 74. Policy Integration and Statistics Department, International Labour Office, Geneva.
- Amsden, Alice (2001) *The Rise of "The Rest:" Challenges to the West from late-industrializing economies*, Oxford and New York: Oxford University Press.
- Carré, Françoise and James Heintz (2009) "The United States: different sources of precariousness in a mosaic of employment arrangements," in L. Vosko, M. MacDonald, and I. Campbell (eds) *Gender and the Contours of Precarious Employment*, London: Routledge.
- Chang, Ha-Joon (1994) *The Political Economy of Industrial Policy*, New York: St. Martin's Press.
- Chang, Ha-Joon (2003) "The market, the state, and institutions in economic development," in Ha-Joon Chang (ed.) *Rethinking Development Economics*, London: Anthem Press, pp. 41–60.
- Chen, M., J. Vanek, F. Lund, J. Heintz, R. Jhabvala, and C. Bonner, (2005) *Progress of the World's Women 2005: Women, Work, and Poverty*, New York: UNIFEM.
- Chirinko, Robert S. and Huntley Schaller (2001) "Business fixed investment and 'bubbles': the Japanese case," *American Economic Review*, vol. 91, no. 3, pp. 663–680.
- Freeman, Richard (2006) "The great doubling: the challenge of the new global labor market," Unpublished paper, August 2006.
- Frenkel, Roberto and Lance Taylor (2009) "Real exchange rate, monetary policy, and employment: economic development in a garden of forking paths," in G. Epstein and

- E. Yeldan (eds) *Beyond Inflation Targeting: Assessing the Impacts and Policy Alternatives*, Cheltenham and Northampton, Mass.: Elgar, pp. 28–43.
- Ghosh, Jayati (2008) “Growth, macroeconomic policies, and structural change,” Background Paper prepared for UNRISD flagship report on Poverty, Geneva: UNRISD.
- Hammouya, Messaoud (1999) “Statistics on public sector employment: methodology, structures, and trends,” Working Paper, Sectoral Activities Program, ILO Bureau of Statistics, Geneva.
- ILO (International Labour Office) (2008) *Global Employment Trends for Women*, Geneva.
- Itoh, Makoto (2000) *The Japanese Economy Reconsidered*, New York: Palgrave.
- JILPT (Japan Institute for Labor Policy and Training) (2010) *Japanese Working Life Profile 2009/2010 – Labor Statistics*, Tokyo.
- Kaldor, Nicholas (1967) *Strategic Factors in Economic Development*, Ithaca, NY: Cornell University Press.
- Kalleberg, Arne L. (2000) “Non-standard employment relations: part-time, temporary, and contract work,” *Annual Review of Sociology*, vol. 26, pp. 341–365.
- Kapsos, Steven (2005) “The employment intensity of growth: trends and macroeconomic determinants,” Employment Strategy Papers, No. 2005/12, Employment Strategy Department, Geneva: ILO.
- Keizer, Arjan B. (2008) “Non-regular employment in Japan,” *Work, Employment, and Society*, vol. 22, no. 3, pp. 407–425.
- Khan, Azizur Rahman (2006) “Employment policies for poverty reduction,” in R. Islam (ed.) *Fighting Poverty: the Employment-Development Link*, London: Lynne Rienner, pp. 63–103.
- Kuznets, Simon (1971) *Economic Growth of Nations*, Cambridge, MA: Harvard University Press.
- Minsky, Hyman (1986) *Stabilizing an Unstable Economy*, New Haven, CT: Yale University Press.
- Ono, Yukako and Daniel Sullivan (2010) “Manufacturing plants’ use of temporary workers: an analysis using census micro data,” Working Paper, Federal Reserve Bank of Chicago, WP2006–24, Revised.
- Rada, Codrina and Lance Taylor (2007) “Productive structure and effective demand during the great divergence: regional contrasts,” in J.A. Ocampo, Jomo K.S., and R. Vos (eds) *Growth Divergences: Explaining Differences in Economic Performance*, Zed Books: London, pp. 67–97.
- Rodrik, Dani (1997) *Has Globalization Gone Too Far?* Washington, D.C.: Institute for International Economics.
- Schmitt, John (2007) “The good, the bad, and the ugly: job quality in the United States over the three most recent business cycles,” Research Report, Center for Economic and Policy Research, Washington, DC, 2007.
- Singh, Nirvikar (2008). “Services-led industrialization in India: assessment and lessons,” in D. O’Connor and M. Kjölleström (eds) *Industrial Development for the 21st Century*, New York: Zed Books.
- Tregenna, Fiona (2008) “Sectoral engines of growth in South Africa,” UNU-WIDER Research Paper 2008/98, November.
- Triplett, Jack E. and Barry Bosworth (2004) *Productivity in the U.S. Services Sector: New sources of economic growth*, Washington: Brookings Institution Press.
- UN-HABITAT (2010) *State of the World’s Cities 2010/2011, Cities for All: Bridging the Urban Divide*, Nairobi.

16 Overconsumption, household debt, and dollar-privilege

The causes of the U.S. subprime crisis

Aki Aneha

Introduction

Today, as throughout the past decade, two of the risks confronting the U.S. economy are the spread of mortgage-backed securities (MBS), which leads to financial instability, and the vulnerability of U.S. households, which is linked to foundering mortgage loans and an increase in bankruptcies.

As discussed below, several factors ultimately led to the outbreak of the crisis, including overproduction and the policy measures undertaken to evade depression. The focus in this chapter is another important root of the subprime crisis: household budgets and consumer spending, especially for those in the subprime income bracket.

Who are the subprime borrowers?

The core argument pursued here is that American consumption is partially responsible for the subprime crisis; consequently, this crisis is the responsibility not only of borrowers but of lenders. Lenders have attempted to avoid their share of responsibility: even before this financial crisis, they created the image of American consumers as overspending, unprincipled, and undisciplined. It is true that American consumers have practiced overspending; but this has been fuelled by consumer credit, mortgage loans, and auto loans. This characterization can be applied to the subprime issue as well. Subprime borrowers have been prone to delinquency in part because they have been operating without sufficient income.

However, is it the practices of borrowers that caused the crisis? And even if it did, what made the Americans run to buy the loans they offered? In this chapter, we seek to clarify the reasons why the American people spend beyond their means as they accumulate debt. This will involve an exploration of the causes of American consumers' overspending; and that exploration, in turn, will lead us to briefly identify the particularity of the United States' global position.

The criteria for subprime borrowers

The general criteria for subprime borrowers that is typically used by the Office of the Comptroller of the Currency and the Federal Reserve Board is a FICO

score under 660.¹ However, few subprime borrowers are drawn from the lowest income group, the members of which do not qualify for subprime business.² Consider the distribution of homeowners with mortgages by income quintile in the U.S. Between 1984 and 2006, the share of homeowners with mortgages increased among households in the second to the fifth quintiles, but declined in the first (lowest) income quintile from 17 percent in 1984 to 13 percent in 2006.

In the post-housing bubble period, the percentage of homeowners in all income quintiles declined (see Figure 16.1). The homeownership rate for the first (lowest) quintile remained at 13 percent in 2009 and fell slightly to 12 percent in 2010. Compared to 1984, the post-bubble homeownership percentages are about the same or higher for the second to fifth quintiles; but that for the first quintile fell by 5 percent.

When the IT bubble collapsed in 2000, the American government adopted a policy that promoted homeownership. But even with the rapid expansion of mortgage loans, homes have never been affordable for the lowest income households. So the term “subprime borrower” doesn’t refer, on average, to a person who is suffering from poverty or an unstable income; rather, it means someone from the second to fourth U.S. income quintiles – that is, from the middle class. Many of the borrowers who are facing foreclosure are statistically middle class – that is, ordinary people. This illustrates why the subprime crisis is such a serious matter in the U.S.

Overconsumption and the myth of waste

Before discussing the links between the subprime crisis and U.S. consumption, we must first describe what is meant by overconsumption. In Juliet Schor’s work

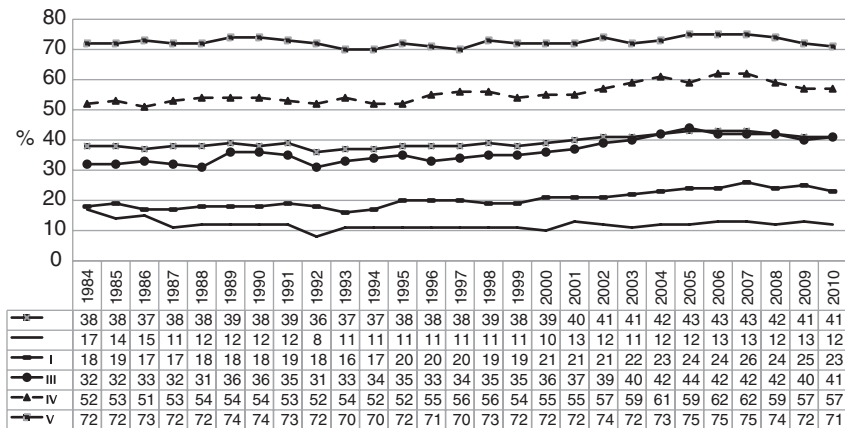


Figure 16.1 Percent homeowner with mortgage (quintiles of income before taxes) (source: Bureau of Labor Statistics, Consumer expenditure survey).

on overconsumption, the American consumer's overspending behaviour is summarized as follows:

Today a person is more likely to be making comparisons with, or choose as a "reference group," people whose income are three, four, or five times his or her own. The result is that millions of us have become participants in a national culture of upscale spending. I call it the new consumerism.³

Schor describes American consumers as ordinary people who cannot restrict their spending in spite of a reduction in their income. Schor draws an image of people who envy the upper-middle-class lifestyle and therefore consume or waste. According to Schor, they consume under the pressure to catch up to the higher-income group, which has "a lot more money" than they do. She describes the upper-middle class as meaning "roughly the top 20 percent of households, with the exclusion of the top few percent. In 1994 the lower income cut off for this group was about \$72,000 a year, and its midpoint \$91,000."⁴ Those below this income level who participate in this "competitive consumption" often lack adequate resources for it. So "the hopes of many to participate in the new consumer economy were replaced by a daily struggle to survive."⁵

Schor puts her emphasis on consumers whose desires are controlled by companies and their advertisements. Under this new consumerism, companies talk consumers into buying brand-name luxury items that are typically associated with higher income groups. Schor also identifies "downshifters," who keep their distance from the new consumerism by being at the opposite end of the spectrum from the people who overspend. The downshifters are the ones who stop chasing competitive consumption and instead live a simple and minimal lifestyle, suppressing their annual income by roughly \$6,000 to \$15,000 dollars.

Elizabeth Warren, who has spent years researching the issue of bankruptcy, has taken a position opposing Schor's analysis, terming her proposal the "overconsumption myth." Warren has used a substantial body of statistical analysis and fieldwork to draw out a different vision of the reality of consumers in the middle class.

Warren describes how, compared with the 1970s, today's family of four is actually spending 22 percent less on food (combining at-home and restaurant eating) than a generation ago. She claims that food eaten at home is subsidized by "cereal in bulk from Costco" and "generic paper towels and canned vegetables."⁶ Warren emphasizes that the ordinary middle class in the U.S. has not wasted, and that they have tried hard to survive because of limitations and mounting pressure on their households. They need more necessities for survival, but acquiring those necessities depresses their economic prospects.

She takes the example of the second car, which is often depicted as a paradigmatic example of waste. Yet a second car is necessary for a couple that lives far from their job sites; a second car is even a prerequisite for getting a job.⁷

The consumer image drawn by Warren does not depict a class below the poverty line, but the middle class itself. Actually, neither Schor nor Warren gives

the exact criterion for “middle class,” a term which is often used in America to describe an ordinary household. However, Warren does provide an example, in which she describes the annual income of a middle-class household as lying in the range of \$20,000 to \$70,000.

The bottom of the middle-class income range that Warren uses is 20 percent above the bottom layer, and its ceiling is 25 percent below the top. Schor, on the other hand, categorizes the middle class as under upper-middle but above down-shifter; so it has the same lower bound, and a ceiling that is 20 percent below the top.

Therefore, both the “overspent American” population and “the generation who are poorer than their parents’ generation” are categorized in the second to fourth quintiles. The middle class corresponds to the second through fourth quintiles, which corresponds to those whose homeownership rate rose during the housing bubble.

David Gordon describes the typical patterns of expenditure among the average working family in the U.S. as follows:

After paying for school lunches and lunches at work, they were probably able to afford about two dinners out for the whole family at McDonald’s each month. Assuming they drank only beer at home (no fancy imported brews), they could buy close to three six-packs of Bud every two weeks.... This is not an example aimed to illustrate extremes of poverty; it illustrates living standards for a family with two workers earning the average wage for private nonfarm production and nonsupervisory employees.⁸

Like Warren, Gordon analyzed not only extremely poor people but also the middle class, where most Americans are involved, often depressed and finding all they can do is just to support themselves in their daily lives. In addition, Gordon argues that the poverty of the average worker’s household is the result of wage cuts and shrinking social services, which are indispensable to life. We return to this topic below.

The background of overconsumption

The inevitability of debt due to wage repression

Let’s explore why consumers cannot stop themselves from accumulating debt that they cannot pay. In the approach taken here, overconsumption means that consumer spending on all categories of expenditure exceeds one’s income from all sources. So looking at the causes of overconsumption means examining how households meet all final consumption expenses, and specifically whether they must rely on debt – “consumer credit” – to do so. Here, consumer credit equals the total of both mortgage loans and all other categories of consumer debt, including auto and education loans and credit-card debt. In some analyses, mortgage loans are not considered in the same category as consumer credit, because

homeowner households are considering to be financing their investment in a durable asset (their homes). Here we work with the reality that mortgage debt payments must be met from the same income streams that are used to meet other forms of household debt, and so should be included in that total.

Capital accumulation processes under globalization have accelerated wage cutting, both by using low-cost labor from developing countries and by forcing workers in developed industrial countries to compete with low-cost developing-country labor. This process has become easier as the power of trade unions has diminished. So, the level of depressed wages for many workers has fallen below the reproduction cost of labor power, while their expenditures for necessities – including medical care – have been grown ever larger. The difference has to be met by consumer credit.

As long as capital needs him, the worker can use consumer credit to compensate for the shortfall in his (and his family's) reproduction costs of labor power. This allows him to continue working. Even as the worker accrues debt, there is no problem as long as he can repay with his future income. Repayment capacity is, in turn, based on the stability both of his status as a worker and of his future income. Of course, there is the possibility that debt built into the cost of living in this way may eventually burst repayment boundaries. The U.S. credit system has minimized this possibility by creating the "minimum-payment system" which allows debtors to repay a minimum amount of their total debt each month and permits them to accumulate more outstanding debt. So workers who earn stable incomes can manage their lives with this "minimum payment system," as long as they are regularly employed. In other words, as long as capital needs them, they can safely endure the expansion of debt.

This dangerous balance will collapse when the workers face a detour in any life stage, e.g., sickness, layoff, and so on. When a personal crisis occurs, delinquency grows, and if the situation becomes aggravated, bankruptcy is inevitable. Note that this matters little for capital: for what the collapse of stable future income means for any worker is that he or she is no longer needed by capital.

In sum, the worker can keep working with accumulating debt as long as capital needs him. Cutting wages below the level needed to reproduce labor power, while it endangers the worker household's solvency, gives the companies doing the cutting a competitive advantage over their competitors.

Increases in social, fixed expense under neoliberalism

Private spending in GDP in the United States is extremely high compared with other countries, reaching 70 percent. But in 2005 the savings ratio, 72 years after the Great Depression, turned negative. And, as Figure 16.2 shows, between 1995 and 2006, real wages rose approximately 10 percent, peaking in 2003; meanwhile, labor productivity increased just under 40 percent.

The increase in income and poverty gaps is also remarkable. The population in poverty decreased from 1960 to 1970; but it has risen since the 1980s. In 2007, the poverty rate stood at 12.3 percent, or 36.5 million people. According

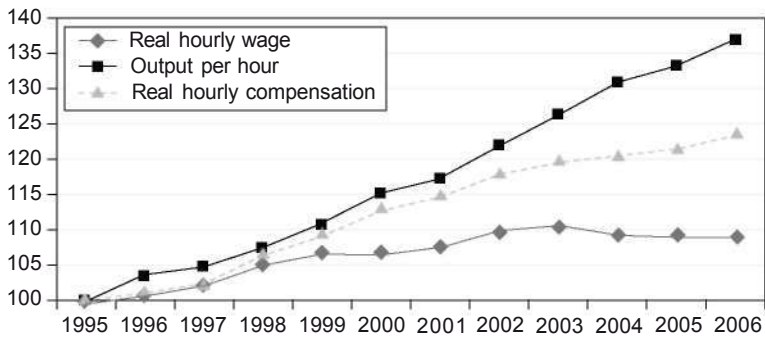


Figure 16.2 Output per hour, real hourly wage and real hourly compensation (1995=100) (source: Arindrajit Dube and Dave Graham-Squire (2006) “Where have all the wages gone? Jobs and wages in 2006,” Policy brief, UC Berkeley Center for Labor Research and Education).

to the United Nations Human Development Report, the U.S. poverty rate is 17th among the 19 developed OECD countries, higher only than those of Ireland and Italy. The income gap has also steadily expanded. Income has been rising consistently only for those in the fifth (highest) quintile; the difference between the first and fifth quintiles is 19 times higher than in 2006.

Mika Tsutsumi concludes that the cause of poverty for many can be linked to healthcare costs. The reason for falling into poverty for one electronic engineer who had received a bankruptcy adjudication in 2005 was his medical expenses. His bankruptcy was caused by the enforcement of a \$12,000 bill that resulted from expenses related to his wife giving birth and from his requiring just one day in hospital for a vermiform appendix operation. Although he had health insurance through his company, his case was not covered. The number of people who cannot afford medical insurance increased from 43 million in 2005 to almost 50 million in 2010. According to a report, uninsured people constitute 16.3 percent of all races, 15.4 percent of whites of both sexes, and 20.8 percent of blacks of both sexes. The rate for Hispanics of both sexes is even higher – more than 30 percent.⁹

According to Warren’s 2001 research project, the three major factors accounting for 87 percent of all cases of bankruptcy, for those with children are: unemployment, medical expenses, and divorce. For the other 13 percent, credit-card overspending is involved – a small amount in proportion – along with bad investments, being a crime victim, natural disaster, other explanation, and no explanation.¹⁰

Moreover, according to this analysis, 62.1 percent of all bankruptcy cases in 2007 were related to a medical cause. Furthermore, 77.9 percent of the people involved in the bankruptcies had insurance when illness onset. Also, those

involved in the bankruptcies included in the study had a monthly mean income of \$2,586 – that is, the average household in this study belonged to the second quintile.¹¹ The point is that these debtors are ordinary people with morals who kept paying their debt just before falling into bankruptcy. This is evidence of the serious situation in the U.S., where the average person falls into serious debt and then into bankruptcy after facing sickness or unemployment. Relative to health- and medical-related expenditures as a share of GDP, public expenditures are the lowest among all developed countries. By contrast, private expenditure on health- and medical-related expenditures in the U.S. is 8.4 percent of GDP, a figure three to four times higher than in other developed countries.

Expenditures for healthcare strain family budgets, and illustrate very clearly the critical situation among American households. The U.S. government has cut budgets for education, healthcare, and social welfare under neoliberalism, and this has a big influence on the household. Thus, it would be untrue to say that the reason the U.S. middle class has no savings is because Americans accumulate debt to expand wasteful consumption.

Let's examine this issue further by examining the "socialization of life" – that is, the "outsourcing of housework." Some private and individual functions of family life, which form part of the reproduction of labor, are replaced either by commodities provided by capital, or by communal goods provided primarily by the public sector. In other words, it means that private work for consumption formerly done within the family is substituted by the public or for-profit provision of that work under the social division of labor. This socialization of life is accelerated as capitalist economies develop.

Kenichi Miyamoto describes consumption expenses in this category of reproducing labor power as involving "social, cooperative consumption means." These expenses include outsourced housework activities and subsidies provided for cooperative consumption: traffic, the means of communication, popular culture and amusement equipment, educational institutions, hospital and other sanitary facilities, public health centers, vocational training institutions, council houses, water supply and drainage operations, cleaning equipment, gas, electricity, and so on. These items are necessary and indispensable for the reproduction of labor power; consequently, they are free of charge or even supplied at low prices.¹²

According to Setsu Ito, items in the category of socialized housework can be provided in one of three ways: by an official body, an enterprise, or a mutual aid organization. In our discussion, the first and third categories should be combined.¹³ When enterprises are responsible for supplying goods or services representing outsourced housework, the quality and amount made available depends on household income. When official bodies offer these goods or services, by contrast, their broad availability can help to eliminate the wealth gap.

There is controversy regarding what social consumption goods should be publicly provided, or subsidized. U.S. statistics suggest that that most Americans would accept the public provision or subsidy of the following social consumption goods/services: childcare, medical care and medical insurance, education,

public service, and rent.¹⁴ This said, the expenditures that American households face on goods that might be eligible (and receive support) for public provision or subsidy are much higher than elsewhere. To see this, these expenditure items are analyzed here for the case of Japan. Using the items listed above, the share of social consumption goods/services in Japanese consumer spending is between 20 and 28 percent. Further, this ratio increases with income: in Japan, expenditures on these goods and services is less in the lower quintiles than in the higher quintiles. Figure 16.3 shows the proportion of expenses for necessary consumption in all private spending for Japan, by income quintile.

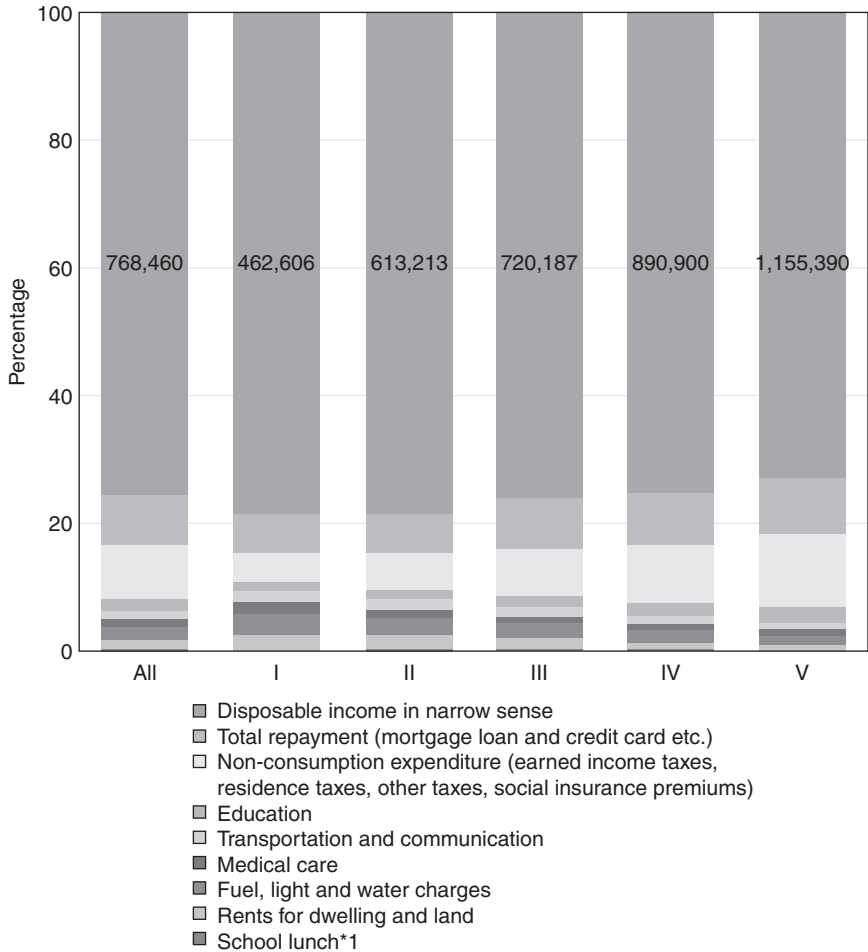


Figure 16.3 Monthly necessary payment and disposable income in narrow sense (Japan) (source: Ministry of Internal Affairs and Communications, Statistics Bureau, Family Income and Expenditure Survey).

Note

*1 “School lunch” does not exist in U.S. Consumer expenditure survey.

But in the U.S., the proportion of all private spending on these social consumption goods/services is about 53–57 percent in each income quintile; and it is highest in the lowest quintile. Figure 16.4 shows data for the U.S., which are taken from the 2007 Consumer Expenditure Survey. For instance, the social consumption goods/services expenditures are 54 percent of all private spending in the fourth quintile, but 57.2 percent in the lowest quintile and 56.3 percent in the fifth quintile. These expenditures are both high and relatively fixed, putting pressure on the remainder of the household's disposable income. Consumers can only pay for urgent and unanticipated expenses from this remainder – as in the case of medical costs or the need to support the household after losing a job. The amount of this “remainder,” for the average household, comes to \$20,879

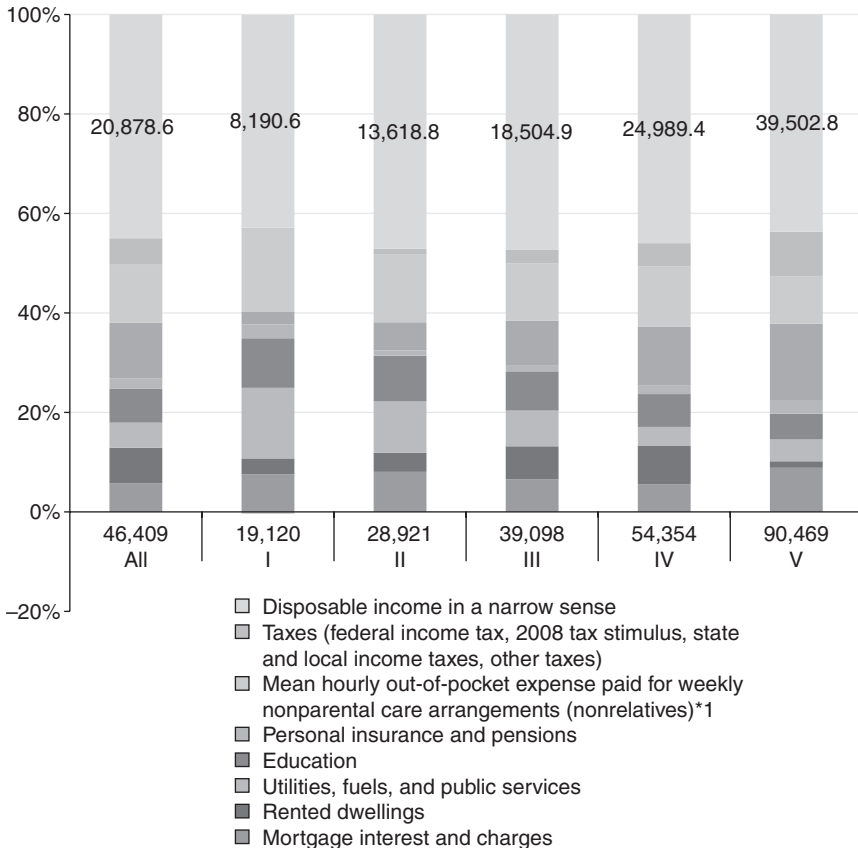


Figure 16.4 Annual necessary payment and disposable income in narrow sense (U.S. dollars) (source: Consumer Expenditure Survey 2007 and U.S. Department of Education Institute of Education Sciences, NHES 2005).

Note

*1. 2005, sampled only “Nonrelative,” this annual payment is based on the original figure which is calculated on weekly basis.

(annually); this figure is only \$8,191 in the first (lowest) quintile and \$13,619 in the second quintile.

This way of viewing the situation of U.S. family households makes it clear that they have little freedom in consumption; their “disposable” income is too small to be wasted. Of course, increases in the “fixed” portion of household expenditures squeezes discretion even more.

The reality of overspending in the U.S. is, as Gordon and Warren point out, that it is caused by the absence of a comprehensive system of social welfare. Households operating under stringency are exposed to the fear of bankruptcy as they face the loss of a job or sickness. They will pay more to keep their job: for example, by taking health supplements or going to the gym as a means of staying healthy and avoiding employment loss. So fixed expenses on items of social consumption goods/services can surpass selective expenses, even while the activities of consumers in lower-income levels increase the likelihood of precipitous unanticipated selective expenses.

Overproduction and the subprime crisis

We now turn to the subprime crisis and overproduction in the United States. We first explore the links between overproduction, credit creation, and household expenditures in the U.S. We then explore a second issue unique to the U.S. economy: the seigniorage that can postpone crisis, but only to eventually aggravate the situation.

Overproduction, subprime lending, and household expenditures in the U.S.

In discussions of the subprime crisis, attention has often focused on the process of re-securitizing collateralized debt obligations (CDO). Moreover, the spread of MBS and ABS (mortgage- and asset-backed securities) throughout the world made this crisis seem quite different than others. But as in other crises, whether even a huge CDO goes bad depends in the end on the last consumer in the chain: that is, can that unit consistently make payments on the debt contracts that underlie that CDO?

The bursting of the housing bubble and the huge amount of resulting bad debt provides evidence that too many houses were built during the period of rising effective demand in the housing boom. The resulting credit swelled to a gigantic sum that was separated from real capital accumulation; it is this credit that is rampant in world financial markets. Over-accumulation appears as a structural contradiction in capitalism, a situation that applies fully to the subprime crisis:

Credit creation has real fundamentals which are corresponding to the reproduction process in the future, and the creation of credit promotes the expanded reproduction furthermore by taking money in the future in advance compared with the case without the creation of credit, and pulls the

reproduction process to the utmost limit. At the same time, under capitalism, the future means that the reflux of capital is unclear, so credit creation originally contains credit shortages and risks, and is easy to tie with speculation. A so-called bubble is just a product of an excessive creation of credit that corresponds to the overinvestment of the capital, including the investment on real estate.¹⁵

We are arguing here that the core of the subprime crisis is “overproduction,” a condition in a capitalist economy which results from an excessive creation of credit that corresponds to an overinvestment of capital. In capitalist countries, credit ballooned and fueled investment, leading to overproduction which was independent from real capital accumulation. This credit flowed through global financial markets; but it had to be fixed to the size of real capital sooner or later.

The expansion of consumer credit

Consumer credit was created in the 1920s. It was necessary to establish the mass production of durable consumable goods, most notably, the car. Mass production is inevitable in the capitalist economy, but the means for inventing mass consumption do not arise naturally. The system that resolves this problem is the instalment payment plan intended for consumers. So the mass production of durable goods was accelerated by consumer credit. As Turner writes, “New consumer goods such as radios, refrigerators and vacuum cleaners were unknown at the start of the 1920s, but were ubiquitous by 1929.”¹⁶

Total outlays, including personal interest payments, were \$294.6 billion more than disposable income in 2007.¹⁷ This overconsumption is supported by mortgage loans and consumer credit. The balance of mortgage loans in 2007 was \$10.5 trillion, and outstanding consumer credit totalled more than \$2.55 trillion. This total household debt balance equalled the GDP of the United States.

Consumer credit has two methods of repayment: non-revolving and revolving. The revolving method, including the minimum payment system, requires the repayment of a specified amount every month, regardless of the total amount of the loan. When debtors use revolving credit, especially the minimum payment system, their repayment is held down, but their monthly interest is added to their debt total and then carried forward to the next month. Even if the amount of debt accumulates, this situation can persist as long as debtors can repay the minimal amount every month. But if debtors lose their jobs, they face the responsibility of repaying the total amount borrowed, including accumulated interest. The total sum of consumer revolving credit reached \$883.4 million in 2007, compared to \$217 million in 1990. Adopters of credit cards in the U.S. hold, on average, 3.5 credit cards.¹⁸

Home-equity loans and the implications of realizing value based on market expectations, not market transactions

The refinancing of mortgages added to the credit-fueled expansion of the U.S. economy, encouraged by the tax shelter provided for holders of mortgage loans.¹⁹ As the U.S. housing-finance system was originally designed, mortgages finance housing purchases, and households realized their houses' value only when they were sold. However, the refinancing of mortgages has now become common, especially during housing bubbles. This permits debtors to take out new and larger mortgage loans which capitalize the value of increasing housing prices – with the difference in loan amount being freely available for any spending purpose. In effect, potential capital gains can be shifted to consumption and debt repayment purposes without selling the property generating those gains. This system worked as a driver for U.S. economic growth. The cash-out from refinancing was \$152.7 billion from 2001 to 2005, up from \$27.2 billion from 1991 to 2000. Alan Greenspan and James Kennedy pointed out that the major uses of free cash from refinanced equity loans were home improvement and the repayment of “non-mortgage debt.”²⁰ The proportion of refinancing loans used to purchase another property was only 22 percent, and the proportion used for repayment of non-mortgage debt and personal consumption expenditure (PCE) was 44 percent in total from 2001 to 2005.²¹

This shows that many people now take on mortgage loans not only for their homes, but for their cars and their daily lives. In the subprime-fueled housing boom, not only mortgage loans but the repayment of consumer credit and the well-being of much of the working class was entrusted to the housing market as well.

A particularity of the United States: the dollar's currency privilege

We next discuss a key reason that the subprime crisis arose and became so aggravated in the U.S. It is an intrinsic practice of capitalism to expand credit and create policies to increase consumption so as avoid financial crisis. But the United States differs from other capitalist countries in that it can uniquely overcome the internal limits to its production because of privilege. When most other countries – especially developing countries – want to settle their accumulated debts, they must obtain dollars by exporting their products or borrowing more from other countries. Ultimately, their loans must be repaid in dollars. But the U.S. has no need to regulate its imports, even as its accumulated debt grows. The current balance deficit “is transferred to the deposit of the non-resident in the United States bank system, and the deposit moves from the resident account to a non-resident account in the United States bank system.”²² As long as the dollar retains its dominance in international markets, any deterrent to its current-account deficit is lost: the U.S. has access to limitless imports independent of its export volume.²³

The dollar's privilege as an international currency thus lies behind many of the otherwise unsustainable trends that maintained U.S. and indeed global accumulation until the global crisis arrived. In particular, the U.S. could endure

the outsourcing of its skilled and unskilled jobs, because importing goods produced by low-wage workers depressed the value of the commodities that sustained U.S. workers' daily lives. This trend also helped households with abundant loans to compensate for constraints on their income.

So the U.S.'s privilege – its ability to pay its debts in its own currency with no need to settle because dollar itself is debt – has enabled its overconsumption, and thus counts as another crucial cause of the subprime crisis. As long as consumers could repay their debt, the crisis of overproduction was postponed. But sooner or later, rising debts and financial obligations would – and finally did – overwhelm the U.S. economy.²⁴

The resulting world crisis, in turn, reveals how much the world economy has depended on the unsustainable expansion of the U.S. market. For example, profits at Indian IT companies have depended on profits earned from contracts commissioned by U.S. companies. India's IT companies TCS and Infosys, for example, had 50 to 60 percent of their sales in North America; these companies' profits, which stood at 30 to 40 percent in the first quarter of 2007, fell to less than 10 percent in 2008.²⁵

Conclusion

This chapter has argued that the root of the subprime problem lies in overproduction. Consumption-boosting measures based on expanding credit were indispensable in deferring the possibility of depression. This problem is intrinsic to all capitalist economies, not just the U.S. This chapter went on to show that the global position of the U.S. is unique because its dollar seigniorage has permitted it to defer depression and overcome limitations such as falling real wages – of course, at the expense of further aggravating its economy's internal contradictions. The central contradiction involved U.S. consumers' need to increase household debt in the face of stagnant wages and rising fixed living costs. A detailed analysis of U.S. household budgets has shown that the habit of spending beyond one's means is due more to stagnant wages, employment instability, and inadequate social support under neoliberalism, rather than to extravagance.

Further, this chapter has shown that subprime loans were not made, in the main, to extremely low-income people; they were made primarily to people in the second-to-fourth income quintiles. So the subprime crisis cannot be viewed as a poverty issue specific to low-income people. Instead, it reveals the fragility of the basis of life of "ordinary Americans."

Notes

- 1 Source: U.S. Office of the Comptroller of the Currency, *Expanded Guidance for Subprime Lending Programs*, www.occ.gov/news-issuances/bulletins/2001/bulletin-2001-6a.pdf (accessed July 23, 2011).
- 2 Egawa (2007), p. 9. See also You Watanabe and Yukiko Kinase, "Outlook for Subprime Mortgage Loan in the U.S.," *Economic Review*, Bank of Tokyo-Mitsubishi UFJ, No. 2007-13, October 3, 2007. Available only in Japanese.

- 3 Schor (1998), p. 4.
- 4 Schor (1998), pp. 12–13.
- 5 Schor (1998), p. 14.
- 6 Warren and Warren Tyagi (2004), pp. 15–18.
- 7 Warren and Warren Tyagi (2004), pp. 46–47.
- 8 Gordon (1996), pp. 99–100.
- 9 U.S. Census Bureau, Health Insurance Historical Tables, www.census.gov/hhes/www/hlthins/data/historical/HIB_tables.html (accessed September 23, 2011).
- 10 Warren and Warren Tyagi (2004) p. 81.
- 11 Himmelstein *et al.* (2009).
- 12 Miyamoto describes the public housing system as the minimum necessary requirement for reproduction of the labor power, and this becomes socialized by the usage of the cooperative living style for urban laborers. The supply of such a public housing system is equivalent to the reproduction of labor power (Miyamoto, 1967, pp. 33–36).
- 13 Ito (1990) p. 256. The reasons why I combined the “mutual aid organization” into “an official body” as its function is from a consideration of the root of the idea of “socialization of life.” The meaning of “socialized life” comes from this definition based on Karl Marx, “Allgemeinen, Gemeinshaftlichen Bedingungen,” *Grundrisse der Kritik der politischen Ökonomie*, (Rohentwurf) 1857–58, Dietz Verlag, Berlin, 1953, p. 432. Marx defined this is the general, communal conditions, not involved in Capital. The importance of Marx’s point is that this general, communal condition is the universal condition which is necessary for every historical stage. So the function of “an official body” and “mutual aid organization” are the same in this meaning.
- 14 “Rent” should be considered as the outcome of the stock of public housing. This is also an important factor for workers to reproduce their labor power.
- 15 Yamada (1999), pp. 46–47.
- 16 Turner (2008), p. 15.
- 17 U.S. Department of Commerce, Bureau of Economic Analysis, Table 2.1, Personal Income and its Disposition, www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=58&Freq=Qtr&FirstYear=2008&LastYear=2010 (accessed September 11, 2011).
- 18 Federal Reserve Bank of Boston, “The 2008 Survey of Consumer Payment Choice,” Public Policy Discussion Paper No. 09–10, January 2010, www.bos.frb.org/economic/ppdp/2009/ppdp0910.htm (accessed December 12, 2010).
- 19 Aneha (2008), pp. 113–115.
- 20 Greenspan and Kennedy (2007), p. 9 and p. 17, Table 2, “Sources and Uses of Equity Extracted from Homes.”
- 21 *Ibid.*, p. 23.
- 22 Yamada (1999), p. 142. Also see Yamada (2011), Chapters 1–3.
- 23 *Ibid.*, pp. 37–62.
- 24 Aneha (1986).
- 25 *Nikkei Newspaper*, April 28, 2008.

Bibliography

- Aneha, A. (1986) “An Analysis on the Sales Credit as a Form of Consumer Credit” (in Japanese), *The Economic Review*, Kokugakuin University.
- Aneha, A. (2008) “Over-Consumption and the Privilege of the Dollar as International Currency in the US Economy,” in Seichi Akiyama and Sinnichi Yoshida (eds), *Dollar System and Globalization* (in Japanese), Surugadai-Press.
- Egawa, Y. (2007) *The Lesson from the Subprime Issue: The Spirit of Securitization and Rating*, (in Japanese), Shoji-Houmu.

- Gordon, D.M. (1996) *Fat and Mean: The Corporate Squeeze of Working Americans and the Myth of Managerial "Downsizing,"* Free Press, New York.
- Greenspan, A. and Kennedy, J. (2007) "Sources and Uses of Equity Extracted from Homes," *Finance and Economics Discussion Series*, FRB, March 2007.
- Himmelstein, D.U., Warren, E., Thorne, D., and Woolhandler, S. (2009) "Medical Bankruptcy in the United States, 2007: Results of a National Study," *American Journal of Medicine*, August, <http://amjmed.blogspot.com/2009/08/medical-bankruptcy-in-united-states.html> (accessed April 22, 2010).
- Ito, S. (1990) *Home economics* (in Japanese), Yuhikaku Publishing.
- Miyamoto, K. (1967) *Theory of Social Capital* (in Japanese), Yuhikaku Books.
- Schor, J.B. (1998) *The Overspent American Upscaling, Downshifting, and the New Consumer*, 1st edition, Basic Books.
- Tsutsumi, M. (2008) *Reportage: Poverty Superpower America* (in Japanese), Iwanami Shoten.
- Turner, G. (2008) *The Credit Crunch: Housing Bubbles, Globalization, and the Worldwide Economic Crisis*, Pulte Press, London.
- Turner, G. (2009) *No Way to Run an Economy: Why the System Failed and How to Put it Right*, Pulte Press, London.
- Warren, E. and Warren Tyagi, A. (2004) *The Two-Income Trap: Why Middle-Class Parents Are Going Broke*, Basic Books.
- Yamada, K. (1999) *Money and Credit in Contemporary Capitalism* (in Japanese), Aoki Shoten.
- Yamada, K. (2008) "Seigniorage and Balance of 'Current Account' and 'Capital and Financial Account' in US Dollars under the Floating Exchange rate" (in Japanese), in Seiichi Akiyama and Sinnichi Yoshida (eds), *Dollar system and Globalization*, Surugadai-Press.
- Yamada, K. (2011) *The Point of View to Analyse Contemporary Economics: The Essence of Marxist Economics* (in Japanese), Sakurai-Shoten.

Index

Page numbers in *italics* denote tables, those in **bold** denote figures.

- adjustable rate mortgages (ARMs) 28, 32
- advanced capitalist countries, diversity 182–4
- Alternative Mortgage Transaction Parity Act (1982) 12
- Amable, B. 184
- American International Group (AIG) 104, 105, 256
- American Recovery and Reinvestment Act (ARRA), 2009 105, 256
- Aneha, Aki 8, 305–19
- Arrighi, G. 65, 189
- ASEAN (Association of Southeast Asian Nations) 143, 273, 275, 279
- Asian currency crisis (1997) 15, 31, 98, 145, 258–9
- asset-backed commercial paper (ABCP) 45
- asset-backed securities (ABS) 13, 28, 76
- asset market bubble 259, 260, 263
- asset price inflation 300, 301

- bailout loans 28, 47, 256
- Baily, M.N. 103
- balanced globalization 267–8
- balance-of-payments management 246
- Bank Acts (1844–5), UK 98
- Bank for International Settlements (BIS) 87, 89, 166
- Banking Act (1844) 95
- Banking Act (1935) 99
- bank multipliers 218
- banknotes (credit money) 210, 215, 216, 217
- Bank of England 94–5
- bankruptcy 164, 256, 269n1; *see also* Lehman Brothers, collapse (2008)
- banks: banking business regulations/deregulations 98–9; central 48, 110; commercial, transformation of 69–70; demand-deposit accounts *see* demand-deposit accounts; and financialization 57, 58; lending to low income sectors 12; relationship banking 215, 216; restructuring of 68; role 160–1; securitization of banking assets 99–100; shadow banking system 255; *see also* Federal Reserve Bank
- Baran, P.A. 106n1, 113
- base money 217, 220
- basic income 24n15
- Baumol, W.J. 130–1, 139
- Bear Sterns investment bank 14, 28, 49n4, 269n1
- Bernanke, Ben 87, 88, 166, 217, 218
- Bernstein, E. 127
- “big government” era 234, 236, 237, 248
- Bilmes, Linda J. 50n11
- Black, F. 159
- Blackburn, R. 67
- Borio, C. 261
- Boyer, Robert 65, 151–73, 186, 187
- Brenner, R. 16, 63, 66, 113, 123n6
- Bretton Woods international monetary system 16, 97, 100, 142, 230, 245; Bretton Woods II system 259, 261, 264; and bureaucratic capitalism 135–6, 139, 140
- BRIC countries 181, 188, 281, 282, 284; emergence and limits 279–80
- Bryan, D. 67
- bubble economy 12, 17, 18, 19, 88; and price movement changes 111, 119, 121, 122; U.S.-centred global capitalism 47, 48; and widening economic income disparity in society 116–19

- bureaucratic capitalism 129, **147**; boom 137; Bretton Woods international monetary system 135–6, 139, 140; capital accumulation regime 134–6; cyclical crises and law of value in 127, 136–8; prosperity 136–7; recession 137; structural crisis in 128, 138–41
- Busby, C. 24n14
- Bush Administration 103, 197
- business cycles: Marx on 15, 16, 24n8; Minsky's basic and super cycles 132–3; political business cycle model (Kalecki) 232–3, 237–43, **238**, **244**; structural crises, following 142–3; U.S., and global hegemony 7, 244–8; *see also* cyclical economic crises
- business failures 14
- business process outsourcing/offshoring (BPO) 284
- business restructuring 31
- Callinicos, A. 63
- Can it happen again?* (Minsky) 158
- Capital* (Marx) 5, 15–16, 24n8, 64, 106; Volume 3 91, 92–6
- capital accumulation 5; in age of bureaucratic capitalism 134–6; dynamic industry 134; and financialization 55–74; global, new nexus 26; government policy 134–5; industrial relations 135; international trade 136; monetary system 135–6; neo-liberal regime 141–5; profit-led 140; prosperity 136–7; structural crisis 128, 129; structuralist macroeconomics model 132; in U.S. economy 44; wage-led 137, 140
- capitalism: basic logic of capital 41; British capitalist system 94–5, 128; bureaucratic *see* bureaucratic capitalism; capital, labor and markets, spatial relations 283–4; “casino” 44, 47, 78, 79, 80, 86, 210, 212; finance-led 65, 178–80; future of, and subprime loan crisis 145–9; historical dimension 47–9, 174, 189; Japanese, impact of subprime world crisis on 18–20; market 128, 129; mature 64; modern 31, 192, 193; money-manager 214; monopolistic *see* monopolistic capitalism; neoliberal 233–7; new empire circuit of capital flows 44, 45, 51, 51n19; whether new stage 284–5; periodizing 191, 192–5; pure theory 210; state monopoly 82–7; U.S.-centered global 26–54, 46; as variable/various in time and space 174–5; *see also* Golden Age of Capitalism
- Case-Shiller index 255
- “casino capitalism” 44, 47, 78, 79, 80, 86, 210, 212
- chain-weighting 250n8
- Chauvet, M. 250n1
- Chesnais, F. 67
- Chiang Mai Initiative 268
- China 146, 197, 263, 267, 269n7, 293; industrialization of in neoliberal accumulation regime 143–4; integration and structural shift, East Asia 272, 280; and U.S. 206–7
- Chirinko, R.S. 300
- circuit breakers 159
- Citigroup 256
- Civil Rights Act (1964) 49n5
- Cold War 40, 136, 212, 213–14
- collateralized bond obligations (CBOs) 37
- collateralized debt obligations (CDOs) 13, 14, 28, 80, 200, 214, 314; and global financial crisis 29, 37, 49n4; global imbalances, political economy 255, 256
- collateralized loan obligations (CLOs) 37
- commodity-money 218
- Communist Manifesto, The* (Marx and Engels) 193
- Community Reinvestment Act (CRA), 1977 12, 30, 32–3, 49n5
- comparative approach, methodology 181–2
- consumer credit 12, 308, 309; expansion 315
- Consumer Expenditure Survey (2007) 313
- coordinated market economies (CMEs) 182
- corporate governance 179
- Council of Economic Advisers 105
- coupling/uncoupling 273
- credit cards 315
- credit crunch 29, 201
- credit default derivatives (CDS) 45
- credit default swaps (CDS) 29, 80, 200, 255
- credit money 210, 215, 216, 217
- credit policy, easy 34
- credit-rating companies 214
- credit scoring 11, 27
- credit system: and prosperity process 15; role in causing economic crisis 92

- credit tightening 15, 50n10, 137, 152, 246
- Crisis of Neo-liberalism, The* (Duménil and Lévy) 206
- crony capitalism 13
- Crotty, J. 64
- Cumings, B. 244
- currency system, international 119–21; *see also* gold standard
- cyclical economic crises 15–16, 128, 175; and law of value 127, 136–8; *see also* business cycles
- Darwin, C. 127
- Debreu, Gérard 162
- debt: inevitability of due to wage repression 308–9; “non-mortgage” 316
- debt repayment problems 11, 14; of state 17
- deflation 110, 111, 112, 217, 222, 233
- de-industrialization process, Japan 300
- demand-deposit accounts 215–16; held by commercial banks at central bank (DDB) 217, 218, 220, 221; held by national government at same bank (DDA) 217, 220, 221; held by public at a commercial bank (DDC) 217, 218, 220, 221
- demand-led industrialization 146
- Democratic Party (DP), Japan 17, 20
- Depository Institution Deregulation and Monetary Control Act (1980) 99
- depression 137–8
- derivatives, dangers of 159–63, 167; mortgage derivative crisis 164–6
- Despres, Emile 229, 245
- developing regions, changes in growth mechanisms 281, 282, 283
- development theory 152
- dialectic of capital 210
- “dirty floating” 221
- Disyatat, P. 261
- diversity of advanced capitalist countries 182–4, 188
- Dodd–Frank Wall Street Reform and Consumer Protection Act (2010) 184
- dollar, currency privilege 316–17
- domestic economic relations, and staggering productivity growth 139–40
- “dot.com” companies 31, 50n9, 51n22, 88
- double-dip recession 21, 257
- Dow Jones Industrial Average 34
- Duménil, Gérard 6–7, 191–207
- Dymski, G.A. 7, 229–53
- dynamic comparative advantage 6, 127, 130–1, 138, 139, 142
- East Asia 7; and balanced globalization 267–8; economic development and regional integration 273–9, 276, 278; global imbalances, political economy 263–4; industrialization of in neoliberal accumulation regime 143–4; integration and structural shift 272–87; *see also* Asian currency crisis (1997)
- economic crisis *see* global financial crisis
- Economic Recessions that Harken Back to the Great Depression* (Takumi) 208
- economic slackening, and globalization 114–16
- Economist, The* 285
- Emergency Economic Stabilization Act (2008) 47, 105
- emergency measures 48
- employment 7–8; female workers 296; human capital intensive sectors 302; informal 290; labor demand 293–5; labor supply 293, 295–7; life-time 297; local employment and trading systems (LETS) 216; “non-regular” 288, 291; “post-industrial” policies supporting 301–3; pressures on structure 293; status 290; structure 289–91, 293
- employment, structure of; *see also* wage restraints
- Engels, Friedrich 193
- Enron 163–4
- Epstein, G.A. 39, 50n12
- Epstein, J. 64
- ethnic minorities 30
- eurobonds 203
- Europe, economy in 2001 201–3
- European Central Bank 203
- European Financial Stability Facility 48
- European Union (EU) 273
- Eurozone 48
- exchange rates 97–8; fixed 100, 106, 110, 139, 230, 245, 250n4; floating 16, 110–11, 140; *see also* Bretton Woods international monetary system; gold standard
- expansionary policy 34
- export-dependent growth strategy 263–4, 268
- factory-operating ratio 112
- Fair Isaac Co, credit scoring system 11, 27

- Fannie Mae (Federal National Mortgage Association) 35, 47, 49n5, 103, 104, 105
- Federal Deposit Insurance Corporation Improvement Act (1991) 99
- Federal Home Loan Banks 105
- Federal Reserve 63, 103, 104, 105, 199, 202, 250n4
- Federal Reserve Bank 99, 211, 233
- Federal Reserve Board (FRB) 33, 34, 87, 88
- fiat money 215, 216, 219, 221
- fictitious capital 93; fraudulent formation 102–4
- finance-led capitalism 65, 178–80
- financial crisis *see* global financial crisis
- financial expansion, Marxist political economy 62–4
- financial imbalance 89
- financial innovations 151; outsourcing of risks to agents incapable of assuming them, preventing 166–70, **168**; private innovations and regulation 155–6; public control 166–70; as sources of growth or finance 154, 169; status and evolution 152; uncertain consequences 153–5
- financial-instability model (Minsky) 2, 14–15, 16, 130, 211, 231–2; and global imbalances 247
- financialization 4, 5, 7–8, 26, 37, 47, 50n12, 51n20, 195, 215, 288, 298; and banking sector 57, 58; causes 56; defined 55; development 38–40; financial expansion, Marxist political economy 62–4; of labor-power 12; post-Keynesian analysis 64–5; as systemic transformation 66–70; and workers 68–9
- financialization, and crisis of 2007–9: aggregate investment as percentage of GDP **60**; background 56; household debt as percentage of GDP **61**; non-bank corporations, leverage 59; public debt as percentage of GDP **60**; radical approaches 62–6; roots of crisis 66–70; structural account of crisis 55–74; *see also* global financial crisis of 2008–2009
- financial-market paralysis, 2001 34
- financial rescue 104–5
- financiers 5, 93–5
- fiscal policies 16, 105, 112
- Fisher, Irving 156
- fixed exchange rates 100, 106, 110, 139, 230, 245, 250n4; *see also* Bretton Woods international monetary system; floating exchange rate systems
- floating exchange rate systems 16, 110–11, 140
- Fordism 17, 19, 65, 133, 139, 153, 209, 210, 215; and 2008 crisis 177, 178, 180
- foreclosures 12, 13, 28
- Freddie Mac (Federal Home Loan Mortgage Corporation) 35, 47, 103, 104, 105
- Freeman, R. 295
- Free Trade Area for the Americas (FTAA) 197
- French Régulation School 3, 17, 65
- Friedman, Milton 85, 217, 218
- Fukushima nuclear accident, Japan (2011) 5, 21, 22, 23, 24, 302
- functional deterioration of financial markets 29
- G20 communiqué (2008) 47, 49n1
- gambling (Marx) 93–4
- Garn–St Germain Depository Institutions Act (1982) 99
- General Agreement on Tariffs and Trade (GATT) regime 40, 136, 138
- General Motors 105
- General Theory of Employment, Interest and Money*, *The* (Keynes) 82, 83, 84, 85
- Gindin, S. 67
- Glass–Steagall Act 69, 77, 99, 255; Regulation-Q 214
- global capitalism 40–1, **42**
- global city 31, 39, 41, **42**, 43, 44, 51n18
- global financial crisis 75–90; in age of neo-liberalism 98–102; banking business regulations/deregulations 98–9; basic perspective 30–1; comparative approach, methodology 181–2; current crisis and historical dimension of contemporary capitalism 47–9; disappearance of financial crisis from capitalist world (post-World War II) 96–7; diversity of advanced capitalist countries 182–4, 188; domestic factors 98; and global imbalances 260–3; and gold standard 95–6, 108–9; international factors 100–2; in Keynesian regime 96–8; post-World War II adjustments 109–11; role of credit in causing 92; structure of as a world great depression 75–82; and subprime problem 27–9; and U.S.-centered global capitalism 44–5, 46

- global financial crisis of 2008–2009 5–6, 174–90; AIG, near collapse 104; bubble economy and income disparity 116–19; comparative approach, methodology 181–2; crisis following 255–7; economic growth models, comparative study 185, 186; economic slowdown and fall in prices 112–16; fictitious capital 93, 102–4; financial rescue and fiscal stimulus 104–5; international currency system, role 119–21; Lehman Brothers, collapse 104; neo-liberalism, U.S. hegemony 198–201; observed problems 111; whether “one-in-a-country” crisis 174–5; structural crises, world history 175–80; subprime mortgage loans 102–4; typical country approach 181–2; *see also* financialization, and crisis of 2007–9; global financial crisis
- global imbalances 7, 230; asset market bubble 259, 260, 263; changes and prospects 265–7; development 257–60; and financial crises 257–64; and global financial crisis 260–3; global rebalancing, and future prospects 265–8; Kalecki political business cycle model 247–8; Minsky financial-instability model 247; political economy of 254–71; political economy of, in United States and East Asia 263–4; “supply push” theory 262
- globalization 26, 39, 142, 195, 214, 254, 256, 309; balanced 267–8; and economic slackening 114–16
- Glyn, A. 24n9
- Golden Age of Capitalism 176, 177, 234, 243
- Goldman Sachs 272
- gold reserves 139
- gold standard 97, 104, 110, 111, 140, 218, 220; and managed currency system **219**; and world economic crisis 95–6, 108–9
- Gordon, David 308
- Gordon, Robert 250–1n11
- government bonds 59
- government policy (welfare state) 134–5
- government-sponsored enterprises (GSEs) 35, 49n5, 269n4; *see also* Fannie Mae (Federal National Mortgage Association); Freddie Mac (Federal Home Loan Mortgage Corporation)
- Gowan, P. 67
- Gramm–Leach–Bliley Act (1999) 77, 99
- Great Depression (1930s) 17, 86, 105, 133, 175, 211, 223; and global financial crisis 26, 29, 47; and neo-liberalism 193, 204
- great moderation 237, 250n10
- Great Transformation (inter-war) period 212
- Greece, crisis in 48
- Greenspan, Alan 14, 26, 33, 87, 108, 156–7, 158, 229, 316
- growth and crisis: finance-led model 65, 178–80; world history 175–8
- growth environment score (GES) 280, 286n6
- Gutián, Manuel 250n9
- Hagiwara, Shinjiro 5, 91–107
- Harman, C. 63
- hedge funds 28, 36, 37, 45, 76, 133, 163; and Bear Sterns investment bank 14, 49n4
- hegemony, financial: finance at the helm 195–7; formation of worldwide hegemony 100–1; global, and U.S. business cycle 244–8; neo-liberalism 197–8; neomanagerialism 204–6; second 194, 195–8, 205; third 204–6; United States 100–1, 198–201, 230; worldwide 101
- Heintz, James 7–8, 288–304
- helicopter money 217, 218, 221
- Hilferding, R. 67, 68, 77, 127
- Hirakawa, Hitoshi 7, 272–87
- Hirschman, Albert 272
- home-equity loans 12, 32, 35, 316
- home price indices **33**
- housing boom: and economic boom of 1990s 31; and expansion of housing finance 35–7; and fictitious capital 102; history of subprime crisis 11, 12–13; responses to collapse 33–5
- housing bubble 30, 44, 57, 61, 80, 81, 86, 180, 308; bursting of 14, 26, 30–1, 35, 45, 87, 231, 314; post-housing bubble period 306
- Huber, Joseph 224n9
- Hu-Wen course, China 197
- hybrid housing loans 12, 13
- hyperinflation 111
- idle money 12, 17, 210, 216, 217, 218, 223n2
- Ikeda, Masao 51n19
- imbalances, global *see* global imbalances
- IMF *see* International Monetary Fund (IMF)

- imperialism 4, 67, 68, 100, 127, 128–9, 208; Marxian political economy 128–9
- industrial, technology and trade (ITT) policy 135
- industrial relations 135
- inflation 16, 110, 111, 112, 217; asset price 300, 301
- Information Technology (IT) boom 11, 31–3, 39
- Information Technology (IT) bubble, bursting of 30, 37, 50n11
- Information Technology (IT) collapse (2001) 15; responses to 33–5
- initial public offering (IPO) 31
- innovations: collective rules, subject to 170; innovations theory and finance 168, 169; *see also* financial innovations
- interest rates 99, 214, 234, 261; declining or low 27, 31, 34–5, 57, 64, 80, 105, 141–2, 164, 217, 255, 256, 260; liberalization 214; long-term 105, 199; over-the-counter transactions 195; rising or high 28, 30, 87, 88, 95, 108, 109, 141, 145, 213, 220, 246; short-term 155; stable 32; zero 48, 217, 256
- intermediate theory, three new concepts (Marxist political economy): basic and super Minsky cycles 132–3; dynamic comparative advantage 6, 127, 130–1, 138, 139, 142; structural macroeconomics model of capital accumulation 132
- International Classification of Status in Employment 289
- International Clearing Union, Keynes' plans for 97, 135
- International Labor Organization (ILO) 296, 303n3
- International Monetary Fund (IMF) 40, 97–8, 111, 135, 136
- international relations, and uneven development 138–9
- international trade 136
- “Internet convention” 153
- investment movement, worldwide 114–16
- investors, professional 101–2
- Ireland, crisis in 48
- irrational exuberance 156
- IT *see* Information Technology (IT)
- Italy, crisis in 48
- Ito, Setsu 311, 318n13
- Itoh, Makoto 4–5, 11–25
- Japan: bubble economy 12, 300; deflation 222; de-industrialization process 300; Democratic Party (DP) 17, 20; “dirty floating” of yen 221; economic recovery of 2002–7 19–20; economic recovery of 2010 20; Fukushima nuclear accident (2011) 5, 21, 22, 23, 24, 302; great earthquake/tsunami (2011) 5, 20–4, 302; impact of subprime world crisis on capitalism 18–20; inflation 217; national debt 48; stagnation of economy 222; Statistics Bureau 300, 303n1; versus United States 160–1
- Japan Bank for International Cooperation (JBIC) 281, 283
- Japanese Society of Political Economy (JSPE) 1, 3, 71n1, 229, 249, 250, 286n1
- joint-stock system 92–3
- Juglar cycles 175
- jumbo loans 32, 35
- Kalecki, Michal 7, 137, 140, 229, 230; Minsky–Kalecki approach to neo-liberalism crisis 229–53; political business cycle model 232–3, 237–43, **238, 244**, 247–8
- Kawamura, Tetsuji 5, 26–54
- Kennedy, James 316
- Keynes, J.M. 96–8, 102, 133; *The General Theory of Employment, Interest and Money* 82, 83, 84, 85; International Clearing Union, plans for 97, 135
- Keynesianism (managerial capitalism) 16, 40, 139; Keynesian coalition 100–1; Keynesian revolution 231; post-Keynesian analysis of financialization 64–5; role of financial crisis in Keynesian regime 96–8; subprime loan crisis and future of capitalism 145–6
- Kindleberger, Charles 152, 229, 245
- Kitchin cycles 175
- Kondratieff, Nikolai 176
- Kregel, Jan 224n7, 234
- Krippner, G. 65
- Krugman, P. 245
- labor demand 293–5
- labor-power, financialization of 12
- labor supply 293, 295–7
- Lapavitsas, Costas 5, 24n1, 24n5, 55–74
- Law, John 156
- Lazonick, W. 65
- lean production 31
- Lee, Kang-Kook 7, 254–71
- Lehman Brothers, collapse (2008) 14, 29, 91, 103, 104, 164, 166, 254, 288

- lender of last resort (LLR): Federal Reserve Bank as 211, 233, 250; international 245
 Lenin, Vladimir 67, 68, 77, 122n3, 123n4, 127
 leveraged buyouts (LBOs) 76, 77
 Lévy, Dominique 6–7, 191–207
 Liberal Democratic Party (LDP), Japan 20
 liberalism 196
 liberalization 14, 39, 100, 101, 294
 liberal market economies (LMEs) 182
 liquidity 155; liquidity crisis 26; liquidity preference 83
 liquidity trap 133, 217
 loan sharks 12
 local employment and trading systems (LETS) 216
 long boom of 1990s, characteristics 31–3
 Long-Term Capital Management (LTCM), collapse (1998) 39, 159–63
 long waves (Kondratieff) 176
 Louvre Accord (1987) 120
 low income borrowers, lending to 12, 32–3
 “Lucas Paradox” 260

 mainstream loans 30
 Malthus, Thomas 272
 managed currency system, postwar 7, 109, 219, 222, 246
 managerialism 197
 managerial revolution 192
 marginal efficiency of capital 83
 market capitalism 128, 129
 market expectations, implications of realizing value based on 316
 market failures 48
 Marshall Plan 136
 Marx, Karl 3–4, 104, 115–16, 122n2, 130, 192, 193; on business cycles 15, 16, 24n8; *Capital* 5, 15–16, 24n8, 64, 91, 92–6, 106
 Marxist political economy of financial expansion 55, 62–4, 129–30; intermediate theory, three new concepts 127, 130–3; international 128–30
 Matsumoto, Akira 5–6, 108–24
 mature capitalism 64
 McKinnon, Ronald I. 246, 251n12
 mergers and acquisitions (M&A) 214; cross-border 40
 Merrill Lynch 164, 256
 Merton, R. 159
 migration, international 297
 mimetic behavior 154, 159
 minimum-payment system 309
 Ministry of Finance, U.S. 99
 Minsky, Hyman 7, 209, 211, 214, 215, 224n6, 229, 230, 250n5, 301; *Can it happen again?* 158; financial-instability model 2, 14–15, 16, 130, 211, 231–2, 247; global imbalances and model 247; Minsky cycles, basic and super 132–3; Minsky–Kalecki approach to neo-liberalism crisis 229–53
 Mississippi Bubble 156
 Mistral, J. 186–7
 Miyamoto, Kenichi 311, 318n12
 Mizuno, K. 113–14
 modern capitalism 31, 192, 193
 monetarism 85, 86, 137, 213; neoliberal monetary policy, consequences 87–9
 monetary system 16, 135–6
 money-capitalists (Marx) 94
 money-manager capitalism 214
 money market fund (MMF) markets 47
 money supply 219
 “monied” capitalists 64
 monoline insurance firms 28
 monopolies 63
 monopolistic capitalism 117, 118, 209; economic stagnation in 113–14; state monopoly capitalism 82–7, 110
Monthly Review 62, 63
 Moody’s Investors Service 49n4
 Moore, Michael 14
 Morgenthau, Henry 98–9
 mortgage-backed securities (MBS) 13, 14, 18, 100, 103, 200, 305
 mortgage loans, subprime 102–4; *see also* home-equity loans
 multinational corporations 67

 NASDAQ exchange 31; Composite Index 34, 35
 National Intelligence Council 280
 National Science Board, U.S. 279
 Nazism 204
 negative wealth effect 34, 50n11
 neoclassical microeconomics 14, 15
 neo-conservative counter-revolution 212
 neoliberal capitalism 233–7; “big government” era 234, 236, 237, 248; “small government” era 233–4
 neo-liberalism 6–7, 189, 191; capital accumulation regime 141–5; crisis of 198–203; financial crises, frequency of 98–102; of Friedman 85; globalization of Japanese capitalism 19; hegemony,

- financial 197–8; increases in social, fixed expense under 309–14; labor demand 293, 294; Minsky–Kalecki approach to crisis of 229–53; neoliberal capitalism 233–7; neo-liberal monetary policy, consequences 87–9
- neomanagerialism 204–6
- New Deal-era 39, 49n5, 99, 189, 204
- New Economy 31, 32, 244, 247; boom *see* Information Technology (IT) boom; collapse *see* Information Technology (IT) collapse (2001)
- new empire circuit of capital flows 44, 45, 51, 51n19
- newly industrializing economies (NIEs) 273, 275, 277, 282, 283
- New York Stock Exchange (NYSE) 34, 35; indices 195, **196**
- Next Eleven (N-11) 280
- Niwa, Haruki 224n17
- Nixon, Richard 100
- North American Free Trade Agreement (NAFTA) 273, 279
- nuclear power generators, Japan 21
- Nurkse, Ragnar 272
- Obama, Barack 20, 105, 184, 267
- Okun, A. 236
- “old economy” 31, 45
- oligopolistic firms 138
- Ono, Y. 293
- open market operations 220
- Organization for Economic Co-operation and Development (OECD) 279
- Orhangazi, O. 64
- originate-to-distribute/originate-to-hold systems 13
- O’Sullivan, M. 65
- Ôuchi, Tsutomu 208
- over-accumulation 15, 63, 66, 157
- overconsumption: background 308–14; and myth of waste 306–8
- overproduction 110; consumer credit, expansion 315; dollar, currency privilege 316–17; home-equity loans 12, 316; and household expenditures in U.S. 8, 314–15; joint-stock system and speculation 92–3; market expectations, implications of realizing value based on 316; and subprime crisis 314–17
- over-the-counter (OTCs) transactions 50n13, 195
- Panitch, L. 67
- parasitical rentiers 67
- pawnshops 12
- Pax Americana, postwar 31, 38, 40, 44, 47, 51n19
- Peel, Sir Robert 98
- perpetual bonds 221, 224n14
- personal consumption expenditure (PCE) 316
- petro-dollars 214
- Pirenne, H. 189
- Plaza Agreement (1985) 120, 245, 246, 299
- Polanyi, K. 189
- political business cycle model (Kalecki) 232–3; and global imbalances 247–8; shifts in 237–43, **238, 244**
- “Political Economy of Full Employment, The” (Kalecki) 232
- Pollin, R. 64, 233–4
- Ponzi finance 14, 133, 142
- population bonus 272
- portfolio management 158
- Portugal, crisis in 48
- potentially bigger market economies (PoBMEs) 273, 280, 281, 283, 284, 285, 286n1
- Potter, S. 250n1
- poverty, vicious cycle of 272
- predatory lending 28, 30, 49n3
- preliminary crisis episodes 204
- present value reversal 133
- price adjustment mechanism 15
- price movement changes 108–24; economic slowdown and fall in prices 112–16; economic stagnation in monopolistic capitalism 113–14
- prime housing loans 11
- printing of money 217, 222
- private-sector lenders 36
- process process innovation 31
- production modes, distinction between 192
- profitability crises 193
- profit rates 16, 24n9, 63, 115
- public control: financial innovations 166–70; return of 156–7
- purchasing power parity (PPP) 279
- quantitative easing (QE) 217
- Rafferty, M. 67
- Reagan Administration/Reaganomics 5, 39, 40, 246
- real accumulation 67
- recession 136, 137; double-dip 21, 257

- refinancing loans 32
 Régulation School *see* French Régulation School
régulation theory 6, 151, 176, 178, 179;
see also French Régulation School
 Reich 41
 relationship banking 215, 216
 rentier concept 64, 223n2
 repayment difficulties 11, 14
 residential mortgage-backed securities
 (RMBS) 28, 49n4; ratings 37
 return on equity (RoE) 59
 risk coverage 159
 risks: and financing 154–5; preventing
 outsourcing to agents incapable of
 assuming them 166–7, **168**
Road to Serfdom (von Hayek) 196
 Robertson, James 224n9
 Rowthorn, Bob 24n14, 147
 Russian rouble crisis (1998) 98
- safe harbor role, United States 230–1
 Salant, Walter 229
 Sarbanes-Oxley Act 163, **164**
 Sassen, S. 41
 Saving and Loan Associations (S&Ls),
 U.S. 13
 saving rate, U.S. 13
 savings and loan (S&L) crisis (1980s) 32
 Say's law 130
 Schaller, H. 300
 Scholes, M. 159
 Schor, Juliet 306–8
 Schulman, David 239
 Schumpeter, Joseph 152, 153
 securitization 26, 29, 35, 166, 214; in age
 of neo-liberalism 99–100; and
 financialization 57, 61; mechanism 32,
 35, 36, 37, 39, 45, 47, 51n21; tranches
 of securitized assets 37
 Sekine, Thomas 7, 208–25
 self-organization 163
 service sector 302
 shadow banking system 255
 Silicon Valley 43, 45
 “small government” era 233–4
 social class 192, 193, 307, 308
 socialization of information 154
 social orders 193–5; forthcoming 204; new
 203–7
 Soviet regime 153
 Spain, crisis in 48
 special investment vehicles (SIVs) 255
 special purpose vehicles (SPVs) 13
 specie money 218
 speculation/speculative trading 15, 16,
 92–3; behaviour of speculators 101–2
 stage theory 127, 129
 Stagflation Crisis (1970s) 176, 212
 stagnation 16, 112; in monopolistic
 capitalism 113–14
 Standard and Poor's 49n4
 state debt 17, 22
 state-monopolistic economic policies
 82–7, 110
 state monopoly capitalism, future direction
 82–7
 statistical techniques 159
 sticky money/wages 139, 140
 Stiglitz, Joseph E. 50n11
 Stock, James H. 250n10
 Stockhammer, E. 64
 stock-jobbers 5, 93–5
 stock market crash, October 1987 158–9,
 160
 stockpiling 15, 16
 stock shares 207n7
 structural change 138–40, 144–5, 188;
 Kaldorian and non-Kaldorian 291–2,
 298
 structural crises 175, 193; in bureaucratic
 capitalism 138–41; business cycles
 following 142–3; capital accumulation
 128, 129; concept of structural crisis
 175; great earthquake/tsunami (2011),
 Japan 5, 20–4, 302; growth and crisis
 175–80; staggering productivity growth
 and disorganizing influence on domestic
 economic relations 139–40; uneven
 development and disorganizing
 influence on international relations
 138–9; world history 175–80
 structuralist macroeconomics model of
 capital accumulation 132
 structured investment vehicles (SIVs)
 36–7, 45
A Study of State-Monopoly Capitalism, A
(Ōuchi) 208
 subprime borrowers: criteria for 305–6;
 identity of 305
 subprime collapse 26, 151–73; derivatives,
 dangers of 159–63; financial innovations
 see financial innovations; LTCM,
 collapse 39, 159–63; public control,
 return of 156–7; resilient financial
 systems, steps toward 171–2; stock
 market crash, October 1987 158–9, 160
 subprime loan crisis 27–31, 104; and

- future of capitalism 145–9; historical character 11–17; Japanese capitalism, impact on 18–20; and “ordinary Americans” 317; and overproduction 314–17; in perspective 157–66; structural impact 17; subprime mortgage loans 102–4; subprime problem and global financial crisis 27–9; as “tsunami” 14
- subprime loans: defined 27; expansion in 1990s 27–8; size 11–12
- Sullivan, D. 293
- surplus capital and funds 5, 75–6
- Sweezy, P. 68, 106n1, 113, 118
- Takumi, Mitsuhiro 208, 209
- Tatebe, Masayoshi 5, 75–90
- teaser interest rates 12, 13
- Théorie de la valeur* (Debreu) 162
- tightening of credit 15, 50n10, 137, 152, 246
- Toyko Electric Power Company 21
- Toyota 19
- Troubled Asset Relief Program (TARP) 105
- Types of Economic Policies under Capitalism, The* (Uno) 208
- UK Centre on Socio-Cultural Change 66
- uncertainty 153–5
- unemployment, involuntary 82–3
- United Nations Conference on Trade and Development (UNCTAD) 277
- United Nations Human Development Report 310
- United States (U.S.): business cycle, and global hegemony 7, 244–8; and China 206–7; collapse of stock market (2002) 98; dollar, currency privilege 316–17; economic recovery and growth, post-2002 11; economy in 2001 201–3; global capitalism *see* U.S.-centered global capitalism; global imbalances, political economy 263–4; hegemony 100–1, 198–201, 230; household expenditures in 8, 314–15; versus Japan 160–1; loans, writedowns 46; macroeconomy 199; prime/subprime loan division 11; safe harbor role 230–1; saving rate 13; size of subprime loans 11–12
- Uno, Kozo 3, 6, 7, 24n8, 127, 208, 210, 217, 218
- U.S.-centered global capitalism: dynamism 41–4; global city 31, 39, 41, 42, 43, 44, 51n18; and global financial crisis 44–5, 46; growth nexus 42, 47; instability 26–54; securitization mechanism 26, 32, 35, 36, 37, 39, 45, 47, 51n21; Southern California, IT-based region 43–4
- value: concept 92; implications of realizing based on market expectations 316; law of 127, 138; market value 93
- value added per unit of labor (VAL) 130, 131, 139
- varieties of capitalism (VOC) 182, 183–4
- Veblen, T.B. 127
- venture capital investment 32
- Volcker, Paul 122n1, 229, 245, 246
- von Hayek, F.A. 196
- Wade, R. 67
- wage-led accumulation 137, 140
- wage repression, inevitability of debt due to 308–9
- wage restraints 114–16
- Warren, Elizabeth 307–8, 310
- Watson, Mark W. 250n10
- welfare state 134–5
- White Paper on the Economy and Public Finance* (Japan Cabinet Office, 2008) 18, 21
- White Paper on the International Economy* (Japanese Ministry of Economy, Trade and Industry, 2005) 114, 277, 279
- World Bank 136
- world economy, spatial dynamics 184, 185, 186–8
- World Trade Organization (WTO) 205, 277
- writedowns, U.S. loans 46
- Yamada, Toshio 6, 174–90
- Yokokawa, Nobuharu 6, 127–50
- zero interest rate (zир) 48, 217, 256

Taylor & Francis

eBooks

FOR LIBRARIES

ORDER YOUR
FREE 30 DAY
INSTITUTIONAL
TRIAL TODAY!

Over 23,000 eBook titles in the Humanities, Social Sciences, STM and Law from some of the world's leading imprints.

Choose from a range of subject packages or create your own!

Benefits for
you

- ▶ Free MARC records
- ▶ COUNTER-compliant usage statistics
- ▶ Flexible purchase and pricing options

Benefits
for your
user

- ▶ Off-site, anytime access via Athens or referring URL
- ▶ Print or copy pages or chapters
- ▶ Full content search
- ▶ Bookmark, highlight and annotate text
- ▶ Access to thousands of pages of quality research at the click of a button

For more information, pricing enquiries or to order a free trial, contact your local online sales team.

UK and Rest of World: online.sales@tandf.co.uk

US, Canada and Latin America:
e-reference@taylorandfrancis.com

www.ebooksubscriptions.com



Taylor & Francis eBooks
Taylor & Francis Group



A flexible and dynamic resource for teaching, learning and research.