

## Global Imbalances and the US Debt Problem: Should Developing Countries Support the US Dollar?

## Forum on Debt and Development (FONDAD)

FONDAD is an independent policy research centre and forum for international discussion established in the Netherlands. Supported by a worldwide network of experts, it provides policy-oriented research on a range of North-South problems, with particular emphasis on international financial issues. Through research, seminars and publications, FONDAD aims to provide factual background information and practical strategies for policymakers and other interested groups in industrial, developing and transition countries.

Director: Jan Joost Teunissen

# Global Imbalances and the US Debt Problem

## Should Developing Countries Support the US Dollar?

Edited by  
Jan Joost Teunissen and  
Age Akkerman

FONDAD  
The Hague

ISBN-10: 90-74208-28-2  
ISBN-13: 978-90-74208-28-4

Copyright: Forum on Debt and Development (FONDAD), 2006.  
Cover painting: Aafke Steenhuis

Permission must be obtained from FONDAD prior to any further reprints, republication, photocopying, or other use of this work.

This publication was made possible thanks to the support of the Department for Development Cooperation of the Dutch Ministry of Foreign Affairs.

Additional copies may be ordered from FONDAD:  
Noordeinde 107A, 2514 GE The Hague, the Netherlands  
Tel.: 31-70-3653820, Fax: 31-70-3463939, E-mail: [a.bulnes@fondad.org](mailto:a.bulnes@fondad.org)  
[www.fondad.org](http://www.fondad.org)

*From: Global Imbalances and the US Debt Problem - Should Developing Countries Support the US Dollar? Fondad, The Hague, December 2006. [www.fondad.org](http://www.fondad.org)*

# Contents

Acknowledgements	ix
Notes on the Contributors	x
Abbreviations	xv
<b>1 Should Developing Countries Support the US Dollar? By Way of Introduction</b>	<b>1</b>
<i>Jan Joost Teunissen</i>	
The History of the US Debt Problem	3
The Financing of US Deficits by Developing Countries	10
About this Book and the Next Volume	12
<b>2 Global Imbalances and Emerging Markets</b>	<b>14</b>
<i>Barry Eichengreen and Yung Chul Park</i>	
1 The Likelihood of a Disorderly Correction	16
2 The Impact on Emerging Markets	20
3 What Countries Can Do	27
4 Conclusion	40
<b>3 Global Imbalances and Latin America: A Comment on Eichengreen and Park</b>	<b>45</b>
<i>Barbara Stallings</i>	
1 The “Upbeat Model”	46
2 Non-Asian Emerging Market Countries	47
3 Politics of Policy Recommendations	51
4 Conclusions	52
<b>4 The Dilemmas and Dangers of the Build-Up of US Debt: Proposals for Policy Responses</b>	<b>53</b>
<i>Jane D’Arista and Stephany Griffith-Jones</i>	
1 US Debt and Global Imbalances	58
2 Risks in Failing to Address the US Foreign Debt Problem	71
3 How Should the Problem Be Addressed and By Whom?	77
4 Conclusions	83

<b>5</b>	<b>Currency Asymmetry, Global Imbalances, and Rethinking of the International Currency System</b>	<b>87</b>
	<i>Fan Gang</i>	
1	China's Trade Has Been Mostly Balanced in the Past 28 Years	88
2	China's Trade Imbalance With the US and the New Supply Chain in Asia	90
3	Where Did China's Large Foreign Exchange Reserve Come From?	93
4	National Savings and Global Imbalance	94
5	The "Currency Asymmetry" and the Persistent Tendency of US Dollar Devaluation	96
6	Effective and Real Exchange Rate: What Is Developing Countries' Responsibility for Global Imbalance?	98
7	Concluding Remarks	101
<b>6</b>	<b>China's Macroeconomic Imbalances: The Liquidity Tango Mechanism</b>	
	<i>Wing Thye Woo</i>	<b>106</b>
1	Systemic Inflationary Tendency: The Liquidity Tango Until 1995	110
2	Suspending the Liquidity Tango: Current Account Surpluses in 1994-2005	113
3	The SOBs Are Undermining the State's Fiscal Position	119
4	Freeing the Interest Rate and the Exchange Rate to Address Macroeconomic Imbalances?	122
5	Fixing the Banking System to Facilitate Macroeconomic Management	126
6	Conclusion	128
<b>7</b>	<b>How Effective Is Monetary Policy in China? A Comment on Woo's "Inflationary Tango"</b>	<b>131</b>
	<i>Zdeněk Drábek</i>	
1	The Model of "Inflationary Tango"	133
2	Questions About the Response Functions of Chinese Economic Agents	136
3	Policy Implications	138

<b>8 Asian Monetary Coordination and Global Imbalances</b>	<b>141</b>
<i>Yonghyup Oh</i>	
1 Asia's Crisis and the Call for Monetary Cooperation	142
2 Investing Abroad or At Home?	143
3 Hurdles to Monetary Cooperation	144
4 Concluding Remarks	147
<b>9 Understanding Imbalances in a Globalised International Economic System</b>	<b>149</b>
<i>Jan A. Kregel</i>	
1 Why the Current Imbalances Are Unlike Any Other	151
2 Analysing Regional Imbalances Through Regional Policy Choices	159
3 The Imbalances Are Likely to Persist Unless Regional Policies Change	167
4 Are There Medium-Term Forces that Can Undermine Policies?	168
<b>10 Policy Recommendations for the US, Europe and Asia: By Way of Epilogue</b>	<b>174</b>
<i>Jan Joost Teunissen</i>	
The Responsibility of the United States	175
Is Europe Powerless?	177
The Possibilities for Asia	178
Concluding Remarks	181





# Acknowledgements

This book is yet another result from the Global Financial Governance Initiative (GFGI), which brings together Northern and Southern perspectives on key international financial issues. In this initiative, FONDAD is responsible for the working group Crisis Prevention and Response, jointly chaired by José Antonio Ocampo, under-secretary-general for Economic and Social Affairs of the United Nations, and Jan Joost Teunissen, director of FONDAD.

FONDAD very much appreciates the continuing support of the Dutch Ministry of Foreign Affairs and the stimulating ongoing cooperation with the United Nations' Economic Commission for Latin America and the Caribbean (ECLAC) in Santiago de Chile, the United Nations' Department of Economic and Social Affairs (UN-DESA) in New York, the North-South Institute (NSI) in Ottawa, the African Economic Research Consortium (AERC) in Nairobi, Debt Relief International (DRI) and Development Finance International (DFI) in London, the Korea Institute for International Economic Policy (KIEP) in Seoul and the many other organisations with which it works together.

This book is the first volume that emerges from a conference held in The Hague on February 27-28, 2006, "Developing Countries and the US Debt Problem: Should the Dollar Be Phased Out as the Key Currency of the System?"

A special thanks goes to Adriana Bulnes and Julie Raadschelders, who assisted in the publishing of the book.

Jan Joost Teunissen  
Age Akkerman  
September, 2006

# Notes on the Contributors

**Jane D'Arista** is director of Programs for the Financial Markets Center (a US-based Center that provides research and education resources to citizen organisations, policymakers, scholars and journalists interested in central banks and the financial sector) and a research associate of the Economic Policy Institute (a Washington-based Institute that aims to broaden the discussion about economic policy to include the interests of low- and middle-income workers). She has written on the history of US monetary policy and financial regulation, international and domestic monetary systems and capital flows to emerging economies. She has taught in graduate programmes in economics at the New School University and the University of Utah and, from 1988 to 1999, in a programme in international finance at Boston University School of Law that she helped create and administer. Before that, she served for 20 years as a staff economist for the US Congress, first as a staff member of the House Banking Committee and then as an international analyst at the Congressional Budget Office.

**Zdeněk Drábek** (1945) is senior counselor, Economic Research and Analysis, at the World Trade Organization. He is chairman of the Board of the Joint Vienna Institute, a training institute of the IMF, World Bank, BIS, OECD, EBRD and WTO. He served as the principal adviser to the governor of the Central Bank and as Plenipotentiary in the Federal Ministry of Economy in Czechoslovakia. He was the chief negotiator for the Czechoslovak Government of the Europe Agreement with the EU and the Uruguay Round Agreements in GATT. He was senior economist at the World Bank from 1983 to 1990, and chairman of the Economics Department at the University of Buckingham in England. He has published widely on topics related to international finance and trade. His most recent book is *Can Regional Integration Arrangements Enforce Trade Discipline? The Story of EU Enlargement* (2005).

**Barry Eichengreen** is the George C. Pardee and Helen N. Pardee professor of economics and professor of political science at the University of California, Berkeley, where he has taught since 1987. He is also research associate of the National Bureau of Economic Research (Cambridge, MA)

and research fellow of the Centre for Economic Policy Research (London, England). In 1997-98 he was senior policy advisor at the IMF. He is a fellow of the American Academy of Arts and Sciences (class of 1997). He is the chairman of the Bellagio Group of academics and economic officials. He has held Guggenheim and Fulbright Fellowships and has been a fellow of the Center for Advanced Study in the Behavioral Sciences (Palo Alto) and the Institute for Advanced Study (Berlin). He has published widely on the history and current operation of the international monetary and financial system. His books include *Global Imbalances and the Lessons of Bretton Woods* (2006) and *The European Economy since 1945: Coordinated Capitalism and Beyond* (2006).

**Fan Gang** (1953) is director of the National Institute of Economic Research, China Reform Foundation (NERI-China), Beijing; professor of economics at Peking University and the Chinese Academy of Social Sciences (CASS), president of China Development Institute (Shenzhen) and a member of China's central bank Monetary Policy Committee. He was visiting fellow of the National Bureau of Economic Research and Harvard University, US, 1985-87; chief editor, *Jingji Yanjiu* (Economic Research Journal), 1992-93; and deputy director of Institute of Economics, CASS, 1994-95. He is consultant to various departments of Chinese central and provincial governments and member of various advisory committees. He is guest professor of a number of universities and graduate schools and consultant to the World Bank, UNDP, ESCAP, and OECD. He has published widely in Chinese and English academic journals and books. His major research interests are macroeconomics and institutional economics, currently "economics of transition".

**Stephany Griffith-Jones** (1947) is professorial fellow at the Institute of Development Studies at Sussex University and holds the position of deputy director of International Finance at the Commonwealth Secretariat. She started her career in 1970 at the Central Bank of Chile. Before joining the Institute of Development Studies, she worked at Barclays Bank International in the UK. She has acted as senior consultant to governments in Eastern Europe and Latin America and to many international agencies, including the World Bank, the Inter-American Development Bank, the EU and UNCTAD. She worked at the Department of Economic and Social Affairs of the UN (UN-DESA), coordinating with José Antonio Ocampo and Jan Kregel the World Economic and Social Survey, on Financing for Development. She has written widely on international finance and macroeconomic policies, especially in relation to Latin American and East European economies. One of her recent books is *From Capital Surges to Drought: Seeking Stability for Emerging Economies* (co-authored by Ricardo Ffrench-Davis, 2004).

**Jan A. Kregel** (1944) is chief of the Policy Analysis and Development Branch of the Financing for Development Office in the Department of Economic and Social Affairs of the UN (UN-DESA) in New York. He joined the UN in 1998 as a high level expert in International Finance and Macroeconomics for UNCTAD until 2001 and, then, as a senior interregional adviser for the Trade and Development Report of UNCTAD until 2004. He is a member of the Scientific Advisory Boards of the Italian International Economic Center, Rome, and the Istituto per la Ricerca Sociale, Milan. He is a visiting professor of the Center for Full Employment and Price Stability at the University of Missouri Kansas City. He was professor in the Department of Economics of the Università degli Studi di Bologna and in the Johns Hopkins University Paul Nitze School of Advanced International Studies where he also served as associate director of its Bologna Center from 1987-90. He has held positions in universities in the UK, the US, the Netherlands, Belgium, France, Germany and Mexico. Among his publications are a series of books in the field of post-Keynesian economic theory.

**Yonghyup Oh** (1963) is head of the International Macroeconomics Team, Department of International Macroeconomics and Finance of the Korea Institute for International Economic Policy (KIEP). He worked for Korea Investment Trust, Korea Long Term Credit Bank for several years and for Seoul Metropolitan Government before joining KIEP. He has been advisor and consultant to Korea Ministry of Finance, Parliament of Korea, Korea International Trade Association, Seoul Metropolitan Government, and private sector organisations such as Korea Asset Management Corporation. He was researcher at the Centre for Economic Performance at the London School of Economics and at the economic research centre DELTA in Paris. He lectures at Seoul National University, and has published in journals such as *European Economic Review* and *Review of International Economics*.

**Yung Chul Park** (1939) is research professor and director of the Center for International Commerce and Finance at the Graduate School of International Studies, Seoul National University. He currently serves as co-chairman of the Public Fund Oversight Committee of the Korean government. He was a member of the National Economic Advisory Council (2003-04), ambassador for international economy and trade, Ministry of Foreign Affairs and Trade (2001-02), and chairman of the board, the Korea Exchange Bank (1999-01). He previously served as the chief economic adviser to the President of Korea (1987-88), as president of the Korea Development Institute (1986-87), as president of the Korea Institute of Finance (1992-98), and as a member of the Central Bank of Korea's Monetary Board (1984-86). He also worked for the IMF (1968-74). He has written and edited several books, including *Economic Liberalization and Integration in East Asia* (2006), and *A New Financial Structure for East Asia* (2006).

**Barbara Stallings** is William R. Rhodes research professor and director at the Watson Institute for International Studies of Brown University. From 1993-2002 she was director of the Economic Development Division at ECLAC in Santiago, Chile. Before joining ECLAC, she was professor of political economy at the University of Wisconsin-Madison for 15 years. She was also a visiting professor and researcher at Harvard, Yale and Columbia universities in the United States and at several research centres in Latin America and Japan. She holds doctorates in economics (Cambridge University, UK) and in political science (Stanford University, US). She is a specialist in development economics and international finance and has published widely in academic journals and books. She has directed a project on the domestic financial sector in Latin America and East Asia, which resulted in a book, co-authored by her and Rogerio Studart, *Finance for Development: Latin America in Comparative Perspective* (2006).

**Jan Joost Teunissen** (1948) is director of the Forum on Debt and Development (FONDAD). He started his career in 1973 as a social scientist and freelance journalist in Chile. Seeing his plan to work in Chile's agrarian reform and rural development aborted by the coup d'état of 11 September 1973, he engaged himself in activities aimed at the return of democracy in Chile. He focused on economic boycott as a political instrument to bring about regime change in Chile and other dictatorships. In his work on international economic and political issues he forged links with academics, politicians, journalists and high-level policymakers in various parts of the world. In the Netherlands he stimulated discussions on the origins and solutions to the international debt crisis. Supported by economists like Jan Tinbergen, Robert Triffin, Johannes Witteveen and Jan Pronk he established FONDAD in 1987. He has co-authored books and articles on finance and development issues.

**Wing Thye Woo** (1954) is professor of economics, Brookings Institution, University of California at Davis, Central University of Finance and Economics in Beijing, and director of the East Asia Programme within the Earth Institute at Columbia University. In 1992-93, he was a member of a Consultant Team to China's Ministry of Finance that helped to design tax and exchange rate reforms. From 1994 to 1996, he led an international team to study the reform experiences of centrally-planned economies. In 1997-99 he directed the Harvard Institute for International Development project "Asian Financial Crisis" for the 1999 Davos meeting of the World Economic Forum. He was a special advisor to the US Treasury in 1997-98, and was appointed in 2005 to be an advisor to Prime Minister Badawi of Malaysia. He founded the Asian Economic Panel (AEP) as a joint venture of Columbia University, Keio University, and the Korea Institute

for International Economic Policy. AEP is a forum of about 50 leading specialists on Asian economies which meets twice a year to discuss Asian economic issues; selected papers from the meetings are published in the Asian Economic Papers.

# Abbreviations

ACU	Asian Currency Unit
AEP	Asian Economic Panel
ASEAN	Association of Southeast Asian Nations (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam)
BIS	Bank for International Settlements
CAR	capital adequacy ratio
CPI	consumer price index
ECLAC	Economic Commission for Latin America and the Caribbean (of the UN); (in Spanish CEPAL)
EMU	Economic and Monetary Union (of the EU)
EU	European Union
FDI	foreign direct investment
GDP	gross domestic product
GNP	gross national product
IMF	International Monetary Fund
KIEP	Korea Institute for International Economic Policy
LTCM	Long-Term Capital Management
NICs	newly industrialised countries
NIEs	newly-industrialised economies
NPLs	non-performing loans
OPEC	Organization of the Petroleum Exporting Countries
PBC	People's Bank of China
RMB	renminbi
RPI	Retail Prices Index
SDR	special drawing right
SOBs	state-owned banks
SOEs	state-owned enterprises
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UN-DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
WCU	world currency unit
WTO	World Trade Organization





# 1

## Should Developing Countries Support the US Dollar?

### By Way of Introduction

*Jan Joost Teunissen*

One of the advantages of being innocent and curious is that you wonder why things are as they are and then, by searching for answers, increase your knowledge. Obviously, you can be innocent in some areas and wise in others. For example, you may not know how to repair a bike while your understanding of fellow human beings is highly developed. Innocence may turn into wisdom if it prompts you to deeply examine an issue. This is possible for many fields of human understanding, and it is certainly possible for one of the pressing issues of these days, the problems of US debt and global economic imbalances – the topic of this book.

The US debt problem is currently an issue of intense discussion. However, it was an issue of intense debate as well in the 1960s and early 1970s as I discovered some 24 years ago.

In 1982, I spent half a year in Latin America and in my meetings with economists the debt problems of Latin American countries were one of the topics we discussed – at the time an increasingly hot issue, and a few months after I arrived the debt crisis broke out in August 1982. Towards the end of my stay, my lack of intimate knowledge about the post-war history of the international monetary system became painfully clear in an interview I had with a famous Brazilian economist. My lack of knowledge provoked what I just said: it prompted me to explore the history of the international monetary system and, in particular, the key role the US dollar was, and still is, playing in the system.

What happened?

One evening in October 1982, I was lucky enough to have an interview with Brazilian professor of economics Maria da Conceição Tavares, whom I knew was admired by her followers and feared by her opponents. When I began the interview, I asked her, in a broad, open question, to give a brief account of the origins of Brazil's debt problems. To my surprise, she shouted to me, undignified, that the problem of Latin America's debt crisis had not started with the oil crisis of 1973-74, or with the irresponsible borrowing by governments and the irresponsible lending by commercial banks, but with the debt problem of the United States!

I was flabbergasted.

"What do you mean?" I stammered.

"Don't you understand?" she said, softening her tone. "You should read Robert Triffin. As early as 1959, Triffin wrote that it was a crazy thing to have the dollar as the key currency of the world. He said, 'This is a lunatic way of organising the system, the US is going to be imbalanced, the dollar will be in crisis and at some point in time the whole system of fixed exchange rates will collapse.' Triffin even criticised the world's monetary system when the sterling pound was the dominant money. He was always against, as Keynes was, this idea of having an international system with the dominant power in meeting the money. So was Prebisch in 1947, when the IMF established its rule. Triffin and Prebisch said, if it went wrong with England, then with the US it would be worse. The US is a continental and closed economy whose pattern of imports and exports and production will be incompatible with a central role in the system. In the new division of labour that is likely to emerge all kinds of countries will industrialise."

I will not reproduce here in full Tavares' explanation, on which she later elaborated when I interviewed her again, in the Netherlands and England. Instead, I will highlight some of the thoughts of Robert Triffin and other experts, and report on developments in the 1960s and 1970s that form the history and background for today's debt problems of the United States. In a third section, I will place the current debate about global economic imbalances in the context of the financing of US deficits. The rest of the world, including poor developing countries, are financing these deficits and thus maintaining the US dollar as the key currency of the system.

## The History of the US Debt Problem

Upon my return in the Netherlands in the fall of 1982, I started reading books about the history of the international monetary system. At the same time, I consulted a historical archive on world political and economic events (Keesings Historisch Archief) to get a feeling for the thinking and decisionmaking of the day. The archive, inherited from my grandfather, reported on a weekly basis about events between 1914 and 1973. By coincidence, 1914 was the year the gold standard came to its end after almost a hundred years of existence, and 1973 was the year the 1944 Bretton Woods monetary system came to its end.

I learned many things from Keesings Historisch Archief, and it was fascinating reading. It was as if I was reading today's newspaper with the knowledge of what would happen later. A few of the things I learned from the issues published between 1959 and 1965 were that: (1) the balance of payments problems of the United States (i.e. its foreign debt problems) were already considered "serious" towards the end of the 1950s; (2) the US deficits of the 1950s were mainly the result of US aid, US military activities around the world, and foreign investments by US companies; (3) concern about the stability of the US dollar, and the international monetary system based on it, was widespread among rich Western nations throughout the 1960s and early 1970s; (4) in 1961, ten of those rich nations put together a large sum of money to help the world monetary system to survive, thus establishing the G-10; (5) the French minister of finance Giscard D'Estaing said two years later, in October 1963, that the Bretton Woods world monetary system, based on the willingness of the United States to exchange gold for dollars, could only survive if the US would stop running balance of payments deficits; (6) the proposals for reform of the world monetary system by Robert Triffin and other experts, aimed at solving this gold-dollar exchange problem and other problems of the system, prompted financial authorities of the G-10 to study the functioning of the system; (7) as a result, the G-10 financial authorities declared in August 1964 that even though reform was not necessary, multilateral surveillance of balance of payments disequilibria (i.e. the US running deficits and other countries running surpluses) would be highly useful, echoing today's "new" IMF mission of surveillance of global financial imbalances; (8) at the annual meeting of the IMF in September 1964, the French minister of finance Giscard D'Estaing

advocated the creation of a new international reserve currency – his proposal met fierce opposition from the United States and England; (9) in its 1964 annual report the IMF observed that it had increased its lending to industrial countries to “unexpected levels”, the United States and England taking 78 percent of the drawings and 69 percent of the stand-by loans; (10) from August 30, to September 10, 1965, the US Secretary of the Treasury Henry Fowler visited France, Italy, Western Germany, Belgium, the Netherlands and England to discuss the problems of the world monetary system; (11) on 1 September 1965, the Joint Economic Committee of the US Congress published a report that advocated a reform of the international monetary system and the creation of a new international reserve currency; (12) on 7 September 1965, the US Undersecretary of the Treasury Robert Roosa launched his book “Monetary Reform for the World Economy”, which proposed the creation of new international reserve units by countries depositing part of their currency with the IMF.

With this, I stop quoting of the notes I made when reading Keesings Historisch Archief some 24 years ago. I hope that my selection of the few years mentioned above (1959-65) shows how useful it can be to go back to earlier days and find out “on the spot” what policymakers, business people and academics were thinking and doing at the time. In my case, I found it very helpful to do so since it provided me the details I looked for in order to understand how decisionmakers in the rich countries had reacted to sensible plans for reform of the international monetary system put forward by Robert Triffin and others. It also gave me a clue as to why policymakers had preferred to not adopt them but, rather, maintain the dollar as the key currency.

Of the numerous books and articles I read, I will mention just four, to give an idea of the insights they provided.

A first book was authored by Dr. H.M.H.A. van der Valk, who dedicated most of his professional career to international monetary issues, including 19 years as a Board member of the IMF. The book, “The International Monetary System in a Period of Innovation”, published in Dutch in 1972 by Kluwer, originated from the author’s desire to come to grips with the crisis of the US dollar and the concomitant crisis of the world monetary system in 1971. Van der Valk provided an extensive account of the monetary system’s history since 1816. In his preface, he gave as a reason for this detailed historical account: “The principal aim of this study is to shed light on today’s international monetary crisis. In this way, it has also become a historical

exposé on pre-war and post-war developments in the international monetary field. These days, people tend to disregard history. However, history contains very useful lessons that are all too often forgotten.”

Another book I read was “U.S. International Monetary Policy: Markets, Power, and Ideas as Sources of Change” by John S. Odell. This book, published in 1982 by Princeton University Press, aimed at explaining and anticipating foreign economic policy changes. At the same time, it provided a fascinating account of three US policy shifts that transformed the post-war international monetary system. The author, associate professor of international relations at the University of Southern California, drew on interviews with almost all the key US decisionmakers. In his view, international monetary policy could only be understood if it was placed in the wider context of foreign policy objectives.

A third book was Robert Triffin’s classic study “Gold and the Dollar Crisis”, published in 1960 by Yale University Press. Triffin, a Belgian economist who had done his dissertation with professor Joseph Schumpeter at Harvard University, became a professor of economics at Yale University in 1951. In 1960, when “Gold and the Dollar Crisis” was published, Triffin had already gained international prestige as chief of the Latin American Section of the Federal Reserve System (the US central bank), and as “father” of the European Payments Union established after World War II.

Triffin’s book contained two parts – an explanation of the successes and failures of international monetary arrangements in the 19<sup>th</sup> and 20<sup>th</sup> century, and an outline of an international monetary system that would remedy a basic flaw in the system that was established in 1944 at Bretton Woods. That flaw was, as Maria da Conceição Tavares observed, that the system was based on the currency of one country, the United States, and on the promise of that country to convert dollars held by foreign central banks into gold, if those central banks wished so. Triffin predicted that a time would come in which the US could no longer live up to this promise, simply because its gold stock would not be sufficient.

In a nutshell, the plan Triffin proposed was to turn the IMF into a world central bank for central banks that should be able to create loans and deposits and expand continuously the reserve base for the world’s monetary system. Central banks’ deposits at the IMF should substitute the US dollar and other national currencies as reserves, and such deposits should be just as usable as gold in international settlements.

IMF deposits would carry exchange rates and convertibility guarantees that would make them safer for reserve investment than any national currency holdings.

In his preface to “Gold and the Dollar Crisis”, Triffin said he was confident that the basic problems analysed in his book would remain valid for policymakers for a long time to come. With a dose of realism he added, “Whether or not the concrete proposals developed here to meet these problems have any chance to be negotiated in time to avoid a major crisis in the international monetary system, is an entirely different matter which history alone can, and will, answer.”

The fourth and last book I would like to mention here is “The Imperious Economy” by David Calleo, published in 1982 by Harvard University Press. Calleo, a professor of European Studies at the Johns Hopkins University, analysed the foreign economic policy of the Kennedy, Nixon, Johnson, Ford and Carter administrations during the 1960s and 1970s. He observed that a good part of US foreign economic policy was inspired by the desire to make the international system serve the US policies pursued at home.

I learned many things from the books, articles and historical archive I read. The story that unfolded page after page was fascinating. Here was a country, a big country, which had become the political centre of the world, a country that had an army with military bases and troops around the world – in Asia, in Western Europe, in Latin America. Here was a country that had helped war-devastated Western Europe rise from the ashes by giving it the money it needed to reconstruct and develop. Here was a country whose firms went abroad to create global corporations that had the organisation, technology, money and ideology to conquer the world economically. Here was a country whose money was accepted by the world as a means of payment and store of value. Here was a country that hosted the two main multilateral financial institutions established after World War II, the International Monetary Fund and the World Bank, and became its most powerful shareholder.

How on earth could this huge, rich and highly industrialised country get into trouble with its balance of payments? Why was it increasing its foreign debt year after year? The answer was simple. Every dollar held by a foreigner meant by definition that the United States owed a dollar to that foreigner, since a dollar bill is nothing else than a piece of paper that says, ‘I owe you’. Sure, something else was needed to make US’ foreign debt a problem. As long as the United States spent as much

abroad (providing aid, importing goods, having military forces abroad, having multinational corporations investing abroad) as it received from abroad (foreign firms and countries investing in the United States, US firms exporting goods, US multinational corporations receiving money from abroad), its net debt to foreigners would be nil. However, as the first and second note from Keesings Historisch Archief above had already told us, the United States was spending more than it earned. It was 'living beyond its means'.

Robert Triffin was one of the first experts who saw that this 'living beyond its means' by the United States could become a problem – for the United States, and for the world at large. Triffin was also the expert who predicted that a time would come that the United States would no longer be able to give gold to the foreign central banks who wanted to change their dollars into gold. Why was Triffin so clairvoyant? And, more importantly, did people listen to him?

By coincidence, I heard that Robert Triffin had moved back to Belgium, after more than 40 years living and working in the United States. So, rather than limiting myself to reading his books and articles, I decided to go and visit him at the Catholic University of Louvain in Louvain-la-Neuve, the university that invited him to work once again in his homeland.

During the long conversations I had with Robert Triffin in 1984 and 1985, he tried to answer all my questions. Was he clairvoyant? He laughed. "Anyone who would have seriously examined the issue of future convertibility of dollars into gold could have come to the same conclusion. Maybe it helped that my first training was in pure theory. I wrote 'Monopolistic Competition and General Equilibrium Theory' (Harvard University Press, 1940) with Professors Schumpeter and Leontiev. ... I began to develop my reform plan in 1957, in my first book on that kind of subject, 'Europe and the Money Muddle'. Already then I saw that the gold production would not be enough to create the amount of international monetary reserves needed to take advantage of the maximum potential growth of the economy and of international trade."

Did people, in particular financial policymakers of the United States and Western Europe, listen to him?

Sure, they did, Triffin told me. During the almost thirty years he was at Yale University (1951-80), he had continuing consultations with central banks and governments. However, listening was one thing, putting his reform plan into practice quite another.



“I remember a meeting in 1963 at the IMF in Washington, where I was developing my views for my reform plan and also for a joint discussion with the Europeans. Bob Roosa, who was the Undersecretary of the Treasury at that time, came to see me and said, ‘Robert, you see what you are doing? Do you want to weaken us in relation to the Europeans? As long as we can approach the Europeans separately, we are in no problem. Don’t forget the old slogan, *divide ut tempera*, but if we have to confront them jointly we will be much weaker.’ At that point, he left and Emminger (Germany’s central bank president) was waiting to take his place to join me. He said, ‘Triffin, are you realising what you are saying? Now, when the United States asks us to take more dollars we can say, ‘Yes, with pleasure, but at the moment we have some special problems in Germany, couldn’t you address yourself to Italy or Belgium?’ But if we have to confront the United States jointly, then we cannot say ‘no’ without putting in danger the Atlantic Alliance.”

I looked at Triffin with amazement – well, I was not really amazed, but my eyes asked for an explanation.

Triffin continued: “I think that part of the dollar problem is related to the fact that the United States assumed the joint defense of Europe. In a sense, the United States and some Europeans accepted, without ever saying so openly, the view that this was a form of financing of joint defense. And this is still true today, I think.”

Triffin’s explanation for European support to the dollar coincided with an observation by Willem Duisenberg, president of De Nederlandsche Bank (the Dutch central bank), who told me in an interview in 1984 that since 1980 US budget deficits had increased rapidly because of high military expenditures. “Military expenditures increased in real terms by 7-8 percent a year. That’s how the United States has acquired these tremendous budgetary deficits,” said Duisenberg. And he added, laughing: “It won’t be the first time they let other countries pay for their arms expenditures. The war in Vietnam was in fact not financed by the United States either, but by other countries.”<sup>1</sup>

In 1971, Triffin’s prediction became reality when international concern about continuing US deficits and massive conversion of dollars into gold held by foreign central banks led to the depletion of the US

---

<sup>1</sup> The Duisenberg quotes can be found on page 361 in: Jan Joost Teunissen, “The International Monetary Crunch: Crisis or Scandal?”, *Alternatives*, Volume XII, No. 3, July 1987, pp. 359-95.



gold stock. It prompted President Nixon to declare on August 15 on television that the United States would no longer be able to convert dollars into gold. One of the pillars of the world monetary system agreed in 1944 at Bretton Woods tumbled. The United States simply did not have enough gold to keep its promise that central banks could convert their dollars into gold at any time. US foreign debt had grown too large. From then on, the value of the dollar was no longer based on gold, but on “confidence” in the economic power and capital markets of the United States.

Two years later, in 1973, the other pillar of the Bretton Woods system, fixed but adjustable exchange rates, tumbled too. As with the dollar crisis of 1971, speculative buying of strong currencies appreciating vis-à-vis the dollar preceded this second and important shift in the international monetary system. On February 12, 1973, the US Treasury Secretary announced another major devaluation of the dollar by 10 percent. The devaluation did not restore confidence in the dollar. Currency traders continued their flight from the dollar into gold and European currencies and, as a result, European countries decided to float their currencies. From then on, the world was going to live with floating exchange rates that could both settle “unviable” exchange rates as well as unsettle viable exchange rates. The de-linking of the dollar from gold and the free floating of currencies created a system (“non-system” in the view of Triffin and others) that laid the basis for today’s global financial imbalances.

However, before this non-system became sacrosanct for Western policymakers there were several attempts to reform the international monetary system. Had they succeeded, they would have put an end to the “exorbitant” privilege of the United States that it could spend as much as it wanted – on its military operations, imports, or whatever – since the world kept supporting the US dollar as the key currency of the system and, thus, kept financing US deficits.

The first, serious attempt at reform occurred in 1972-74, shortly after Nixon’s announcement that the United States would “temporarily” stop the conversion of dollars into gold. The IMF established a committee of twenty nations (the so-called Committee of Twenty) that had to come up with a detailed reform plan. After two years of negotiations, the Committee presented a plan that would have ended dollar supremacy. In the meantime, however, another event dramatically changed the international monetary and financial system: the so-called oil crisis of 1973. Oil-producing countries quadrupled the price of oil, and suddenly

dollars flooded the world. They were “recycled” by commercial banks operating internationally. The reform plan of the Committee of Twenty, which originally suggested basing the world’s monetary system on a truly international reserve currency, became obsolete. The US dollar remained king.

A second attempt at reform happened towards the end of the 1970s. Again, there were heavy, speculative attacks against the dollar, causing a drop in the international value of the dollar. Investors feared that the dollar would devalue quickly and that its key role in the system might end. This time it was not the quadrupling of the oil price that rescued the dollar, but the steep rise in US interest rates in 1979. From one day to the next, the prime interest rate set by the Federal Reserve (the US central bank) rose to 15 percent. As a result, the dollar became again very attractive to foreign investors.

In the 1980s and 1990s, there were no serious attempts at reforming the system. However, the Asian financial crisis of 1997-98 stimulated a new debate on its malfunctioning and, during the late 1990s and early years of 2000, commissions of financial experts and individual experts came up with proposals to improve “the architecture” of the world’s monetary and financial system.

Recently, the staggering and ongoing increase in US deficits (foreign debt) has stirred a new debate about the need for reform of the world’s monetary system. As usual, there are various camps among academics and policymakers. Some argue that the huge and increasing US deficits are not a problem, while others are deeply concerned about them and fear the day the world is no longer willing to finance them. Also, the blame is easily shifted from the one country or continent to the other. Some say that Asia, particularly China, is to blame because it depends too much on exports to the United States, keeps its currency too low, saves too much and does too little to develop a domestic market for its products. Others say that the United States does too little, or plainly nothing, to reduce its deficits.

### **The Financing of US Deficits by Developing Countries**

It is now easy to understand why Professor Maria da Conceição Tavares shouted to me in 1982 that Latin America’s debt crisis had started with the foreign debt problem of the United States. I mean, her statement, not her shouting – although I understand her shouting as well because I share her anger.

Briefly, Tavares' argument was that because Western countries maintained the dollar as the key currency of the system, and "petrodollars" were recycled through the private banking system, in the 1970s commercial banks were able to increase their role in the world financial system and lend huge sums of money to Latin American and other emerging market countries. Then, when the US central bank sharply increased its prime interest rates in 1979, to halt inflation and make the dollar attractive again to foreign investors, commercial banks extended new loans to Latin American countries so that these countries could continue to service their debts. These new loans were necessary because the interest rate on old loans had increased sharply – in line with the Federal Reserve's prime rate. In technical terminology, the new loans were "roll-over credits". Instead of financing development in Latin America they went straight back to the banks. This was another reason for Tavares' anger.

Let us now look at the issue of today's financing of US deficits by other countries, including poor developing countries.

Talking about this issue, Mervyn King, governor of the Bank of England, pointed recently to two disquieting facts: "First, the rise in the US current account deficit to more than 6 percent of national income has raised fears of how the inevitable correction will eventually be achieved. Second, for much of the past twenty years, as evidenced by the Asian crisis of the late 1990s, we have worried about emerging market countries accumulating excessive dollar *liabilities*. Now we seem to be worried about their accumulating excessive dollar *assets*. Capital has flowed 'uphill' from poor to rich countries. The invisible hand of international capital markets has not successfully coordinated monetary and exchange rate policies."<sup>2</sup>

Although King's critical view may surprise you, it is not an uncommon view among central bankers. For example, in 1984, Willem Duisenberg used almost the same words when he told me, "The situation we are in now is completely absurd. A sound situation would be that the rich countries lend or give money to the poor countries. There should be an export of capital in the form of loans and grants from the rich to the poor countries. But, surprisingly, the richest country in the world, the United States, actually imports capital from all over the world. In this

---

<sup>2</sup> Mervyn King, "Reform of the International Monetary Fund", Speech at the Indian Council for Research on International Economic Relations, New Delhi, India, February 20, 2006.

sense the United States is being financed by the rest of the world, including the developing countries.”<sup>3</sup>

The two facts mentioned by Mervyn King in his New Delhi speech are worrisome and call for action. However, since academics disagree among each other as usual, and most policymakers tend to limit their concern to issues of immediate relevance and concern to them, no serious action has yet been taken to address the US debt problem and the ‘uphill’ financing of US deficits by poor countries.

### **About this Book and the Next Volume**

This book is the first of two volumes that emerge from a conference held in The Hague on February 27-28, 2006. The chapters that follow in this first volume examine the issues in-depth and, mainly, from the viewpoint of developing countries. The developing country focus is uncommon and highly useful since most analyses depart from the perspective of rich countries. The contributing authors in this volume are policy-oriented academics, most of them associated with think tanks and universities in various parts of the world, and two of them with the United Nations and the World Trade Organization. The authors of the second volume also include policymakers.

In this first volume, some of the contributing authors stress the need for international monetary reform while others seem to be more reluctant, passive, pessimistic or “realistic” about the need for or the possibility of such reform – I leave it to you to decide what term you would prefer.

My own experience is that, in general, the more I study an issue, the less easy it is to maintain a simple view against or in favour of a certain policy stance – even though my view on the need for international monetary reform has not changed since the moment I started to increase my knowledge about the malfunctioning of the world’s monetary system. My experience is also that I sometimes find myself defending a moderate position when someone else presents a radical view, and vice versa. On the one hand, this has to do with my natural tendency to raise questions when a social scientist pretends to possess the truth (in social, economic, political and cultural affairs there is usually not one exclusive, single truth), and on the other hand, with the complexity of the issues. Talking about complexity, radical views can

---

<sup>3</sup> Jan Joost Teunissen, “The International Monetary Crunch: Crisis or Scandal?”, *Alternatives*, Volume XII, No. 3, July 1987, page 361.

spring from in-depth analysis.

I would welcome your critical and curious reading of the analyses and views presented in this volume. Both the chapters that you may agree with and those you may disagree with are worth reading. I have learned a lot from the authors whose policy stance I do not (fully) share. Equally, I have learned a lot from the authors I agree with. In both cases, they have provided me with arguments and details I was not, or not fully, aware of.

The second volume looks further ahead and deals more at length with the issue of international monetary reform. However, in that volume the same occurs as in this one: some economists advocate the need for reform of the system and suggest concrete proposals, while others seem to be happy with the current (non)system and see the plea for reform of their colleagues as utopian dreams.

I believe that any serious policymaker or academic should always be open to the possible need for alternative policies and reform of the system, especially if there are good reasons for change. In my Epilogue to this book I will highlight the policy options available to the US, Europe and Asia for resolving global imbalances as presented by the contributing authors in this volume. In the next volume, I will return to the issue of system reform and policy change. Then I will also return to some of Tavares' insights, as well as those of Triffin and other experts who have inspired me to found the international forum for discussion on finance and development Fondad.

# 2

## Global Imbalances and Emerging Markets

*Barry Eichengreen and Yung Chul Park*

The massive current account imbalance between the United States on the one hand and Asia and Latin America on the other is the most prominent feature of the contemporary international monetary and financial landscape. This pattern is not without its merits. Since the turn of the century, the United States has been the source of the majority of the growth of global demand. It has provided a buoyant market for the exports of the rest of the world. It has facilitated the efforts of countries in Asia and Latin America to accumulate foreign reserves in order to insulate their economies from financial shocks. By enabling the more heavily indebted emerging markets to limit additional borrowing, it has permitted them to pre-fund their external financing needs and lengthen the maturity structure of their obligations. These are not new insights: the idea that the imbalance has benefits not just for the United States but also for the surplus countries is at the heart of the so-called “global co-dependence” and “New Bretton Woods” views of the current global setting (Mann, 2004; Dooley *et al.*, 2003).

The issue is whether these benefits dominate the costs. The current account surpluses and massive reserve accumulation of emerging markets come at the expense of consumption and investment. For Asia excluding China and Japan, investment rates fell by nearly 9 percent of GDP between 1996 and 2004 (see Macfarlane, 2005; Rajan, 2005). In Latin America, the comparable fall was a more modest but still significant 3 percent of GDP. Thus, one alternative to financing the US current account deficit would have been for emerging markets to use

more of their savings to finance additional domestic investment. Whether this would have been advisable depends on one's view of the efficiency of the high levels of investment of the first half of the 1990s, in Asia in particular, and of whether emerging markets are sacrificing growth due to their now lower rates of capital formation.<sup>1</sup> Another option would have been for emerging markets to reduce their saving in favour of higher levels of consumption commensurate with their now higher living standards. Whether this would have been desirable depends on how one interprets those high savings rates, again particularly in Asia, and specifically whether one sees them as an unintended consequence of financial underdevelopment and other domestic distortions or as reflecting the intrinsic preferences of households and firms, in which case there is no obvious rationale for intervening with public policy. One can ask the same questions about public sector behaviour. Are governments wise to pay down debt and accumulate reserves in the effort to bullet proof their economies against external financial disturbances, or would they be better advised to devote additional resources to public investment in education, public health, social security and physical infrastructure? Would these uses of public sector resources be superior to reserve accumulation in light of the costs of sterilisation and the risk of capital losses on dollar balances?

The other question is whether this pattern of global co-dependency could come to grief – in other words, whether global imbalances could unwind in a disorderly and disruptive way – and what the impact would be on emerging markets. More precisely, there are two questions. First, what is the likelihood of a disorderly correction of the US current account deficit? And, second, what would be the impact on emerging markets? While the first of these questions is already the subject of a large literature, the second has received less attention.<sup>2</sup> We therefore make it our focus in this chapter.

We argue that, in contrast to recent crises, the impact on emerging markets of a disorderly correction of global imbalances is likely to flow most immediately through trade rather than financial channels. This resembles the situation prior to recent decades marked by the explosive growth of capital flows; prior to recent decades, trade multipliers and terms of trade effects were the principal avenues through which events

---

<sup>1</sup> In more technical language, the question is whether higher investment would have simply been dissipated in a higher incremental capital-output ratio.

<sup>2</sup> Two exceptions are Goldstein (2005) and World Bank (2005a).

in the advanced countries affected the developing world. The same is likely to again be the case today. In turn, this has implications for how emerging markets should prepare for the possibility of the abrupt correction of the US current account and for how they should respond.

## 1 The Likelihood of a Disorderly Correction

There is no consensus regarding the likelihood of a sharp correction of the American current account deficit. One view, epitomised by Roubini and Setser (2005) and Chinn (2005), is that a correction is inevitable because US external indebtedness is on an unsustainable path. The current account deficit is approaching 7 percent of US GDP. Assuming unchanged policies at home and abroad, this deficit balance will continue to widen, approaching 10 percent of GDP at the beginning of the next decade. US net international indebtedness will rise from current levels of roughly 25 percent of GDP to 60 percent in 2010 and more than 100 percent in 2015. In this view, it is simply not plausible that investors in other countries will be willing to accumulate additional claims on the United States at such a rapid rate, or that they will be prepared to hold an ever rising share of their net wealth in the form of US obligations.

The other view is that the US can continue running very substantial deficits if not indefinitely then at least for an extended period. Rapid productivity growth renders the United States an attractive place to invest, sustaining capital inflows (Cooper, 2004).<sup>3</sup> The high savings of other countries have no other logical outlet (Bernanke, 2005). In particular, the inability of other countries to create attractive financial assets at the same pace that they are able to expand their productive capacity, means that as they grow and their residents become wealthier they have a desire to net accumulate claims on the United States (Caballero *et al.*, 2005). Even if the US current account gap still must narrow, this can occur very gradually, say at the rate of half percent of US GDP per year, reducing the rate of growth of US external indebtedness to levels that will be happily absorbed by foreign investors.

Even if private investors reach their limit in terms of their willingness to accumulate additional claims on the United States, there remains the possibility that foreign central banks will continue to provide the necessary finance. Already in 2004-5, foreign central banks,

---

<sup>3</sup> See also Clarida (2005) and Backus and Lambert (2005).



and Asian central banks in particular, provided essentially 100 percent of the net financing for the US current account deficit.<sup>4</sup> It is widely argued that foreign central banks are understandably reluctant to change their behaviour abruptly. Were they to curtail the foreign exchange market intervention resulting in their accumulation of reserves and sustaining the ongoing flow of official finance for the US external deficit, their currencies would rise, injuring their export competitiveness and slowing their growth.

Against this is the argument that the appreciation of other currencies against the dollar is inevitable. Sterilising the impact of reserve accumulation on domestic financial markets will become increasingly expensive as entities like the People's Bank of China (PBC) are forced to issue growing quantities of central bank bills.<sup>5</sup> Not sterilising will mean more rapid inflation and real appreciation that is better taken in the form of nominal appreciation that does not damage the credibility of monetary policy. Since central banks are aware of the pressure for the dollar to fall and for other currencies to rise, they have an individual interest in diversifying their reserves out of dollars sooner rather than later, even if they at the same time have a collective interest in continuing to support the greenback.<sup>6</sup>

Our own view (Eichengreen and Park, 2004) is that there will have to be significant adjustment – that neither foreign investors nor foreign central banks will be prepared to continue financing US current account deficits at current levels indefinitely. Our guess, consistent with Obstfeld and Rogoff (2004), is that the US deficit will have to fall to some 3 percent of US GDP – that is, to less than half of current levels – in order to reduce the rate of growth of foreign claims on the US to sustainable levels in the neighbourhood of 60 percent of US GDP.<sup>7</sup> In turn, this will require a further real effective depreciation of the dollar of at least 20 percent. To be sure, exactly how large the fall in the deficit must be, and the size of the associated real depreciation, depends on when the adjustment commences (a point emphasised by Blanchard *et al.*, 2005).

---

<sup>4</sup> While private capital flows into the US were large, these were matched by private US foreign investment; this is the sense in which the financing provided by foreign central banks was needed to fully finance the current account deficit.

<sup>5</sup> Garton (2005) provides an estimate of the fiscal costs of reserve accumulation and shows that these already amount to 0.4 to 0.6 percent of GDP for India, South Korea and Malaysia.

<sup>6</sup> See Eichengreen (2004). We return to this argument below.

<sup>7</sup> This is the implication of assuming 5 percent growth of nominal US GDP.

The longer that adjustment is delayed, the larger will be the existing stock of US external liabilities, and the sharper will have to be the increase in net exports in order to service it. In other words, if adjustment begins now, the 20 percent fall in the dollar can plausibly be spread over a period of years. The longer it is delayed, the larger will be the necessary fall in the dollar, and the more likely it becomes that this change in relative prices will be rapid once it begins. And the larger and more rapid the adjustment, the more disruptive will be the effects.

The worst-case scenario is one in which adjustment is delayed until foreign finance dries up abruptly, in turn forcing the US current account deficit to be eliminated at a stroke. The result would then be very sharp compression of US and global demand. In itself this implication is uncontroversial, given the assumption that foreign finance is abruptly curtailed. If capital inflows into the United States decline by 7 percent of GDP because foreign finance dries up, then the current account must move immediately to balance by definition of the balance of payments. The impact effect must be for US demand and specifically the net demand for imports to decline by 7 percent. A 7 percent decline in US demand is a recipe for a decline in global output in the amount of 7 percent of US GDP, other things, including inventory accumulation, being taken as equal. Second-round effects could then aggravate the impact on output and employment.

The mechanism producing these effects is no mystery. A 7 percent decline in net foreign purchases of dollar assets will cause the dollar to fall. It will cause the prices of dollar-denominated assets to decline – equivalently, their yields will rise, eliminating the Greenspan Conundrum. These are two sides of the same coin: a declining dollar and higher US interest rates go together by interest parity. Insofar as a falling dollar implies imported inflation, the Fed will also be forced to raise policy rates faster than expected. These higher interest rates will damp down consumer spending by increasing the cost of consumer credit and limiting the rise in housing prices that has worked to sustain household net wealth in the absence of positive personal saving. They will dampen investment by raising the cost of capital. The fact that US interest rates have recently risen relative to foreign interest rates is at least superficially consistent with the notion that the market attaches a rising probability to this scenario.<sup>8</sup>

---

<sup>8</sup> Obstfeld (2005) provides an analysis based on real interest rates backed out from the yields on inflation-indexed bonds.

An objection to this doom-and-gloom picture is that output and employment in the US can be sustained if net imports are reduced by boosting US export sales. This is the implication of the observation that the dollar will depreciate as a result of the shock under consideration here. Demand, rather than falling, can simply be shifted to the rest of the world. But for the rest of the world this would mean a shift in demand away from its own products. The result would be some redistribution of the recessionary impulse from the United States to other countries but no mitigation of the overall recessionary effects. Indeed, to the extent that one is concerned with the implications for emerging markets (as in this book), calling this scenario – in which US output and employment are stabilised by demand rotation – the happy case, is a misnomer.

A further objection, mooted above, is that foreign central banks would never allow financing for the US deficit to be curtailed so abruptly. They recognise that they have an interest in insuring the ongoing flow of external finance for the US current account deficit precisely in order to avoid precipitating a recession. They would step in with further purchases of US assets if private investors pulled the plug. But central banks also have an interest in avoiding capital losses on their dollar reserves. From the point of view of the United States, selling American Treasury and agency securities for German bunds represents a gross capital outflow that would offset the ongoing flow of incremental finance. Individual central banks worry about the impact on domestic monetary conditions and inflation of running large ongoing surpluses. They worry about the resource misallocation that results from keeping interest rates artificially low.<sup>9</sup> They worry about the present or prospective future costs of sterilising the financial effects. They thus have an incentive to diversify out of dollars if they think they can do so without prompting reserve diversification by other central banks and precipitating a move in the dollar. They have an incentive to let their currencies rise if they think they can limit the effects.

To be clear, we are not arguing that the US deficit will necessarily be compressed this sharply. But neither can this possibility be ruled out. In any case, focusing on the worst-case scenario is useful for contemplating the implications for emerging markets.

---

<sup>9</sup> Effects that are most clearly evident in China in the form of investment rates that are surely too high to be consistent with allocative efficiency.

## 2 The Impact on Emerging Markets

The World Bank (2005a) provides a catalogue of channels through which a sharp depreciation of the dollar and sudden compression of the US current account deficit will affect emerging markets. To start with positive effects, a declining dollar will reduce the cost of servicing dollar-denominated debt. To some extent, this effect is already evident: between 2002 and 2004 the decline in the dollar reduced ratios of debt to GNP and debt service to exports by one percentage point, reflecting the dominance of dollar-denominated debt.<sup>10</sup> This effect favours relatively heavily indebted countries, where the reduction of debt burdens is particularly valuable, and dollar borrowers, where the exchange rate change works in their favour. In practice, this means mainly Latin American countries like Brazil, Chile and Columbia, where the Bank estimates that the fall in the dollar from 2002 to 2004 reduced the ratio of debt to exports by 4 to 10 percent.<sup>11</sup>

On the negative side, rising US interest rates and declining US Treasury prices could precipitate a flight to quality that heightens volatility in emerging financial markets, with adverse implications for the level and price of capital flows. The curtailment of capital flows toward the United States would make for higher US Treasury benchmarks and wider emerging-market bond spreads, especially for borrowers with high ratios of debt to GDP. The assumption here is that US policy rates are important for the evolution of global interest rates, and emerging market spreads and capital flows co-vary with the level of global rates. Emerging markets also will feel a negative wealth effect from capital losses on their foreign reserves.

This emphasis on the impact on financial markets of a fall in the dollar reflects an effort to shoe-horn this discussion into the financial-crisis paradigm of the 1990s. The immediate way in which emerging markets were affected was by sudden stops in capital flows, in periods when there occurred a flight to quality by investors in advanced countries. This time around, in contrast, the financial consequences are likely to be more ambiguous and less obviously damaging to emerging markets. In fact, the positive correlation between US interest rates and emerging market spreads is less pronounced and less stable than suggested in the World Bank's analysis; for a number of countries and

---

<sup>10</sup> World Bank (2005a), p. 52.

<sup>11</sup> To a lesser extent, positive effects are also felt by South Africa and Turkey.

periods this correlation has been essentially non-existent (Eichengreen and Mody, 1998). The response depends on the reason for the rise in US rates and on the reaction of the other advanced countries. If monetary tightening simply reflects the desire to normalise US policy rates, as the Fed seeks to back out the lingering impact of the sharp interest rate reductions taken at the beginning of the decade, then it is plausible that rates in other countries should also rise, as gross financial flows from the US to foreign markets are deterred by rising yields at home. The saving grace here is that interest rates in the financial centres should rise only gradually, as the Fed and other advanced-country central banks weigh the advantages of higher rates for the maintenance of price stability against any negative implications for their economies. And gradual increases in rates should be relatively easy for emerging markets to absorb.

If, on the other hand, the impetus for higher rates in the US stems from sudden evaporation of the willingness of foreign investors to finance the country's current account deficit and from the inflationary effects of the consequent fall in the dollar, then higher interest rates in the US will be accompanied by lower interest rates in the rest of the world. With less liquidity flowing to the US, more liquidity will remain in other markets. Again, this is an implication of the interest parity condition. In other words, in this scenario in which the dollar falls, foreign interest rates must be lower than US rates by the amount of expected foreign currency appreciation in order to satisfy the no-arbitrage condition. And if higher interest rates in the US are accompanied by lower rates in Europe, then it is not obvious that emerging markets will be adversely affected.

For emerging markets to feel a strong negative impact, one must add another element that produces a significant drop in global liquidity. One possibility would be a sharp adjustment of US asset prices that produces distress, or at least fears of distress, among financial institutions, as happened in the bond market correction of 1994 and the LTCM crisis of 1998. Such fears could result in de-leveraging by foreign as well as US financial institutions, reducing global liquidity.

They could produce a global flight to quality and, in particular, less appetite for emerging market debt, as happened in these earlier periods.<sup>12</sup>

---

<sup>12</sup> A variation on this theme is how the story was told in the heyday of the Bretton Woods System, when global liquidity was measured as the sum of the US monetary base plus dollar reserves held by foreign central banks. In this model, a

A further problem for narrators of this story is that emerging markets have greatly reduced their dependence on new foreign borrowing. As a group they are running current account surpluses, which means that they have no need for additional foreign debt. In fact, they are reducing net external debt by accumulating reserves. To be sure, if the US current account abruptly moves to balance, current accounts in Asia and Latin America will have to move to balance as well, assuming that Europe's current account balance remains where it is, at zero. This will still mean no additional borrowing. Admittedly, where debt is maturing it will have to be rolled over. But many Latin American and Eastern European countries in this position have pre-funded their re-financing needs while the going is good. Venezuela was already pre-financing debt for 2006 in the middle of 2005; by mid-2005, Mexico had already covered its financing requirements through the end of 2007. Excluding Ecuador, whose external financing needs are considerable, Latin American net financing needs in 2006 is less than 3 percent of exports, down from more than 30 percent in 1996-98.<sup>13</sup> Excluding Turkey, which has a large current account deficit, only half of which is financed by FDI, and large amounts of debt to roll over, Emerging Europe's net financial needs will be less than 7 percent of exports, down from nearly 24 percent in 1996-98.<sup>14</sup> If funding suddenly becomes unavailable, Latin American countries still could retire their maturing obligations and meet their other external financial needs by liquidating just 10 percent of their reserves. The comparable figure for Emerging Europe is 11 percent. Alternatively, closing this gap by increasing net exports would require only

---

reduction in the rate of growth of the US monetary base reduced not just US liquidity but also global liquidity, since it meant that foreign central banks were accumulating reserves less quickly. On reflection, it will be evident that this variant of the story requires exchange rates to be pegged to the dollar, for otherwise the monetary base and liquidity in the rest of the world could move independently of dollar reserves. To put it another way, only if currencies are pegged will foreign policies and conditions mimic US policies, as was the case under Bretton Woods; only then will the US be able to act as Stackelberg leader in the global liquidity game. While there is some evidence of this mechanism working in the recent past (see e.g. Jensen, 2005), if foreigners abruptly grow unwilling to finance the US deficit and allow their exchange rates to move, this assumption will be violated.

<sup>13</sup> Ecuador's net financing need is more than 70 percent of exports in 2006, driving up the regional average. Note that all these calculations make assumptions about the continuing flow of FDI and official finance, mainly from the IMF. They assume away the danger of large-scale capital flight.

<sup>14</sup> Including Turkey they will average about 10 percent.

a 1 percent depreciation of Latin American currencies (5 percent including Ecuador) and a 3 percent depreciation of Emerging European currencies (5 percent including Turkey), by Deutsche Bank (2005) estimates.

Given all this, emerging markets would be largely insulated from the financial impact of higher interest rates. The main exceptions would be Ecuador and Turkey and countries with large amounts of interest-rate-indexed debt. This is where some unwinding of emerging market spreads from current, historically unprecedented low levels would bite. In Brazil, for example, domestic debt has an average duration of less than a year and over half is still linked to the overnight interest rate. For a country in this position, a rise in global interest rates could have serious consequences. But recall our earlier scepticism that global rebalancing would mean higher *global* rates.

Curiously, the World Bank's analysis neglects what we would regard as potentially the most important negative channel through which emerging markets will be affected, namely the impact on their trade. The abrupt elimination of foreign financing for the US current account would force the country's net imports to decline by 7 percent of US GDP. This could have serious consequences for emerging markets, even more serious than the impact of higher interest rates.

Since it would take time for dollar depreciation to crowd in additional US exports, we assume that the entire swing comes in the form of US imports. As a first cut, we also assume that the dollar falls by the same amount against all foreign currencies, reducing US imports across the board. (We relax this assumption momentarily.) The impact on other regions then depends on the importance of exports to the US as a share of regional GDP. In data for 2004, this share varies from a high of 23 percent in the small highly open East Asian economies (Hong Kong, Singapore and Taiwan<sup>15</sup>) to a low of 4 percent in the euro area and Japan (see Table 1). In between one finds the Anglo Saxon economies (Australia, Canada, New Zealand and the UK), the larger East Asian economies (Indonesia, Malaysia, the Philippines, South Korea and Thailand) and China toward the high end, at 15, 13 and 15 percent respectively, and Latin America at the low end, at 7 percent.<sup>16</sup>

---

<sup>15</sup> We should probably discount the very high figures for these three countries at least to some extent because of the low domestic content of many of their exports.

<sup>16</sup> Oil exporters also rely heavily on the US for their final market, but they are a special case.



**Table 1 Trade by Region, 2004\***  
(percentage of regional GDP)

	United States	Japan	Anglo Saxon	Other Industrial	Large Euro	Small Euro
United States		1.6	4.9	0.4	1.9	1.2
Japan	4.1		1.6	0.3	1.5	1.0
Anglo Saxon	14.5	1.9		1.2	7.0	5.7
Other Industrial	4.6	1.5	4.9		21.5	11.5
Large Euro	3.2	1.0	3.7	3.1		13.3
Small Euro	4.7	1.5	6.9	3.8	27.0	
East Asia 1	13.0	13.2	5.3	0.8	5.1	3.5
East Asia 2	22.5	22.7	14.8	3.4	12.5	7.9
China	14.9	10.2	4.6	0.8	6.5	3.6
Other Emerging Markets	4.9	1.3	3.4	0.9	7.2	4.7
Latin America	7.0	1.3	1.4	0.5	3.8	2.8
Oil-Producers	23.2	2.9	3.7	2.3	5.7	3.7

	East Asia 1	East Asia 2	China	Other Emerging Markets	Latin America	Oil-Producers
United States	1.4	0.9	1.5	0.6	0.6	3.0
Japan	3.7	1.7	3.6	0.4	0.3	1.0
Anglo Saxon	1.6	1.1	1.5	1.2	0.3	1.3
Other Industrial	1.2	1.2	1.4	2.4	0.7	2.9
Large Euro	0.9	0.7	1.4	1.6	0.5	1.2
Small Euro	1.5	1.0	1.7	2.2	0.9	1.7
East Asia 1		10.3	12.3	2.3	1.0	3.2
East Asia 2	42.5		51.7	7.0	1.3	4.2
China	7.7	16.0		1.6	1.3	2.3
Other Emerging Markets	2.0	1.4	2.0		0.6	1.5
Latin America	1.4	0.4	2.4	1.0		2.1
Oil-Producers	2.5	0.8	1.9	1.6	1.4	

*Notes:*

\* The 12 regions are the *US*, *Japan*, *Anglo Saxon* (Australia, Canada, New Zealand, the UK), *Other Industrial* (Denmark, Sweden and Switzerland), *Large Euro* (Italy, France, Germany), *Small Euro* (Austria, Belgium, Finland, Greece, Ireland, the Netherlands, Portugal, Spain), *East Asia 1* (Indonesia, Korea, Malaysia, the Philippines and Thailand), *East Asia 2* (Hong Kong and Singapore), *China*, *Other Emerging Markets* (Egypt, India, Israel, Morocco, Pakistan, South Africa and Turkey), *Latin America* (Argentina, Brazil, Chile, Colombia, Peru), and *Oil-Producers* (Iran, Mexico, Norway, Saudi Arabia, Venezuela).

Source: IMF, Direction of Trade Statistics and International Financial Statistics, Washington D.C.



It flows from this focus on trade that a disorderly correction of the US current account imbalance will have the largest impact on emerging markets most dependent on exports to the US, which means above all the small entrepot economies of Asia. Looking at the issue comparatively, East Asia is more vulnerable than Latin America mainly because the Asian region is more open and not inconsiderably linked to the US.

A more nuanced analysis would allow different currencies to appreciate against the dollar to different extents. For example, one can imagine that Asian countries continue to peg to the dollar at current levels while European countries allow the euro to float upward against it, and that Latin American countries split the difference (they allow their currencies to appreciate against the dollar by half as much as do European countries). In this scenario, Asian currencies depreciate on an effective basis, since they remain unchanged against the dollar but depreciate against the euro and the Latin American currencies. Whether the individual Latin currencies appreciate or depreciate on an effective basis then depends on whether the country issuing them exports mainly to the United States and Asia or to Europe. But looking across emerging-market regions, this scenario will not be happy for Latin America, since it will have to bear more of the global adjustment burden given the absence of an Asian contribution.

Alternatively, one can envisage a scenario in which Asian countries are more inclined than countries in other parts of the world to allow their currencies to appreciate against the dollar, reflecting the relatively robust health of their economies. While Asian currencies then appreciate unambiguously, the magnitude of their effective appreciation will depend on the share of the exports of the issuing country destined for the US.

Truman (2005) has developed several such scenarios. In the first one, the euro rises by 40 percent against the dollar, Asian currencies by 20 percent, and Latin American currencies by 15 percent. In Asia, effective nominal exchange rates remain essentially unchanged, since they appreciate relative to the dollar but depreciate against the euro; this is true for each individual Asian country as well as for the regional aggregate. In Latin America, in contrast, the effective regional exchange rate appreciates (by 6 percent) despite the fact that revaluation against the dollar is smaller. This reflects the fact that more of the region's trade is directed toward the United States. This effect is driven by Mexico and Venezuela, which see their effective rates rise by 9 and 7 percent, respectively. (We may want to disregard the second effect as

reflecting mainly the fact that oil is priced in dollars, something that will not remain the case indefinitely.) Brazil, in contrast, continues to enjoy a 3 percent effective depreciation.

The contrasting scenario is one in which the rise in the euro against the dollar is limited to 20 percent, while the Asian currencies are allowed to appreciate against the dollar by 40 percent and the Latin American currencies continue to rise by 15 percent. Compared to the first scenario, the impact on Mexico is unchanged; the country trades disproportionately with the United States, appreciation of the peso against the dollar is all that matters, and by assumption this remains unchanged. Now, however, Brazil no longer enjoys a nominal depreciation, given the importance of its commodity exports to Asia and the fact that Asian currencies are appreciating.

A more nuanced analysis would also allow a significant slowdown in the US (and a more modest slowdown in China induced by the appreciation of the renminbi) to differentially impact commodity exporting countries. The rapid rate of increase in commodity prices in recent years has reflected strong demand emanating disproportionately from these two countries. Now, if demand slows down in the US and China and therefore global demand slows down, the terms of trade of commodity exporters like Chile and Indonesia will be hit. Conversely, developing countries that depend on commodity imports, which means mainly the resource-poor East Asian countries and, to a lesser degree, Latin American countries like Brazil, will experience weaker commodity prices as a partial cushion against slower global growth.<sup>17</sup> Here petroleum prices, whose pro-cyclical movement is especially strong, given capacity constraints, and their impact on countries like Mexico and Venezuela (along with their countervailing impact on the low-income oil-importing countries of Africa) are simply a particularly pronounced case in point.

In sum, the principal risk to global stability and thus to stability in emerging markets from the current pattern of global imbalances lies in the possibility of a disorderly correction that would precipitate a major slowdown in US growth and a significant rise in US interest rates. But, in contrast to recent experience, the risk to emerging markets does not lie this time in the financial consequences. Emerging markets are running current account surpluses rather than deficits, minimising

---

<sup>17</sup> Contrary to popular perception, Brazil with its large and varied manufacturing sector is not a net commodity exporter.

their borrowing. Stronger policies have reduced the danger of capital flight. Prudent debt management has prompted governments to pre-fund their external financial needs. This is not to deny that the exceptionally low level to which emerging market spreads have fallen will not be sustained. But ample international reserves will help countries to compensate for a flight to quality and adverse shifts in the price and direction of international capital flows. Rather, the main risk stems from the possibility of a significant slowdown in US growth and, more specifically, in the growth of US net import demand. The incidence of the effect varies with trade openness and more specifically with dependence on exports to the United States. In Latin America, this means that Mexico is at particular risk. In Asia, exposure to the danger of a disorderly correction is greatest for countries like Singapore, Hong Kong and Taiwan, which are highly open and export heavily to the United States. In addition, the impact will tend to vary with the policy response, not just with the extent to which currencies are allowed to move but with macroeconomic policy generally. It is to this issue that we now turn.

### 3 What Countries Can Do

We now ask what policymakers can do to minimise these risks, starting with the United States and China, the two countries at the centre of this discussion, and then proceeding to Japan, the other Asian countries, and finally Latin America.

#### *The United States*

Of the two ways of gradually reducing the US current account deficit – raising US savings and reducing US investment – the former would be more growth- and employment-friendly. US gross national savings have fallen to 13.6 percent of GDP on the IMF's measure, down by 3.3 percentage points from the 1983-2000 average and barely half the level prevailing in the rest of the world. The problem in the United States is that “everyone talks about the need for a higher savings rate, but no one does anything about it.” This reflects first a paucity of policy tools, and second a lack of political will.

The two obvious tools are monetary and fiscal policies. Higher interest rates would work to limit the rise in asset valuations, and

specifically the rise in housing prices that has reconciled rising household net wealth with zero personal savings. There is a retrospective argument that the Fed should have started sooner and proceeded more quickly with pushing up interest rates back to levels consistent with a positive real rate. The expansion of the US economy has been durable and could have withstood the somewhat faster monetary tightening. Moving real interest rates back into positive territory would have limited the frothiness of asset markets and produced higher personal savings. Authors like Truman (2005) argue that this would have been consistent with Mr. Greenspan's "risk-management strategy" insofar as it would have narrowed the current account deficit and reduced the risk of a disorderly correction. Unfortunately, this critique is retrospective; it is a story about what the Fed should have been doing in 2002-2004. Real interest rates are back in positive territory. Now that the US economy is in the later stages of a cyclical expansion, it is not clear that more monetary tightening would be prudent.

In contrast, the case for fiscal action remains. Since 2001 the US fiscal balance has swung from +2.5 percent to -3.5 percent of GDP. The Congressional Budget Office has attributed changes between earlier fiscal projections and realised outcomes to three sources: discretionary fiscal actions, economic surprises (typically, growth that ran faster or slower than expected), and technical factors (mainly, changes in the level of the stock market that have raised or lowered capital gains revenues).<sup>18</sup> Of the \$750 billion deterioration of the federal budget relative to forecast in the period 2001-2005, more than two-thirds was due to legislative action (the 2001 Bush tax cuts), while the remaining third was due entirely to technical factors (changes in effective tax rates due to changes in capital gains, reflecting the decline in the stock market).<sup>19</sup> This emphasis on revenues is consistent with the observation that federal taxes as a share of GDP have fallen from their historical norm of 22 percent of GDP to 18 percent, while expenditures as a share of GDP have remained largely unchanged. It is consistent with the observation that the big ticket items on the expenditure side going forward are related to health care for the elderly, who are a well-organised lobby in a position to resist cuts.

---

<sup>18</sup> See Congressional Budget Office (various issues).

<sup>19</sup> Along with some unexpected costs of increases in entitlement programmes. In contrast, the impact of economic growth on the budget balance was almost exactly as projected.

It follows that the most important thing the US can do to rectify its fiscal imbalance is to allow the Bush tax cuts to expire. Were the tax cuts sunsetted as scheduled (this means, in the main, that cuts on capital gains and dividend income would be allowed to expire at the end of 2008), other discretionary changes in the tax system avoided, and expenditure restraint maintained, the unified budget would return to near balance in 2010, assuming the maintenance of economic growth.<sup>20</sup>

The impact on the balance of payments would be less than proportional. This limited impact on the current account reflects the induced reduction in private savings, corporate savings in particular, as economic growth decelerates. Erceg *et al.* (2005) find that a \$1 billion decline in the US budget deficit produces only a \$200 million improvement in the current account. Using panel data for a group of industrial countries, Chinn and Ito (2005) obtain almost an identical estimate.<sup>21</sup> Such estimates suggest that reducing the budget deficit by 3.5 percent of US GDP would cut the current account deficit by at most 1 percent of GDP. This kind of relatively small overall adjustment in US demand is desirable from the point of view of global growth in order to avoid a recession. In other words, a larger increase in taxes designed to cut the current account deficit still further in the short run is undesirable. This also implies that fiscal consolidation in the United States, by itself, will not obviate the need for depreciation of the dollar and complementary policies abroad.

This scenario also assumes the political will to address the country's fiscal problem. The realism of this is questionable. There is little pressure from the markets to address the budget deficit so long as interest rates on long-term Treasuries remain stable courtesy of purchases by foreign central banks. With the approach later this year of the 2006 mid-term elections and *de facto* commencement of the 2008 presidential campaign, it is not clear that either political party will see it as in its interest to make the case for higher taxes.<sup>22</sup> The war in Iraq, homeland security needs,

---

<sup>20</sup> If the tax cuts are allowed to expire, the other costly tax measure for which there is political pressure, reform of the Alternative Minimum Tax, would then become less pressing since more individuals would be subject to the regular tax system and therefore not the ATM.

<sup>21</sup> Gruber and Kamin (2005), in contrast, obtain an even smaller coefficient, reinforcing the point we are about to make.

<sup>22</sup> To the contrary, the House of Representatives in particular shows every inclination to extend the Bush cuts on dividends and capital gains through 2010 and to push through cuts in the Alternative Minimum Tax without including any

Hurricane Katrina, and the recently passed prescription drug benefit all cast doubt on the assumption that expenditure discipline will be maintained. Economists can sound the call for fiscal consolidation, but this does not mean that politicians will hear it.

### *China*

The debate over China's role in the global adjustment process will also be familiar. On the one hand, the country's growth strategy is export led; a substantial appreciation of the renminbi against the dollar that damages export competitiveness could jeopardise this growth and threaten a politically destabilising rise in unemployment. On the other hand, it is hard to envisage that global rebalancing could go smoothly without a contribution from China. If the US current account moves toward smaller deficit, other countries' current accounts must move to smaller surplus. China's surplus is roughly a third the size of the US deficit. This makes it hard to imagine that the entire burden of adjustment could be borne by the countries responsible for the other two thirds: Japan, the Asian NICs, Latin America, and the oil producers.

With Chinese investment rates running at nearly 50 percent of GDP, it is absurd to think that current account adjustment could be effected through still higher investment. Already there are good reasons for questioning the efficiency with which investment capital is being allocated. While not disputing that China needs more industrial capital, modern housing, and urban infrastructure, there are reasons for doubting that it can be deployed even more rapidly. This means that current account adjustment will have to occur through reductions in saving.

Some of this adjustment will come about naturally. As structural change becomes more predictable, households will engage in less precautionary saving. The need to accumulate a financial nest egg will become less pressing as workers worry less about losing jobs in state-owned enterprises, as the state builds pension and health care systems to provide for the elderly, and as the development of credit markets enables households to borrow to defray the costs of tuition, home purchases, and consumer durables.<sup>23</sup> After 2015, the ageing of the

---

offsetting tax increases to help pay for the measure.

<sup>23</sup> The importance of financial development for national savings is disputed. Loayza *et al.* (2000) find evidence of a significant negative relationship, while Chinn and Ito (2005) do not.

Chinese population will reduce personal savings, as per the predictions of the life-cycle model. But time will be required for these effects to be felt. None of them will operate on the horizon relevant to global rebalancing.

In the short run – which is the time horizon relevant to the discussion here – the main agent for reducing national saving must be the public sector. Smaller budget deficits in the United States should thus be offset by larger budget deficits in China. The government should begin to gradually increase spending on education, health care, social security, urban infrastructure, and modern housing. A limited increase in public dissaving would move Chinese savings rates in a direction compatible with global rebalancing.

The case for fiscal stimulus in China has been made by Blanchard and Giavazzi (2005). They observe that the country has considerable fiscal room for manoeuvre; even accounting for the implicit fiscal liabilities created by problems in the banking sector, public debt levels remain low. Others, such as Genberg *et al.* (2005), are more cautious. China can only build so many dams, housing projects, and power generating plants in the short run. A further increase in publicly funded construction projects would open the door to the diversion of public funds and bureaucratic inefficiency. To increase social spending, the central government must secure the cooperation of local governments. It is not clear that systematic cooperation to ensure the efficient allocation of public funds can be arranged in short order. And simply throwing money at provincial governments may create additional scope for politically connected lending to state enterprises and others.

Wouldn't further stimulus to domestic demand create risks of inflation and overheating? Here is where there is an argument for currency appreciation. Expansionary fiscal policy in a context where fiscal solvency is not at issue will strengthen the exchange rate. Real appreciation will then slow the growth of exports and prevent overheating and inflation. With the decline in national savings rates, demand will rotate from exports to domestic markets, and orderly appreciation of the exchange rate will work to facilitate this reallocation.

There is a considerable literature debating precisely how much renminbi appreciation is required. Framing the issue as we do here – starting with the need for a reduction in national saving, moving from there to the need for fiscal action, and viewing the adjustment of the exchange rate as an equilibrium response – suggests that the answer is contingent. How much nominal and real exchange rate adjustment is



required will depend on the magnitude of the fiscal initiative and how national saving is affected.<sup>24</sup> It will depend on the evolution of America's growth and current account. A large reduction in Chinese savings that creates significant risks of inflation and overheating will have to be met with a substantial appreciation. A smaller reduction in Chinese savings, which we see as the more likely case, will warrant a smaller real appreciation to avoid precipitating a significant growth slowdown. Similarly, continuing strong demand for imports by the US will help to reconcile a larger renminbi appreciation with the maintenance of Chinese export growth. All this suggests a wait-and-see attitude toward currency appreciation – it suggests letting market forces influence the response.

This wait-and-see attitude is consistent with the rhetoric of the PBC and the Chinese government. It is also consistent with the idea that China will want to deploy a range of policy instruments to protect itself against the disorderly correction of global imbalances. If other investors, public and private, grow reluctant to finance the US deficit, China will not be able to support the dollar by itself. If the dollar falls sharply against other currencies, then the renminbi/dollar rate will have to appreciate in order to contain inflation and avoid overheating. To put it another way, keeping the renminbi pegged to a falling dollar would imply faster monetary expansion in China, which is undesirable. Sharp compression of the US current account deficit, which is what is implied by this scenario, would imply a sharp slowdown in the growth of Chinese exports. In turn, this would render the case for fiscal expansion all the more compelling.

But since China is only a fraction the size of the US, this means that, from the point of view of global demand, fiscal expansion in China can only offset a fraction of fiscal contraction in the US. Even together, then, the US and China only comprise part of the adjustment story.

## *Japan*

Japan is the other East Asian player that has been running large current account surpluses. These reflect the weakness of investment and consumption demand, which are symptoms of the country's decade-long slump. It follows that the most important thing the country can

---

<sup>24</sup> In other words, do Chinese households raise their savings in a Ricardian response to expected future taxes, or do they reduce their savings as they observe the development of a social safety net?



do to help resolve the problem of global imbalances and contribute to the general rotation of Asian demand from extra-regional exports to the region itself is to sustain its recovery.

Recent forecasts show Japan finally emerging from its decade-long deflation. Industrial production rose for a fourth month in November 2005. In the same month, consumer prices excluding fresh food (core CPI) rose 0.1 percent from a year earlier – up for the first time in ten years. The Tankan survey published in December showed that confidence among large manufacturers was continuing to climb, suggesting that investment by these producers should exceed earlier expectations. Macroeconomic forecasts suggest that this time, in contrast to other nascent recoveries, the growth of exports (reflecting in part the growth of Chinese demand) should in turn stimulate investment and consumption spending. If this happy scenario is correct, then domestic demand is finally combining with exports to initiate a sustained recovery. The consensus forecast is that the GDP growth rate in 2005 will be about 2½ percent, lower than that in 2004, before falling to 1½ to 2 percent over the next five years.<sup>25</sup>

The country's recovery should be particularly good for economies that export heavily to Japan (first and foremost Indonesia and the Philippines and to a lesser extent China, Korea, Malaysia, Thailand and Vietnam) and for countries whose export structure closely matches the composition of Japanese import demand (China, Korea, Malaysia, Singapore, Taiwan and Thailand).<sup>26</sup> In other words, Japanese recovery would be helpful for almost everyone in the region. Moreover, as Japan's recovery gains strength, there is likely to be a tendency for the yen to appreciate (Huang, 2006), which will make it easier for other governments in the region to contemplate appreciation of their currencies against the dollar.

National savings are expected to remain at around 25 percent of GDP. Household savings had slid to a little over 6 percent of GDP before turning up again in 2002. With the recovery gathering strength, Japanese households should now start saving more. As in other East Asian economies including China, Korea, and Taiwan, the business sector has been generating large surpluses, which are likely to continue at current levels

---

<sup>25</sup> However, recent developments lead one to believe that these forecasts are on the low side; there is little doubt that for the first time in ten years Japan's motor of domestic demand has begun humming.

<sup>26</sup> Japan absorbs more than 20 percent of the exports of the first two countries and more than 10 percent of the exports of the others. The calculations of the similarity of domestic industries with Japanese imports are from Huang (2006).

or decline slightly. Current account developments will therefore hinge on investment spending. Consensus forecasts (e.g. Daiwa 2005) point to a slow but steady increase in the aggregate investment rate. As a result, there will be modest pressure for the yen to appreciate, and the current account surplus for 2006 should decline slightly to 3 percent of GDP.

Can Japan do more? At this stage few would argue for an activist macroeconomic policy or, in particular, for more government spending on infrastructure and other public projects. Gross national debt is approaching 150 percent of GDP, and population ageing will make management of this burden more difficult going forward. The authorities are committed to eliminating the existing budget deficit as quickly as possible.

Signs that deflation is ending have opened a debate over whether the Bank of Japan should end its super easy monetary policy, which has driven the real interest rate below zero. The restoration of positive real interest rates will enhance the efficiency of credit-allocation mechanisms and force more normal behaviour on the banking system. The central bank is evidently anxious to move in this direction.

Given the moderate pace of recovery, however, there is the concern that any increase in the interest rate intended to restore the normalcy of monetary policy could choke off growth and plunge the economy back into recession. Higher interest rates would slow investment demand and thereby further limit Japan's contribution to global rebalancing.

In sum, the most important contribution Japan can make to the resolution of global imbalances is to sustain its still fragile recovery. In the present context, this means not repeating the mistakes of the past by tightening monetary policy prematurely and adjusting fiscal policy too sharply.

### ***Emerging East Asia Excluding China***

East Asian countries have traditionally valued fiscal prudence. Reflecting this fiscal conservatism, government debt as a share of GDP has been low in East Asia except for Japan and the Philippines (Table 2). Many young democracies in East Asia find it difficult to adjust fiscal policy as a result of a slow and complicated political process of determining the size and distribution of government expenditure between projects, sectors, and regions. Fiscal policy can even be pro-cyclical if that lag is very long. East Asian policymakers are also cautious to avoid replicating Japan's experience with a pump-priming policy that has resulted mostly in a massive increase in national debt.

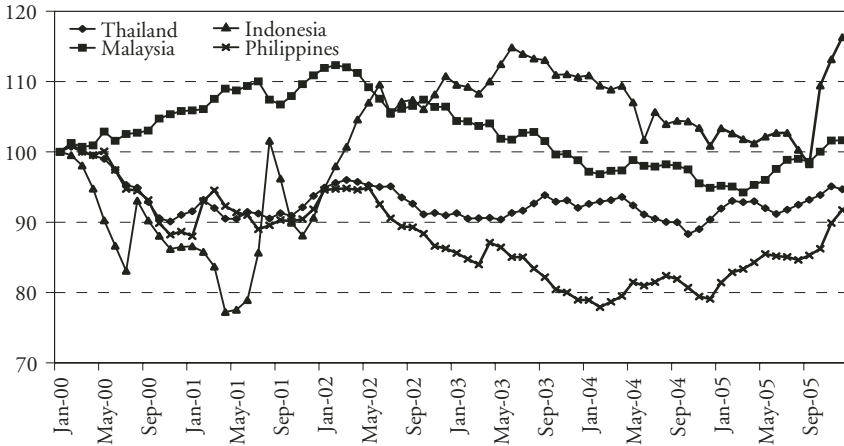
**Table 2 Selected Fiscal Indicators**  
(percentage of GDP)

	<i>General Government Gross Debt</i>					
	2000	2001	2002	2003	2004 Est.	2005 Proj.
Japan	139.3	148.8	158.4	164.7	169.2	174.4
China	16.9	18.7	20.6	21.3	20.0	19.1
Hong Kong	..	..	..	..	..	..
South Korea	29.2	33.8	32.4	32.6	33.6	32.9
Singapore	..	..	..	..	..	..
Taiwan	24.4	31.5	35.1	37.6	39.6	41.5
Indonesia	91.3	78.2	69.2	60.2	57.9	53.3
Malaysia	36.7	43.6	45.6	47.1	46.0	44.8
Philippines	89.1	88.4	93.8	101.3	99.6	97.0
Thailand	23.0	24.8	31.3	28.5	28.6	26.2
	<i>Central Governmental Fiscal Balance</i>					
Japan	-6.9	-6.3	-6.9	-7.1	-7.0	-6.9
China	-3.6	-3.1	-3.3	-2.8	-1.7	-1.7
Hong Kong	-0.6	-5.0	-4.9	-3.2	-0.8	-0.7
South Korea	1.1	0.6	2.3	2.7	2.3	2.2
Singapore	7.9	4.8	4.0	5.8	3.9	4.5
Taiwan	-0.5	-2.8	-4.3	-4.0	-3.3	-3.0
Indonesia	-3.4	-3.2	-1.5	-1.9	-1.4	-1.6
Malaysia	-5.7	-5.5	-5.6	-5.3	-4.3	-3.5
Philippines	-4.6	-4.6	-5.6	-5.0	-4.2	-3.9
Thailand	-2.0	-2.1	-2.3	0.4	0.3	0.5

Source: IMF, *Regional Outlook September 2005*, Asia and Pacific Department, International Monetary Fund, Washington D.C., 2005.

Among the ASEAN states, Indonesia and the Philippines are in no position to contemplate further increases in government spending or cut taxes. The Indonesian government is committed to further fiscal consolidation to reduce vulnerability arising from the high level of public debt. Its objective is to achieve broad budgetary balance by 2006-2007 consistent with lowering public debt to no more than 50 percent of GDP. The Indonesian government has also been engaged in fiscal reform that envisages more efficient tax administration and improvement in budget preparation and execution. Public debt in the Philippines is close to 100 percent of GDP, which is high and unsustainable. The government has committed itself to balancing the budget by 2009 by tax increases and streamlining fiscal expenditure.

**Figure 1 Real Effective Exchange Rate in ASEAN-4**  
(January 2000=100)



Source: Bank for International Settlements.

Thailand and Malaysia have been more successful at bringing their budget deficits down to manageable levels. As a result, Thailand now has a room for additional fiscal stimulus, and its authorities have seen the need to run a budgetary deficit to boost domestic demand. South Korea, Singapore and Taiwan could certainly apply significant doses of fiscal expansion. Of these countries, South Korea has been most active in implementing an expenditure switching policy by combining an increase in government spending with an exchange rate appreciation. The other two countries have not been as active as export earnings have been large enough to sustain relatively high rates of growth.

There is little disagreement that an across the board appreciation of East Asian currencies constitutes an important component of the resolution of global imbalances. However, if China insists on maintaining its limited flexibility, other East Asian countries are not likely to let their currencies appreciate vis-à-vis the renminbi as China has emerged as their export competitor in regional as well as global markets. This creates a problem of collective action and an argument for policy coordination.

China's tentative move to a basket peg and a more flexible exchange rate on July 21, 2005 is significant in this light. Kawai (2002) argues that South Korea and Thailand have also shifted to *de facto* basket arrangements similar to Singapore's managed float. Prompted by China's decision, Malaysia has now also adopted a basket arrangement and a

more flexible rate. The behaviour of real effective exchange rates of Indonesia and the Philippines (Figure 1) suggests that their currencies are also now linked to a basket. Aside from the yen, which will continue to float independently, practically all emerging economies in East Asia now have a similar framework of exchange rate policy, which ought to facilitate coordinated action.

But it is a problem that one important country, Japan, does not wish to participate in a regional framework for exchange rate coordination. This is because the yen is a free floating international currency, whereas other East Asian currencies are non-convertible (except for the Singapore dollar) and linked to baskets of regional and international currencies. Japan has a relatively small external sector, making it less sensitive to currency fluctuations. All this suggests that the principal ASEAN economies, together with China, Korea and Hong Kong, will have to work out agreement to coordinate exchange rate adjustments among themselves.

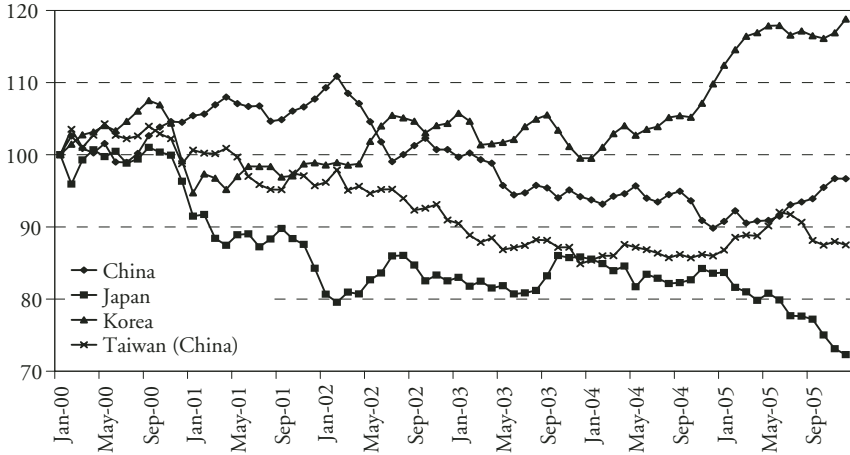
Another complication is related to differences in bilateral trade imbalances among the East Asian countries themselves. When the ten East Asian countries are divided into Japan, China, and the other emerging economies, Japan has been running surpluses in its trade with all these economies including China.<sup>27</sup> The group of emerging economies on the other hand has been running a surplus in its trade with China but a large deficit with Japan.

Because of these different profiles of the bilateral imbalances, the group of East Asian emerging economies may be able to accept a simultaneous appreciation of their currencies and the renminbi against the US dollar. However, if the yen is not expected to appreciate, China and other emerging economies will not go along with the joint appreciation, for fear of deepening their persistent structural trade deficits with Japan. And the yen will not necessarily appreciate vis-à-vis the US dollar unless the Japanese authorities intervene, which they have not shown an inclination of doing recently. To economists, bilateral trade imbalances may not matter, but to East Asian politicians and policymakers they can matter a lot, especially when the source of deficits is Japan. This dilemma underscores the need to bring Japan

---

<sup>27</sup> According to Chinese trade statistics, China is in deficit vis-à-vis Japan. Japanese statistics, however, show that Japan is running a deficit in its trade with China. The difference stems from the inclusion of Hong Kong as part of China in the Japanese statistics.

**Figure 2 Real Effective Exchange Rate in Other Asian Countries**  
(January 2000=100)



Source: Bank for International Settlements.

into a regional arrangement for exchange rate policy cooperation. Success would require overcoming the problem that China and Japan do not see eye to eye on many issues, largely because of their rivalry for economic and political influence in East Asia.

A recent IMF report describes the decline in reserve accumulation in East Asia in 2005 as having been dramatic (IMF, 2005b). Is this a promising sign that East Asia's imbalance vis-à-vis the rest of the world is resolving itself into a manageable magnitude through market forces and no longer poses threat to global financial stability?

Not obviously. If the region's terms of trade improve as the recent upsurge in crude oil prices is tempered and the US trade deficit continues to increase East Asia may start registering a larger surplus on current account again. As growth picks up in the region on the back of Japan's recovery, some of East Asia's emerging economies may experience a renewed surge in capital inflows, as they did in 2003 and 2004.

To counter these developments, some countries like Thailand have undertaken or are planning to initiate large public investment projects, while others have loosened up capital controls to facilitate capital outflows. Eight years after the outbreak of the financial crisis in 1997-98, East Asia's emerging economies excluding China appear to have eliminated much of the excess capacity they built during the boom years of the early 1990s and hence will resume their capital spending (Lee, 2006). As shown in Figure 2, this has created a tendency for the Korean won

and the currencies of the ASEAN-4 to appreciate in real effective terms. Given this, the contribution of Korea and the ASEAN-4 to the trans-Pacific imbalance seems likely to shrink. But not so Japan and China's current account balances, which will remain at 3 and 4 percent of GDP for the foreseeable future. This means that the trans-Pacific imbalance between East Asia as a whole and the US will be transformed into largely an imbalance between Japan and China on the one hand and the US on the other. And, in turn, this means that leadership in resolving it will have to come from these two countries.

### *Latin America*

Latin American countries are in a particularly difficult position insofar as they export heavily to the United States. They have little scope for a monetary or fiscal response. In countries like Mexico, Brazil and Chile, the central bank targets inflation and increasingly allows the exchange rate to fluctuate as needed to achieve this end.<sup>28</sup> Mexico, Brazil and Chile cannot simply follow the dollar down, since this would jeopardise hard-won anti-inflationary credibility. Only in Chile is there arguably room for the active use of fiscal policy.

A reduction in real interest rates from their current high levels, most notably in Brazil, would provide useful economic stimulus.<sup>29</sup> But this is tantamount to assuming a solution to the problem. In particular, it assumes a reduction in political noise, the maintenance of fiscal discipline, and further steps at strengthening institutions of contract enforcement precisely when a less favourable global economic environment would make ongoing reforms more difficult to sustain.<sup>30</sup>

The macroeconomic impact of a reduction in real interest rates would presumably be felt in the form of higher rates of investment; in

---

<sup>28</sup> Only in Argentina is priority attached to *de facto* dollar pegging. Dollarised economies like Ecuador and El Salvador of course fall into this category as well.

<sup>29</sup> In Brazil, the real interest rate on long-term inflation-indexed bonds remains well in excess of 8 percent, extraordinary levels by international standards.

<sup>30</sup> Latin American governments have also sought to encourage savings and investment by transforming pensions from pay-as-you-go systems to privately capitalised individual retirement accounts where this has not already occurred, as in Brazil, authors like Dayal-Gulati and Thimann (1997) having shown that such reforms have a significant impact on savings rates. But it takes time for these reforms to show up in changes in national savings rates – too much time for the measure to be relevant to the resolution of global imbalances.



Latin America, where savings and investment rates are less than half of Chinese levels, there is a strong case for adjusting current accounts by raising investment rather than reducing saving. The region's relatively low levels of investment reflect a long history of policy instability, income inequality, and weak creditor rights.<sup>31</sup> Although progress in solving these problems is underway, profound changes in the social and economic fabric are not knit overnight. That is to say, they are unlikely to be completed on the time frame relevant to offsetting the impact on the region of a disorderly correction of global imbalances.

#### 4 Conclusion

Observers from emerging markets have long complained that discussions of the problem of economic crises have exaggerated weaknesses in policies and institutions in the developing world while neglecting the influence of the advanced industrial countries and global financial markets. This may or may not be a valid critique of accounts of crises past, but there is no question that the US current account deficit and its implications for global adjustment now constitute the main risk to financial stability going forward. With few exceptions, emerging markets have gone a long way in reducing their vulnerability, shifting from current account deficit to surplus, pre-funding their external financing needs, building up reserves, strengthening their fiscal positions, and buttressing price stability. US policymakers have meanwhile moved in the opposite direction by allowing an unsustainable external imbalance to emerge.

Although emerging markets have done much to strengthen their financial position, they now face the urgent task of preparing themselves for the eventual unwinding of the US deficit. Avoiding a significant slowdown in economic growth will require them to shift the composition of demand from external to internal sources. In turn, this will require a shift in the policy mix toward tighter monetary and looser fiscal policies. Exchange rates against the dollar will have to adjust. Not all emerging markets are in an equally good position to undertake these adjustments. Some countries have limited fiscal room for manoeuvre. Others are

---

<sup>31</sup> In addition, insofar high savings and growth rates go together (Gavin *et al.*, 1997; Eichengreen, 2005), Latin America may be in a low saving, low growth equilibrium from which it is difficult to break out quickly.



jittery about letting their currencies appreciate against the dollar. Commencing this adjustment process while global economic and financial conditions are still favourable will ease the adjustment process. So too will cooperation on exchange rate and other policies. It would be nice if the United States would participate in this process of cooperative policy adjustment by addressing the domestic roots of its twin deficits. But emerging markets cannot afford to wait for the US to act.

## References

- Backus, David and Frederic Lambert (2005), "Current Account Fact and Fiction", Stern School of Business, New York University, unpublished manuscript.
- Bernanke, Ben S. (2005), "The Global Savings Glut and the US Current Account Deficit", Sandridge Lecture at the Virginia Association of Economics, Board of Governors of the Federal Reserve System, Washington D.C., March 10.
- Blanchard, Olivier and Francesco Giavazzi (2005), "China: A Three-Handed Approach", MIT, Cambridge MA, unpublished manuscript.
- , Francesco Givazzi and Filipa Sa (2005), "International Investors, the US Current Account, and the Dollar", In: *Brookings Papers on Economic Activity* 1, The Brookings Institution, Washington D.C., pp. 1-49.
- Caballero, Ricardo, Emmanuel Farhi and Pierre-Olivier Gourinchas (2005), "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates", MIT and University of California at Berkeley, Cambridge MA/Berkeley, unpublished manuscript.
- Chinn, Menzie (2005), "Getting Serious About the Twin Deficits", Council Special Report Number 10, Council on Foreign Relations, New York, September.
- and Hiro Ito (2005), "Current Account Balances, Financial Development and Institutions: Assaying the World 'Savings Glut'", NBER Working Paper No. 11761, National Bureau of Economic Research, Cambridge MA, November.
- Clarida, Richard H. (2005), "Japan, China, and the US Current Account Deficit", In: *CATO Journal*, Vol. 25, No. 1, pp. 111-14.
- Congressional Budget Office (various issues), "Budget and Economic Outlook", Congressional Budget Office, Washington D.C.

- Cooper, Richard (2004), "US Deficit: It is not only sustainable, it is logical", In: *Financial Times*, October 31.
- Dayal-Gulati, Anuradha and Christian Thimann (1997), "Saving in Southeast Asia and Latin America Compared: Searching for Policy Lessons", IMF Working Paper No. WP/97/110, International Monetary Fund, Washington D.C., September.
- Deutsche Bank (2005), "Special Report: LA and EMEA: Improved External and Public Financing in Retrospect", In: *Emerging Markets Monthly*, No. 98, September, pp. 40-44.
- Dooley, Michael, David Folkerts-Landau and Peter Garber (2003), "An Essay on the Revived Bretton Woods System", NBER Working Paper No. 9971, National Bureau of Economic Research, Cambridge MA, September.
- Eichengreen, Barry (2004), "Global Imbalances and the Lessons of Bretton Woods", NBER Working Paper No. 10497, National Bureau of Economic Research, Cambridge MA, May.
- (2005), "The Blind Men and the Elephant", paper presented to the Tokyo Club Foundation's Macroeconomic Research Conference on the Future of International Capital Flows, Kyoto, 21-22 November.
- and Ashoka Mody (1998), "Interest Rates in the North and Capital Flows to the South: Is There a Missing Link?", In: *International Finance*, Vol. 1, No. 1, pp. 35-58.
- and Yung Chul Park (2004), "Out of Step Policies Threaten Global Growth", In: *Current History*, No. 677, December, pp. 417-22.
- Erceg, Christopher, Luca Guerrieri and Christopher Gust (2005), "Expansionary Fiscal Shocks and the Trade Deficit", International Finance Discussion Paper 825, Board of Governors of the Federal Reserve System, Washington D.C., January.
- Garton, Phil (2005), "Foreign Reserve Accumulation in Asia: Can It Be Sustained?", Australian Treasury, unpublished manuscript.
- Gavin, Michael, Ricardo Hausmann and Ernesto Talvi (1997), "Saving Behavior in Latin America: Overview and Policy Issues", IADB Working Paper No. 346, Inter-American Development Bank, Washington D.C., May.
- Genberg, Hans, Robert McCauley, Yung Chul Park and Avinash Persaud (2005), *Official Reserves and Currency Management in Asia: Myth, Reality and the Future*, Geneva Reports on the World Economy 7, CEPR, London.
- and Alexander Swoboda (1993), "The Provision of Liquidity in the Bretton Woods System", In: Michael Bordo and Barry Eichengreen

- (eds.), *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*, University of Chicago Press, Chicago, pp. 269-316.
- Goldstein, Morris (2005), "What Might the Next Emerging Market Financial Crisis Look Like?", Institute for International Economics, unpublished manuscript.
- Gruber, Joseph and Steven Kamin (2005), "Explaining the Global Pattern of Current Account Imbalances", International Finance Discussion Paper No. 846, Board of Governors of the Federal Reserve System, Washington D.C., November.
- Huang, Yiping (2006), "Japan's Impact on Asia", In: *Asia Economics Weekly*, Citigroup, Hong Kong, 25 January, pp. 3-8.
- IMF (2005a), *World Economic Outlook*, International Monetary Fund, Washington D.C., October.
- (2005b), *Asia-Pacific Regional Outlook*, Asia and Pacific Department, International Monetary Fund, Washington D.C., September.
- Jensen, Niels C. (2005), "Deteriorating Global Liquidity", Investors-Insight Publishing Inc. ([www.investorsinsight.com](http://www.investorsinsight.com)), 21 November.
- Kawai, M. (2002), "Exchange Rate Arrangements in East Asia: Lessons from the 1997-98 Currency Crisis", In: *Monetary and Economic Studies*, Vol. 20, No. S-1 (Special edition), Institute for Monetary and Economic Studies, Bank of Japan, Tokyo, December.
- Lee, Jong Wha (2006), "Domestic Investment and Regional Imbalances in East Asia", paper presented at the KIEP and PRI Seminar on "Emerging Financial Risks in East Asia", 12-13 January.
- Loayza, Norman, Klaus Schmidt-Hebbel and Luis Servén (2000), "What Drives Private Saving Around the World?", World Bank Policy Research Working Paper No. 2309, The World Bank, Washington D.C., March.
- Makino, Junich (2005), *Japan's Economic Outlook 147*, Daiwa Institute of Research, Tokyo, Japan.
- Macfarlane, Ian J. (2005), "Payments Imbalances", Presentation of the Governor of the Reserve Bank of Australia to the Chinese Academy of Social Sciences, Beijing, May 12.
- Mann, Catherine (2004), "Managing Exchange Rates: Achievement of Global Re-Balancing or Evidence of Global Co-Dependence?", Institute for International Economics, unpublished manuscript, July.
- Obstfeld, Maurice (2005), "America's Deficit, the World's Problem", In: *Monetary and Economic Studies of the Bank of Japan*, Vol. 23, No. S-1 (special edition), October, pp. 25-36.

- and Kenneth Rogoff (2004), “The Unsustainable US Current Account Position Revisited”, NBER Working Paper No. 10869, National Bureau of Economic Research, Cambridge MA, November.
- Rajan, Raghuram G. (2005), “Global Imbalances — An Assessment”, Speech delivered by the Economic Counsellor and Director of the IMF’s Research Department at the Ronald Reagan International Conference Center, Washington D.C., October 25.
- Roubini, Nouriel and Brad Setser (2005), “The Sustainability of US External Deficits and Chinese External Surpluses”, Roubini Global Economics, New York University, unpublished manuscript, November.
- Truman, Edwin (2005), “Postponing Global Adjustment: An Analysis of the Pending Adjustment of Global Imbalances”, Working Paper No. WP05-6, Institute for International Economics, Washington D.C., July.
- World Bank (2005a), “Global Imbalances and Emerging Market Economies”, In: *Global Development Finance, Mobilizing Finance and Managing Vulnerability*, Chapter 3, The World Bank, Washington D.C., pp. 51-64.
- World Bank (2005b), *Global Economic Prospects and the Developing Countries 2006*, The World Bank, Washington D.C.
- Xiao, Geng and Zhengge Tu (2005), “China’s Industrial Productivity Revolution: A Stochastic Frontier Production Function Analysis of China’s Large and Medium Industrial Enterprises during 1995-2002”, paper presented at WEAI/HKEA 2005 Pacific Rim Conference, Hong Kong, 15 January.

# 3

## Global Imbalances and Latin America: A Comment on Eichengreen and Park

*Barbara Stallings*

In “Global Imbalances and Emerging Markets”, Barry Eichengreen and Yung Chul Park make a number of important contributions to the discussion of the current international monetary and financial situation. First, they analyse the debate on the large US current account deficit and the likely denouement. Their view is that a correction will be required; how disorderly depends on when it begins. Second, they consider the possible impact on emerging markets of a disorderly correction and argue that it will be much more benign than in previous periods. Interestingly, the benign story is based on financial channels, while trade channels are considered more problematic – returning to the approach of earlier periods before the recent financial crises. According to this approach, negative implications vary with countries’ openness and their degree of trade concentration with the heavily indebted US. Third, they disaggregate their analysis somewhat and look at five countries or groups of countries: the United States, China, Japan, the emerging East Asian economies excluding China, and Latin America. In each case, they make policy recommendations for how international imbalances could be reduced.

The most interesting – and controversial – aspect of the chapter is the argument that the emerging market economies will be relatively shielded from a negative financial impact, even in the event of a disorderly correction. The treatment of the trade channel is also important but less controversial; it also needs to be integrated into the financial analysis. Finally, the policy recommendations are sensible, but their feasibility needs to be considered more extensively. While I agree with much of

what is said in the chapter, I believe that the optimistic conclusions are based too heavily on the East Asian experiences and do not necessarily hold for other developing regions. Moreover, if political considerations mean the policy recommendations are not followed, these other regions may well suffer the consequences.

This comment begins by discussing what could be called the “upbeat model” embodied in the chapter and then looks at what has happened outside of East Asia. I focus particularly on Latin America, but the points are likely to hold for emerging market economies in other non-Asian regions as well. In addition, I discuss the politics behind the Eichengreen-Park policy recommendations and then draw some (less optimistic) conclusions.

## 1 The “Upbeat Model”

The core of the optimistic model that Eichengreen and Park put forward is based on two factors. On the one hand, in the event of a disorderly correction, they say that a fall of the dollar and a rise in US interest rates will likely be offset by the reaction in other industrial economies. Thus, emerging market economies will not face a generalised negative environment. On the other hand, they suggest that emerging economies have reduced their own vulnerability by running current account surpluses, building up reserves, pre-financing their borrowing requirements, and following macroeconomic policies that give investors more confidence. The authors do, however, acknowledge that emerging economies may face dangers from a slowdown in US growth rates and thus a decline in import demand. With respect to the trade channel, they disaggregate more than they do in the more generalised discussion of the financial channel. Not only will countries’ relationship with the United States matter, but type of exports may also be relevant for determining impact.

In examining the situation in individual countries and regions, the authors again tend toward the optimistic. In each case, they make policy recommendations that would undoubtedly reduce the possibility of a disorderly correction in the current international imbalances. For example, they say that the United States should lower its budget deficits, while Asian countries should move to reduce their current account surpluses and negotiate a simultaneous appreciation of their currencies. Nonetheless, despite occasional admissions that troublesome politics can

**Table 1 Current Account Balances in East Asia and Latin America, 2005**  
(in billions of dollars and percentages of GDP)

	amount	percentage of GDP		amount	percentage of GDP
<i>East Asia</i>	224	5.7	<i>Latin America</i>	31	1.4
China	128	5.7	Mexico	-8	-1.0
Taiwan	9	4.7	Brazil	13	1.8
Korea	16	2.2	Argentina	4	2.2
Hong Kong	21	11.8	Venezuela	22	15.8
Singapore	30	29.1	Chile	0	-0.2
Malaysia	19	14.6	Colombia	-2	-1.6
Thailand	-4	-2.3	Peru	1	1.3

Source: Calculated from *The Economist*, February 11, 2006 (current account); World Bank, *World Economic Indicator 2006*, World Bank, Washington D.C., 2006, (GDP except for Taiwan); CEPD, *Taiwan Statistical Data Book 2006*, Council for Economic Planning and Development, Taipei City, 2006 (GDP for Taiwan).

undermine good economics, they fail to elaborate on the political problems or to acknowledge the consequences if their policy recommendations are not followed. In particular, the consequences – a disorderly and costly correction of the international imbalances – would be highly problematic if their hypothesis of reduced vulnerability holds for only one group of emerging market economies.

## 2 Non-Asian Emerging Market Countries

My analysis of non-Asian developing countries centres on four tables, which provide data on several indicators of the decreased vulnerability that Eichengreen and Park see for the emerging market economies. The tables compare East Asia with Latin America for the year 2005, focusing on the seven largest economies in each region or the region as a whole.

Table 1 looks at the current account balance, both in terms of absolute dollar amounts and percent of GDP. As can be seen, the current account surplus is far larger in East Asia than in Latin America, both in absolute terms as well as share of GDP. Even if China is omitted, this pattern holds although the difference is less striking. Including China, the seven East Asian countries' total surplus is \$224 billion (5.7 percent of GDP), while in Latin America the comparable figures are \$31 billion (1.4 percent of GDP). Without China, the Asian numbers



**Table 2 International Reserves in East Asia and Latin America, 2005**

(in billions of dollars and percentages of GDP)

	amount	percentage of GDP		amount	percentage of GDP
<i>East Asia</i>	1,642	41.5	<i>Latin America</i>	221	10.1
China	819	36.7	Mexico	73	9.5
Taiwan	253	74.8	Brazil	53	6.7
Korea	210	26.6	Argentina	26	14.2
Hong Kong	124	69.7	Venezuela	24	17.3
Singapore	117	100.0	Chile	17	14.8
Malaysia	70	53.8	Colombia	15	12.3
Thailand	49	27.7	Peru	13	16.7

Source: Calculated from *The Economist*, February 11, 2006 (current account); World Bank, *World Economic Indicators 2006*, World Bank, Washington D.C., 2006, (GDP except for Taiwan); CEPD, *Taiwan Statistical Data Book 2006*, Council for Economic Planning and Development, Taipei City, 2006 (GDP for Taiwan).

are \$96 billion (5.6 percent of GDP). Looking beyond the regional averages, the ranges are also significant. In East Asia, these run from a -2.3 percent (Thailand) to 29.1 percent (Singapore), while in Latin America they go from -1.6 percent (Colombia) to 15.8 percent (Venezuela).

Table 2 shows reserves, where a similar picture emerges. Even if China is left out, the Asian countries have nearly four times the absolute volume of reserves (\$823 billion versus \$221 billion in Latin America); an even larger order of magnitude holds for reserves as a percent of GDP (47.6 percent versus 10.1 percent). Ironically, despite the much larger current account surpluses in Asia, projections by the Institute for International Finance suggest that capital inflows are and will continue to be much higher there as well, meaning that the reserve build-up can be expected to continue apace.<sup>1</sup> In summary, there are current account surpluses and large volumes of reserves in both regions, a fact that represents a vast change for Latin America in comparison to much of the post-war period. Nonetheless, a significant difference in favour of East Asia remains when the two regions are compared.

A third comparison, as seen in Table 3, focuses on debt outstanding. For developing Asia and Latin America, external debt in absolute dollar

<sup>1</sup> Institute for International Finance, "Capital Flows to Emerging Market Economies", Washington, D.C., January 19, 2006.



**Table 3 International Debt in Developing Asia and Latin America, 2005**

Debt category	Developing Asia	Latin America
Billions of dollars		
External debt	834	842
Debt service	105	144
Share of exports		
External debt	56	154
Debt service	7	26

Source: IMF, *World Economic Outlook 2005*, International Monetary Fund, Washington D.C., September 2005, Table 37.

terms is just about the same in the two regions.<sup>2</sup> Looking at debt service, however, a differentiation already begins to appear such that Latin America faces more difficult problems in obtaining the foreign exchange necessary to service its debt. If we look at debt as a share of exports, the difference becomes much more dramatic. External debt as a share of exports is about three times as high in Latin America as in the developing Asian countries and nearly four times as high in terms of debt service. This is the same pattern that was present in the 1980s, and it led to the decade-long debt crisis in Latin America compared to much lesser problems in East Asia.

Overall, these three tables suggest a much more favourable financial situation for Asian countries than for other developing countries, proxied here by Latin America. Latin American countries have smaller current account surpluses, a lower volume of reserves, and higher debt ratios, especially as a share of exports. The comparison suggests that Latin America may, indeed, be subject to a financial crunch if/when international monetary conditions turn negative. “Sudden stops” have not ended, and financial vulnerability remains a problem, despite the more positive situation at the moment.<sup>3</sup>

<sup>2</sup> The Asian countries included in the discussion of debt are different than in the tables on current account and reserves. The World Bank, the original source of data on debt, excludes the so-called newly industrialising countries (NIEs) of East Asia (Korea, Taiwan, Hong Kong and Singapore), since they are considered to have “graduated” out of the developing country status. Also smaller Asian and Latin American countries are included.

<sup>3</sup> On sudden stops, see Guillermo Calvo, “Capital Flows and Capital-Market Crises:

**Table 4 Changes in Terms of Trade for Asia and Latin America, 1987-2006**

	NIEs	Developing Asia	Latin America
1987-1996	0.3	0.2	-0.5
1997-2006	-1.3	-0.8	0.9
2003	-1.6	-0.2	3.7
2004	-2.0	0.2	3.1
2005	-2.4	0	7.0

Source: IMF, *World Economic Outlook 2005*, International Monetary Fund, Washington D.C., September 2005, Tables 22-23.

To better understand the possibilities for negative outcomes, we need to discuss the links between finance and trade channels. Eichengreen and Park emphasise the latter as more important than the former in creating potential problems for emerging market economies, and indicate that Latin American countries are quite vulnerable to a slowdown in US and international growth rates and thus the demand for their exports. Strangely, however, they do not mention terms of trade patterns.

Drawing on data from the World Economic Outlook, Table 4 shows changes in the terms of trade during the two decades, 1986-96 and 1996-2006, and individual years during the most recent period, for the four newly-industrialised economies (NIEs), other developing countries in Asia (excluding China and India), and Latin America. Some interesting patterns can be seen. For the NIEs, the terms of trade were clearly more favourable in the earlier decade than in the more recent one. For developing Asia, the picture is similar if more muted. For Latin America, by contrast, the current decade has been much better than the previous one. If we look at the three most recent years, a negative movement in the terms of trade appears for the four NIE economies, not much movement at all for developing Asia, but an extraordinarily successful period for Latin America – which cannot be expected to continue in the longer run. Since the Asian pattern has been negative in the most recent period, it is less likely to suffer when a reversion toward the historical mean occurs.

---

The Simple Economics of Sudden Stops”, In: *Journal of Applied Economics*, Vol. 1, 1998. For a discussion of financial vulnerability in emerging market economies, see Ricardo Ffrench-Davis and Stephany Griffith-Jones (eds.), *From Capital Surges to Droughts: Seeking Stability for Emerging Economies*, Palgrave Macmillan, 2004.

The boom-bust cycle, which has been so typical of Latin America over the years, arises from a combination of trade and financial factors. Negative terms of trade lead to current account deficits, which obviously require financing. Private lenders are more hesitant to provide finance under these circumstances, and the conditionality accompanying public-sector loans often lead to complicated political situations that can further a downward cycle. On the upswing, private capital pours in, but it can leave as quickly as it entered in the presence of a political or economic shock. In financial terms alone, even in the absence of trade issues, flight to quality has been a greater problem in boom-bust Latin America than in the more stable economies of East Asia.

### 3 Politics of Policy Recommendations

I agree with most of the policy recommendations made by Eichengreen and Park. My concern is that more discussion is needed about the political prerequisites for their recommendations to be carried out and the implications if they cannot be implemented. Are there alternatives that would make a positive outcome more likely? What are these?

The main recommendation with respect to the United States is to lower the current account deficit through increased savings. This, in turn, should come about by allowing tax credits to expire so as to reduce the budget deficit. It is certain that the Bush Administration will not follow this advice. Moreover, the Democrats, even if they were to take control of the House or the Senate in the mid-term elections of 2006, are unlikely to cut the deficit in a serious way either. So what do we do? Just wait for a crisis, or is there perhaps an international bargain to be struck? Is there a political bargain that would help to lessen the international crisis that would result if a disorderly unwinding of the US deficit would occur?

For China, Japan, and the rest of Asia, the main recommendation is to cut surpluses through a coordinated appreciation together with fiscal expansion. While there is a caveat that not all countries in the region could engage in this process, it is argued that an important number could and should. Here we get into a collective action problem or a prisoner's dilemma in that all countries want to maintain their competitiveness. What can be done? This is a topic we talked about in a previous Fondad conference at De Nederlandsche Bank, where Eisuke Sakakibara gave a

paper on financial cooperation in the Asian region.<sup>4</sup> The same problems exist with respect to trade cooperation: Japan and China do not have a very cooperative relationship, and this relationship has only gotten worse in the intervening period. What are the political elements that might bring about regional cooperation? We need to look at those rather than the political advantages that would come about by greater cooperation.

Finally, the chapter includes a very short section on policy recommendations for Latin America. The basic message is to cut current account surpluses by raising investment rates. Certainly Latin America – unlike East Asia – needs higher investment rates. But it also needs higher savings rates, which some theoretical approaches say would reduce growth and undermine investment. Moreover, it seems questionable to argue that Latin America needs to lower its current account surpluses: they are not very large, and they will become smaller when the terms of trade deteriorate. In addition, the current political climate in Latin America is extremely delicate, with increasing polarisation between left and right in many countries. In this climate, the debate is favouring greater consumption rather than investment, with negative implications for future growth.

#### 4 Conclusions

In summary, I would argue that it is misleading – and perhaps even dangerous – to make projections about emerging market economies as a whole. At a minimum, we need to distinguish the successful East Asian economies from others. Here the focus was on Latin America, but other regions suffer similar problems. Since structural conditions and historical experiences have diverged so substantially, the same policies are unlikely to be appropriate for all. In addition, the political prerequisites of sound policy prescriptions need more attention. Otherwise, the most sensible recommendations may well fail with serious consequences for at least some of the developing countries that were the focus of the Eichengreen and Park analysis.

---

<sup>4</sup> Eisuke Sakakibara, “Asian Cooperation and the End of Pax Americana”, In: Jan Joost Teunissen and Mark Teunissen (eds.), *Financial Stability and Growth in Emerging Economies: The Role of the Financial Sector*, FONDAD, The Hague, 2003.

# 4

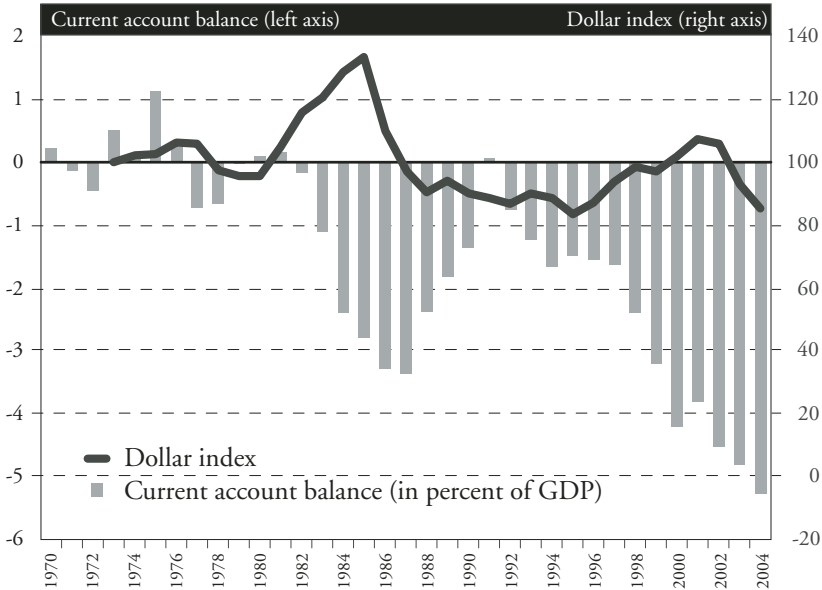
## The Dilemmas and Dangers of the Build-Up of US Debt: Proposals for Policy Responses

*Jane D'Arista and Stephany Griffith-Jones*

Current account deficits of the United States have been the rule for most of the past twenty five years (with only three years of current account surplus in this period). As can be seen in Figure 1, the scale (and share of US GDP) of these deficits have grown dramatically since the late 1990s. The US export income covers less than 65 percent of its imports, which illustrates the scale of the imbalance on the trade account. The current account deficit reached 6.5 percent of GDP in mid-2005. The fact that the US has become a major international net debtor implies that potentially large negative trends are beginning to emerge on servicing net liabilities.

In 2004, US holdings of foreign assets (estimated at \$10 trillion) were significantly lower than its foreign liabilities, estimated at \$12.5 trillion. While this negative position developed over time, it only started to generate net outflows recently (White, 2006) because net total returns on US assets are reportedly far higher than total real returns on US liabilities (with the difference between both returns reaching around 3.3 percent in the period 1973-2004, according to Gourinchas and Rey, 2005). Should this differential yield diminish, the magnitude of the US imbalance could further increase. There is much literature projecting that if current trends continue, without corrective action, US current account deficits could reach 10 or 12 percent of GDP by 2010 (see Truman, 2005, for a useful overview).

US deficits have in recent years helped sustain more rapid world

**Figure 1 United States Current Account Deficit, 1970-2004**

Source: US Department of Commerce, Bureau of Economic Analysis, and US Fed. Figure from UN-DESA (2005).

economic growth, estimated, for example, by Truman (2005) as contributing 0.3 percent of yearly global growth in the last five years. They have also facilitated a major structural change in the world production and trade flows, as Asian developing countries (especially China) have specialised in production of industrial goods, with a high proportion going into exports (Kaplinsky, 2005); the United States has mainly specialised in goods and services that are hardly or not at all traded internationally, mainly thus producing for its own market (Artus, 2005). As a consequence, the US has become not just the world's borrower of last resort – as Martin Wolf (2005) put it – but also the world's consumer of last resort.

These major changes are shaped of course by the use of the US dollar as the major reserve money and instrument for international payments – in trade and in issuance of debt and other financial instruments. The dollar is widely used internationally as a means of payment, a unit of account and a store of value.

In a modified way the Triffin (1960) dilemma still has a certain validity (see UN-DESA, 2005). According to Triffin, the rest of the world needed the US to run a balance of payments deficit to provide liquidity for supporting world growth. However, when the US deficit

rose too much, excess supply of dollars eroded confidence in the dollar; this would lead to instability in exchange rates and in the growth of the world economy. Though Triffin's critique was made in the context of the Bretton Woods system, it still may have relevance in today's non-system, where there is no mechanism to force (or even encourage) countries to change their relative degrees of economic absorption and exchange rates to reduce imbalances in an orderly way. Furthermore, international coordination mechanisms are weaker (and less representative) than in the past and the willingness of major countries to coordinate also seems smaller.

The current international "non-system" and the large size of the current account imbalances have raised two major concerns. Firstly, and greatly discussed, is the issue of sustainability of the US current account deficit and net debt and the risk of a disorderly and potentially deflationary adjustment to the US and the rest of the world. Insufficient attention has been paid to the possibly large negative impact of such an adjustment to developing countries (amongst the exceptions, see Eichengreen and Park, 2006, and World Bank, 2005). This chapter hopes to contribute to such an analysis, especially by suggesting measures that developing countries can take to protect themselves against such an eventuality.

There is a second problem about the current operation of the international monetary system, which relates to fairness. To the extent that the US can run larger current account deficits for far longer periods than other countries, it can afford to live "above its means", because other countries – and/or international financial markets – are willing to finance such deficits. This is particularly problematic when fairly poor developing countries are making a significantly "negative net transfer of resources" to the US (see, for example, UN-DESA, 2005). It is true that these countries benefit from the higher aggregate world growth that the US current account deficit generates, but it is both counter-intuitive and unfair that a fairly poor country like China should be helping to finance the consumption of a very rich country like the US. The case could be made that these resources would be far better invested in China itself or in other developing countries. From the short-term perspective of the continued financing of the US current account deficit, however, it is an important issue whether Asian countries will continue to accumulate such high levels of foreign exchange reserves and continue to invest such a high proportion into US dollar dominated assets.

However, the main source of funding for the growing US current account deficit is private foreign investments channelled through international capital markets (see detailed discussion below; Truman, 2005). Indeed, it is the very large growth of the US domestic financial markets, particularly of private financial markets, that have enabled such large US current account deficits.<sup>1</sup> Some distinguished analysts (Greenspan, 2004) seem to take comfort from this, believing that financial market flexibility and depth reduce the risk of crisis and a disorderly adjustment of the dollar and the US economy. However, many others (Rubin *et al.*, 2004; Summers, 2004; White, 2006) explicitly or implicitly fear that the dominance of private financing of the US current account deficit, and the history of boom-bust patterns of credit levels and asset prices (including exchange rates) could imply that international financial markets could either trigger a disorderly adjustment of the dollar or deepen it, causing undesirable effects on the US and the world economy. Undoubtedly, these boom-bust patterns of behaviour have caused both costly crises and negative impacts on the real economy in many developing and developed countries in the recent past. There is clearly some risk that they could – at some point – precipitate or deepen a rapid fall in the dollar. The fact that the private flows financing the US deficit are to such an important extent short term, and that a fairly large very short-term “carry trade” plays a big role in this financing increases such risks. As Eichengreen and Park (2006) point out, foreign central banks would have an interest in insuring continued financing of the US current account deficit in such a scenario, to avoid its recessionary effects on their economies – and could increase their purchases of US assets to replace private investors. However, they would have an interest in avoiding capital losses on their dollar reserves, and could be tempted to diversify quickly out of them.

The negative impact of such a disorderly adjustment in the United States on developing countries could be very severe, particularly through the trade, but also through the financial channel, and even more so if these were to interact perversely. The latter could, for example, occur if slower growth or contraction of economic growth triggered wealth effects that implied falling asset prices (in the US and

---

<sup>1</sup> Though it is true that during some periods (e.g. first quarter of 2004), recorded increases in official assets covered the US current account balance, private capital inflows were 2.5 times official inflows.



elsewhere). In a context of highly leveraged financial institutions and high levels of US domestic debt (especially household debt), this could lead to a “flight of quality”, away from developing economies, even though these latter countries – especially, but not only, in Asia – have very significantly reduced their vulnerability to external financial shocks by their large accumulation of reserves. However, even in Asia, important sources of financial fragility persist, for example in the high level of non-performing loans and low capital adequacy ratios of the Chinese banking system (Griffith-Jones and Gottschalk, 2006). Furthermore, the explosive growth of derivatives and their increased use for currency speculation and especially for “carry trade” also in emerging markets may pose new – and yet not fully understood – sources of financial vulnerability for developing economies, especially in situations of major stress or unexpected changes. The opacity of these transactions and the even greater difficulties of regulating them (as they operate offshore) make the existence of these markets potentially more dangerous (UN-DESA, 2005; Dodd and Griffith-Jones, 2006).

Currently, the world economy and most developing countries are growing at a rapid pace. However, increasing imbalances, and especially the growing US current account deficit as well as its net debt position, pose increasing concerns about its sustainability and potentially large negative effects of a possible sharp fall in the dollar and the US deficit. The fact that policymakers seem comfortable with current trends, and are therefore unwilling to take necessary actions – over which there is much consensus – is a further source of worry. This poses a number of challenges. In the long term, there may be a need for a new international monetary system that makes such large and potentially damaging imbalances less likely and that would be more equitable. There is also an immediate clear need for more international policy cooperation and coordination to achieve smooth global rebalancing. A larger and more representative IMF should perhaps have a far larger and stronger role in policy coordination amongst major economies, thus playing a far more active role in managing the world economy (Ocampo, 2001; King, 2005; de Rato, 2004). In spite of the problems of insufficient representation of developing (especially Asian) countries, which requires urgent attention, the IMF is currently the only institution where developing countries could have a voice on global macroeconomic policy consistency and where they already have some voice on macroeconomic imbalances in large economies.

However desirable it is for the international monetary system to be modified, and for a coordinated international response to the adjustment of global imbalances to start as soon as possible – as well as of course for the US to begin addressing its triple deficits – there is a great likelihood that there will be limited movement on these fronts. We will therefore focus more below on what developing countries themselves can do to further reduce their potential vulnerability to a disorderly adjustment of current imbalances.

In what follows (Section 1) we will look in more depth at US debt and global imbalances, focusing on the US international investment position, on the link in the US between foreign exchange reserves and liquidity creation and on the link between developing countries' savings, their increased accumulated reserves and US credit expansion. In Section 2, we analyse the risks in failing to address the US foreign debt problem and Section 3 focuses on measures to be taken, mainly by developing countries themselves, to mitigate risks to them of a disorderly adjustment of US imbalances or other possible shocks.

## 1 US Debt and Global Imbalances

Concern about global imbalances has been building since the 1990s and analysts from a variety of disciplines have called attention to aspects of the problem ranging from the unsustainability of the US current account position to the role of “under” and “over” saving rates in deficit and surplus countries.<sup>2</sup> There are, however, some critical issues relating to the build-up in US debt and other global imbalances that we believe have yet to be fully explored. Many analysts assume, for example, that imbalances arise as a result of developments and policies within national economies. We argue that imbalances – including “under” and “over” saving – also result from interactions at the global level and are at least partially shaped by pressures generated by the current international monetary and payments systems. Thus we begin with a discussion of the ways in which a fiat currency and privatised payments system under the guardianship of a few wealthy developed countries and their private multinational financial institutions have, in our view, contributed to the problem.

---

<sup>2</sup> For earlier analyses of the problem, see Blecker (1999), D’Arista (1999), Godley (1999), Greider (2000) and Plender (2000).

### *Monetary Arrangements and Global Economic Responses*

Most cross-border payments are denominated in the national currencies of relatively few so-called strong currency countries. Other countries – those whose currencies are not widely used in international transactions or held as external savings – “earn” the means of payment by exporting goods and services to strong currency countries or borrow strong currencies on the expectation that current account surpluses to the countries that issue them will provide the external savings needed to service their debts. While this underlying preference toward export-led growth was not initiated by the shift in global monetary arrangements in the 1970s, that shift (and the pricing of oil in dollars) augmented support for such policies in many developed countries while moving export capacity to the centre of development policy. The International Monetary Fund prescribed export-led-growth policies for all developing and emerging economies after the financial crises of the 1980s and 1990s, despite little evidence that strong currency countries other than the US were willing to accept the current account deficits needed to ensure their success.

Meanwhile, the role of key currencies as means of payment ensures that a few strong currencies also have become stores of value in the global economy in holdings of both private investors and official institutions. The rapid growth in key currencies as stores of value since the 1970s is recorded in the international investment positions of countries and the Bank for International Settlements’ (BIS) reports of holdings in external markets.<sup>3</sup> The US international investment position is arguably the most important record of the growing importance of the stock of holdings of external savings but, while many analysts focus on the evidence it provides of the rising external debt of the United States, the impact of that debt on the US domestic and global economies is less widely discussed. The following examination of the US international investment position sets the stage for our analysis of its impact on the United States and global economies.

---

<sup>3</sup> Many third party transactions in key currencies take place in external (“Euro”) markets and external savings in those currencies are held there as well. One result is that the value of key currencies can be determined by transactions that do not finance the current accounts of the countries that issue them and do not change these countries’ international investment positions.

### ***The US International Investment Position***

The status of the US as the world's dominant importer of both goods and capital is relatively recent. When Wall Street crashed in October 1987, US residents still owned more assets abroad than the amount of US assets owned by foreigners. In other words, the US international investment position was still positive, as it had been since World War I. But the increased borrowing required to finance growing trade deficits had already taken a toll on that once-strong creditor position. By 1989, the US became a net debtor nation and its external (i.e. foreign) liabilities continued to mount throughout the 1990s. At year-end 1996, the net debt reached a record \$548 billion (with assets at market values). One year later, it crossed the \$1 trillion threshold – equivalent to 13 percent of gross domestic product – and by the end of 1998 rose to \$1.5 trillion or 18 percent of GDP.

The volume of capital flows to and from the US increased after 1998 and, in 2004, set new records despite concerns about the willingness of foreigners to continue financing the nation's ongoing current account deficits. But, at the end of that year, the magnitude of the gap between a record inflow of new investment in US assets by foreigners (\$1,440 billion) and an equally unprecedented outflow for new foreign investment by US residents (\$855 billion) was masked by valuation adjustments.<sup>4</sup> The result was a relatively modest \$170 billion increase in the net value of US liabilities to foreigners between 2003 and 2004 and a miniscule increase in the net negative investment position from 21.6 percent of GDP in 2003 to 21.7 percent in 2004 (see Tables 1 and 2).

As the data show, the net inflow of foreign investment in 2004 was much larger than the amount needed to finance the US current account deficit (\$670 billion) and the excessive inflow of foreign savings resulted in a spillover back into the global economy as US residents recycled the surplus capital they could not use productively at home.<sup>5</sup> Nevertheless,

---

<sup>4</sup> Dollar depreciation in this period pushed up the value (measured in appreciating foreign currencies) of outstanding US assets abroad by \$821 billion while price changes contributed only \$406 billion to the rise in the much larger stock of US assets held by foreigners (see Table 2).

<sup>5</sup> It is often argued that the inflow of foreign savings in excess of the amount required to finance the US current account deficit was triggered by the large outflow of US investment abroad in 2004. However, the size and composition of private capital flows suggests that, as former Federal Reserve Board Chairman

**Table 1 US International Investment Position, Year-End 2003-2004<sup>1</sup>**(in billions of dollars and percentage of GDP<sup>2</sup>)

Net Creditor/Debtor Position (-)				Change: 2003-2004		
2003		2004		Financial Flows	Valuation Adjustments <sup>3</sup>	Total Change
amount	%	amount	%	amount	amount	amount
-2,372	21.6	-2,542	21.7	-585	415	-170

*Notes:*<sup>1</sup> Direct investment positions at market value.<sup>2</sup> GDP in current dollars.<sup>3</sup> Includes price changes, exchange rate changes, changes in coverage, statistical discrepancies and other adjustments to the value of the assets.*Source:* US Department of Commerce, *Survey of Current Business*, Bureau of Economic Analysis, US Department of Commerce, Washington D.C.

even as dollar devaluation moderated the increase in the net negative investment position, the dollar value of foreign-held assets as a share of US GDP rose more rapidly than the rate of US growth. In 2004, foreign-held assets climbed to 106.6 percent of US GDP, up from 97.0 percent at year-end 2003.

There are important asymmetries in the composition of American residents' foreign holdings versus foreign residents' holdings in the US. One is the fact that the majority of US holdings are direct investments in plant and equipment while the majority of US liabilities to foreigners are marketable financial assets (stocks, bonds, government securities and bank liabilities) that can be liquidated more easily than direct investments. Another is the difference in the holdings of US and foreign public sectors. The central bank and other US government agencies own relatively few foreign assets while foreign official institutions owned some \$2 trillion of US financial assets or about 16 percent of the \$12.5 trillion total stock of foreign investment at year-end 2004. As these asymmetries suggest, the US lacks a pool of liquid foreign assets to sell if there were a decline or abrupt withdrawal of foreign funding, while their already large holdings of US assets might limit

---

Alan Greenspan noted (2003), overfinancing has been a chronic development due to rising rates of return on US assets. Thus, we argue, excess inflows financed US residents' capital outflows in this and other years rather than the reverse.

**Table 2 Selected Components of US International Investment Position, Year-end 2003-2004**  
(in billions of dollars)

	2003	2004	Change 2003-2004		
			Financial Flows	Valuation Adjustments	Total Change
<i>US-owned assets abroad</i>	8,297	9,973	855	821	1,676
US government assets	268	273	-4	9	5
Official reserve assets	184	190	-3	9	6
Other assets	85	84	-1	0	-1
US private assets	8,028	9,700	860	812	1,671
Direct investment abroad	2,718	3,287	252	317	569
Foreign securities	2,954	3,437	102	381	483
Bonds	874	917	19	23	42
Corporate stocks	2,079	2,520	83	358	441
Non-bank claims	597	802	149	56	205
Claims reported by banks	1,759	2,174	356	59	415
<i>Foreign-owned assets in the US</i>	10,669	12,515	1,440	406	1,846
Foreign official assets	1,567	1,982	395	20	415
US government securities	1,192	1,500	311	-4	307
Other US assets	375	482	84	24	108
Other foreign held assets	9,102	10,533	1,045	386	1,431
Direct investment	2,457	2,687	107	123	230
US Treasury securities	543	640	107	-11	97
Other US securities	3,408	3,988	370	210	580
Corporate and other bonds	1,707	2,059	309	43	352
Corporate stocks	1,701	1,929	61	167	228
US non-bank liabilities	454	581	124	3	127
US liabilities reported by banks	1,921	2,305	323	61	384
US currency	318	333	15	0	15

*Note:*

2003 figures are revised; 2004 figures are preliminary. Valuation adjustments include changes in prices, exchange rates, coverage, statistical discrepancies, and other adjustments to the value of assets. Direct investment is at market value. Numbers may not add due to rounding.

*Source:* US Department of Commerce, Bureau of Economic Analysis, June 30, 2005.

other countries' ability or willingness to cushion withdrawals with loans or further purchases.

In 2004, the net inflow of foreign official funds (\$395 billion) broke the previous year's record (\$278 billion) and focused attention on these investors as a major source of capital flows to the US. But their contribution to the total inflow was only 27.4 percent. The much larger \$1,045 billion of private foreign investment better illustrates the context and incentives for the record volume of flows in that and other years. One incentive was the rapid expansion in global liquidity that, the BIS argued, was created by stimulative monetary policies in industrial countries in response to the recession of 2001-2002 (BIS, 2004a). Ample liquidity and historically low interest rates had sparked a search for yield that, as the Federal Reserve began its measured increases in policy rates, shifted borrowing in dollars for carry trade transactions to borrowing in yen and renewed speculative interest in US financial assets.<sup>6</sup>

The excessive scale of foreign private inflows and the outflows of US investment they financed increased incentives for a rising inflow of foreign official investment in 2004 as well. Sizeable spillovers of investment into emerging economies – again, in response to the search for yield – prompted monetary authorities in these countries to step up the level of intervention to curb currency appreciation and moderate the growth of money and credit in their domestic economies. But the dollars they purchased found their way back into US financial markets in the form of foreign official purchases of US Treasury and agency securities – investments that contributed to further increases in liquidity in US and global markets and additional downward pressure on interest rates.<sup>7</sup>

Former Federal Reserve Board Chairman Alan Greenspan has asserted that capital flows are “exact mirror images of current account balances”. But he also acknowledged that rising rates of return on US

---

<sup>6</sup> Cross-border carry trades involve borrowing in a low-yielding currency and investing in assets denominated in a higher yielding currency. Beginning in the mid-1990s, significant increases in carry trade transactions have helped drive up activity in both credit and foreign exchange markets and have played a major role in the depreciation of funding currencies and appreciation of investment currencies.

<sup>7</sup> The level of activity in external markets in 2004 also reflects the extraordinary build-up in global liquidity in this period. Cross-border and foreign currency claims of BIS reporting banks grew by \$2.28 trillion – more than twice the change in 2003 and substantially larger than the previous record increase of \$1.33 trillion in 1997 (BIS, 2005b).



assets “resulted in private capital investments from abroad that chronically exceeded the current account deficit” (Greenspan, 2003, p. 3). What he failed to add is that these excessive investments from abroad expand the supply of credit and have, as their mirror image, rising levels of debt owed by domestic sectors.<sup>8</sup> The link between them is critical in determining whether or not current levels of either external or domestic debt are sustainable because both have the potential to constrain global as well as US domestic demand.

### ***US International Financial Transactions in 2005***

The comparison of US international financial transactions in 2004 and 2005 in Table 3 shows that foreign private investment was \$26.6 billion higher and foreign official investment \$174.0 billion lower in 2005 than for the same period in the previous year.<sup>9</sup> As the rise in foreign private investment in Treasuries (\$89.8 billion) and other US securities (\$119.4 billion) suggests, new investments by this sector reflected an increase in cross-border carry trades that tended to strengthen the dollar against the yen even as intervention by the Bank of Japan virtually ceased. Meanwhile, the \$146.9 billion drop in US bank liabilities to foreigners constrained the sources of funding for cross-border carry trade transactions by these institutions as US banks’ foreign claims fell by \$137.9 billion. The overall outflow by US residents was \$363.8 billion smaller than in 2004 with most of the drop (\$230.5 billion) in new foreign direct investment.

The role of carry trades in driving international capital flows appears to have intensified in the fourth quarter of 2005. The BIS notes anecdotal reports of a surge in such transactions by hedge funds using short positions in yen and other low interest rate currencies to fund long dollar positions. But even as US interest rates rose, the search for

---

<sup>8</sup> Foreign savings have supplied between 10 and 20 percent of total lending in US credit markets in every year since 1994. In 2004 and 2005, foreign private and official investment accounted for 26.8 and 25.7 percent of total lending respectively and helped push the debt of domestic non-financial sectors from 189.8 percent of GDP in 2001 to 211.4 percent at year-end 2005 (Federal Reserve System, 2005).

<sup>9</sup> The data in Table 3 are flows and do not include changes in valuation. Data on valuation changes for stocks of US assets abroad and foreign assets in the US are available about half a year after the end of the previous year.



**Table 3 US International Financial Transactions 2004-2005**

(in billions of dollars; seasonally adjusted)

	2004	2005	Change
<i>US owned assets abroad, net (increase/financial outflow[-])</i>	-855.5	-491.7	363.8
US government assets	4.0	21.7	17.7
US official reserve asset, net	2.8	14.1	11.3
Assets other than official reserve assets	1.2	7.6	6.4
US private assets, net	-859.5	-513.4	346.1
Direct investment	-252.0	-21.5	230.5
Foreign securities	-102.4	-155.2	-52.8
US claims on unaffiliated foreigners reported by US non-banking concerns	-149.0	-118.5	30.5
US claims reported by US banks (not included elsewhere)	-356.1	-218.2	137.9
<i>Foreign owned assets in the US (increase/financial inflow[+])</i>	1,440.1	1,292.7	-147.4
Foreign Official assets in the US, net	394.7	220.7	-174.0
US Treasury securities	311.1	177.2	-133.9
Other US assets	83.6	43.5	-41.1
Other foreign assets in the US, net	1,045.4	1,072.0	26.6
Direct investment	106.8	128.6	21.8
US Treasury securities	106.9	196.8	89.8
US securities other than US Treasury securities	369.8	489.2	119.4
US liabilities to unaffiliated foreigners reported by US non-banking concerns	124.3	62.2	-62.1
US liabilities reported by US banks (not included elsewhere)	322.6	175.7	-146.9
US currency	14.8	19.4	4.6
<i>Net financial outflow (-)/inflow (+)</i>	584.5	801.0	216.5
<i>Capital account transactions, net</i>	-1.6	-5.6	-4.0
<i>Statistical Discrepancy (sum of above items with sign reversed)</i>	85.1	9.6	-75.5
<i>Memo item:</i>			
<i>Balance on Current Account</i>	-668.1	-804.9	-136.8

Source: US Department of Commerce, Bureau of Economic Analysis, www.bea.org

yield continued to push up equity markets in emerging economies and lowered their sovereign bond spreads. In the third quarter of 2005, foreign portfolio investment in emerging economies hit near-record levels and rebounded in November after a short sell-off in October (BIS, 2005c).

The build-up in liquidity in the US, Japan and many emerging economies intensified in 2005 and appears to have perpetuated the round-robin, pro-cyclical pattern of international capital flows. For example, the BIS noted that Japan's bull market in equities had become the favourite destination for foreign investors (BIS, 2005c). But the currency appreciation that might have been associated with foreign investment in equities was offset by lending in yen for carry trade investments in dollar assets. Thus with flows into one or more segments of a national market spilling out and into other national markets – even returning, in some cases, to the markets from which flows had originated – excess liquidity was distributed throughout the global economy, exerting ongoing, downward pressure on interest rates.

### ***Foreign Exchange Reserves and Liquidity Creation***

Clearly, the private sector has been and remains the driving force in international capital flows and a major source of funding for US credit expansion. As the 2005 BIS *Annual Report* noted, dollar holdings of foreign official institutions in the US and in offshore deposits accounted for only about a third of the long-dollar position of non-US residents. Nevertheless, these institutions and their reserve holdings play a critical role in the expansion – and potential contraction – of global liquidity.

A key element of the currency-based international monetary system that superseded Bretton Woods is that, unlike gold, foreign exchange reserves are interest-bearing assets denominated in a strong currency.<sup>10</sup> Dollar reserves held in the US are invested in US Treasury securities and are liabilities of the Treasury. They are not included in stocks and flows of the US central banks' liabilities, are outside its direct influence and, thus, constitute a system for parallel open market operations with the same liquidity-creating powers as those of the Fed. Moreover, changes in reserve holdings respond pro-cyclically to Federal Reserve

---

<sup>10</sup> Central banks also held foreign exchange assets as international reserves in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries and their use expanded after 1922 as a means of augmenting limited gold supplies. The fact that returns on these assets increase reserve holdings was seen then (as now) as an attractive feature.

initiatives, amplifying the impact of a given policy objective.

For example, when the dollar depreciates because the Federal Reserve has taken policy actions to lower US interest rates by buying Treasuries in the open market, foreign official institutions buy dollars with their own currencies in their own or in external markets to prevent their currencies' appreciation and to push up the value of the dollar.<sup>11</sup> The dollars are then invested – usually in US Treasuries – and increase foreign holdings of dollar reserves. The repatriation of dollars amplifies the direction and impact of the Fed's policy initiative by increasing downward pressure on interest rates and supplying additional liquidity. Conversely, when the Fed tightens by selling government securities, foreign central banks may be motivated to sell from their holdings and use the proceeds to buy their own currencies to moderate dollar appreciation and downward pressure on their own exchange rates – again, amplifying the impact of the Fed's actions.<sup>12</sup>

If the objective is to counter the impact of Fed policy on exchange rates, the outcome in both cases is likely to be the opposite of that intended. Foreign central banks' attempts to change exchange rates by buying and selling their own and other currencies usually fail because the resources available for intervention are dwarfed by the size of global market flows. But in the context of the US market, foreign official purchases and sales of US Treasuries are comparable to or larger than those of the Fed and can significantly change conditions in US domestic credit markets. Since the 1970s, foreign official purchases have exceeded Federal Reserve purchases in many quarters and years and, in time, their holdings grew larger than the Fed's. Thus the fact that intervention culminates in investment decisions that reinforce (rather than counter) Fed policy initiatives is an equally potent factor in undercutting the effectiveness of intervention in exchange markets.

Recent reserve accumulations by emerging economies differ from earlier intervention initiatives by advanced economies in that dollars are acquired in payment for goods, services and financial assets and are exchanged for the home currency in domestic rather than external markets. Their reinvestment in US financial assets adds liquidity to US

---

<sup>11</sup> Because the Federal Reserve discourages holdings of foreign currency assets in the US, the exchange of foreign currencies for dollars must take place offshore. Thus, intervention involves a repatriation of dollars held outside the US.

<sup>12</sup> Foreign official sales of US Treasuries in the early 1980s contributed significantly to the overshooting of dollar interest and exchange rates.

credit markets and may even counter Fed initiatives to raise interest rates and constrain credit growth. Given that one objective of reserve accumulation is to raise the value of the dollar, the reinvestment of dollars in US assets can be counterproductive since it amplifies the easier market conditions that foster depreciation while impeding the shift to tighter conditions that would attract additional private foreign investment and raise the dollar's value. However, by bolstering the availability of credit and thus contributing to conditions that support import purchases, these investments help maintain access to the US market – a major objective of countries that favour export-led growth.

Monetary analysts and the Fed itself have tended to ignore the implications of these developments, but the size of the additions to dollar reserves in the years 2002 through 2004 make clear the need for concern about the central bank's ability to offset their impact on US interest rates and credit expansion. And, given their size, pressures and incentives to re-export that liquidity are inevitable. Thus, intervention and reserve accumulation have played a substantial role in reinforcing the round-robin pattern of international capital flows in recent years. Moreover, it is likely that foreign currency reserves' highly pro-cyclical role in amplifying the expansion and contraction of liquidity in the market for the reserve currency would persist even if the euro, yen or other currencies replaced the dollar.

### ***“Under” and “Over” Saving in the Context of a Currency-Based International Monetary System***

As we have argued, using national currencies as an international store of value generates debt in key currency countries. The investment of external savings in the credit instruments of that country tends to lower the cost and expand the availability of credit as residents sell assets from their portfolios to foreign investors and seek to replace those assets with comparable investments. If flows are not large, they can be sterilised by issuing central bank liabilities to resident investors to mop up excess liquidity. The US, however, has never used that tool and, in any event, flows had grown too large by the end of the 1970s to be effectively sterilised by using traditional bank-centred quantity controls such as increases in reserve requirements.<sup>15</sup> In addition, the rapid pace of financial

---

<sup>15</sup> Moreover, foreign inflows were increasingly used to purchase financial assets in secondary markets rather than invested in bank deposits, further weakening the

liberalisation and restructuring in the 1980s – and the ongoing relaxation of prudential lending standards – exacerbated conditions for the build-up in debt.

The US household sector incurred the largest increase in debt in the decade 1995-2005 and this increase was associated with a fall in the saving rate and a rise in consumption as a share of total aggregate demand.<sup>14</sup> Given its availability and favourable terms, many consumers viewed the cushion provided by access to credit as a substitute for savings – particularly after 2002 when borrowing was used both to purchase appreciating residential property and extract equity from property for spending. But businesses, too, took advantage of low rates in bond markets to borrow for stock buy-backs that tended to strengthen the bottom lines of managers rather than those of the firms they managed.

US monetary policy was complicit in these developments: maintaining interest rate differentials favourable to the dollar to attract capital inflows in the latter half of the 1990s, allowing foreign savings to pump up credit growth and create asset booms<sup>15</sup> and failing to moderate imbalances in credit flows with existing quantitative tools (where possible) or insistence on prudential norms. Nowhere in the public pronouncements of the central bank was there mention of concern about credit expansion or the effectiveness of the existing means to control it. Suggestions that financial institutions follow prudential norms were offered only after credit-fueled bubbles had already reached unsustainable levels.

Emerging economies, too, have experienced high levels of credit growth and spending since the 2002 recovery. In some of these countries, the build-up in global liquidity has resulted in rising consumption. In others – China, for example – credit expansion has bolstered spending on fixed investment.<sup>16</sup> For many emerging economies, high saving rates and lagging consumption were re-enforced by the inability to pay or receive their own currencies in external transactions. Given this constraint, they

---

Fed's ability to sterilise them with existing, bank-centred monetary tools.

<sup>14</sup> Debt of the US household sector rose from 65.7 percent of GDP in 1995 to 92.1 percent at year-end 2005. The debt of the federal government fell over the same period from 49.2 percent of GDP to 37.7 percent, while that of non-financial businesses rose from 55.6 percent to 66.8 percent (Federal Reserve System, 2005).

<sup>15</sup> For a discussion of the link between credit growth and asset booms, see Borio and Lowe (2002).

<sup>16</sup> Spending for fixed investment in China accounts for 50 percent of total aggregate demand (White, 2006).

adopted policies that channelled savings into the production of exports. Moreover, faced with the need to maintain low prices and prevent exchange rate appreciation to remain competitive in the global economy, they encouraged households to save as an alternative to higher wages and government-provided safety nets. Imbalances arose as smaller shares of households' income and of the pools of credit they generated were channelled to these savers.

Equally important, frequent crises encouraged developing countries to accumulate reserves. The extraordinary build-up in reserves by emerging economies over the past decade is partly indicative of the pressures to use surplus earnings from trade to construct a cushion against those shocks. But to do so, this implies lending their savings to strong currency countries rather than invest them in their own economies. This imperative is a constraint on demand in these "high saving" countries as they amass idle resources to cover needed imports and debt service in the event of future financial crises.<sup>17</sup>

The profit-seeking strategies of the large private financial institutions that dominate the international payments system intensified emerging economies' vulnerability to financial crises. As more developed and developing countries adopted capital account liberalisation in the 1990s, the valuation of currencies increasingly came to depend on the arbitrage transactions of these institutions between different financial instruments and markets rather than on trade (Cornford, 2005). Changes in interest rate differentials on assets denominated in different currencies now play a disproportionate role in driving shifts in capital flows and currency values, exacerbating the problems of monetary control on a global scale. Exposed to this dynamic, emerging economies lost the ability to influence the build-up of external debt in their own economies and, again, were forced to respond by amassing offsetting assets in the form of foreign exchange reserves to cover their exposure. The growth in their foreign exchange reserves since the Asian crisis forged a link between "oversaving" at the international level and widening global imbalances. On the positive side, higher reserves have significantly decreased developing countries' vulnerability to crises.

---

<sup>17</sup> While foreign exchange reserves held on the books of central banks provide support for expansions of money and credit in the domestic economy, monetary authorities in these countries must sterilise some or all of the build-up in reserves by selling holdings of domestic assets or issuing central bank liabilities to prevent overexpansion.

## 2 Risks in Failing to Address the US Foreign Debt Problem

While many agree that US deficits are unsustainable, there is no consensus view on what set of circumstances or particular scenario might trigger a shift in the build-up of US indebtedness. In the following sections, we look at some of the factors in both the US and emerging economies that might trigger a shift and the risks we see in failing to address the problem.

### *The US Economy: Risks and Potential Consequences*

As former Chairman Greenspan (2003) noted, the sustainability of US trade deficits depends on whether and for how long foreigners will be willing to increase their holdings of dollars. In the case of the foreign private sector, some part of the answer will depend on interest rate differentials favourable to the dollar and opportunities for leveraged investment strategies such as carry trades that will continue to make investments in short-term dollar assets attractive. For official investors with a longer-term outlook, the issue is more complicated. First, there is the build-up of huge imbalances in reserve ownership with Japan and Emerging Asia holding \$2,651 billion or 64 percent of the global total at the end of 2005 (Table 4). The size of their holdings has prompted worries that one or more of these countries might decide to change the currency composition of their portfolios of reserves and that this could precipitate a sell-off by other official and private investors (IMF, 2004).

It is always possible that political developments could prompt sales of dollar reserves, but depreciation is thought to be the most likely trigger for diversification. Yields apparently do influence portfolio choices of official investors. In fact, after strong growth in the 1990s, the dollar share of global reserves fell after 2000 and slipped below 65 percent at the end of 2004, down from 69.2 percent at year-end 2003 (Table 5). While depreciation of existing holdings was certainly a factor in lowering the dollar's share, the increase in euro deposits of OPEC countries suggests that depreciation had also begun to influence decisions about new reserve investments (BIS, 2004a, 2004b).

Sales of foreign exchange assets denominated in one of the major currencies have tended to be reinvested in assets denominated in another. But it is possible that – like some Asian private investors who have withdrawn foreign currency deposits in international banks for reinvestment in their own currencies at higher interest rates – foreign central banks might

**Table 4 Annual Changes in Official Foreign Exchange Reserves of Selected Countries**  
(in billions of dollars at current exchange rates)

	1998	1999	2000	2001	2002	2003	2004	2005	Out- standing end-2005	% of Total
Total	27	140	159	111	356	620	720	422	4,171	100
<i>Industrial countries</i>	-33	55	60	3	112	219	196	-22	1,292	31.0
US	5	-4	-1	-2	5	6	3	-5	38	0.9
Euro area	-33	-39	-9	-11	8	-28	-7	-13	167	4.0
Japan	-5	75	70	41	64	201	172	5	829	19.9
<i>Emerging Asia<sup>1</sup></i>	63	79	53	76	174	264	363	250	1,822	43.7
China	5	10	11	47	74	117	207	209	819	19.6
Hong Kong SAR	-3	7	11	4	1	7	5	1	124	3.0
India	3	5	5	8	22	31	28	6	131	3.1
Korea	32	22	22	7	18	34	44	12	210	5.0
Singapore	4	2	3	-5	7	14	17	4	115	2.8
Taiwan, China	7	16	1	16	39	45	35	12	253	6.1
<i>Latin America<sup>2</sup></i>	-10	-9	2	0	4	31	21	25	217	5.2
Argentina	2	2	-2	-10	-4	3	5	5	23	0.5
Brazil	-8	-8	-2	3	2	12	4	1	54	1.3
Chile	-2	-1	1	-1	1	0	0	1	17	0.4
Mexico	3	-1	4	9	6	8	5	10	73	1.8
<i>Middle East<sup>3</sup></i>	<i>n.a.<sup>5</sup></i>	<i>n.a.</i>	11	3	2	7	14	12	80	1.9
<i>Central and Eastern Europe<sup>4</sup></i>	7	1	19	13	37	51	69	70	335	8.0

*Notes:*

<sup>1</sup> Asia: countries shown plus Indonesia, Malaysia, Philippines and Thailand.

<sup>2</sup> Latin America: countries shown plus Colombia, Peru and Venezuela.

<sup>3</sup> Middle East: excluding Iran and Iraq. For Saudi Arabia, excluding investment in foreign securities.

<sup>4</sup> Central and Eastern Europe: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia and Slovenia.

<sup>5</sup> Not available.

Source: BIS, *Annual Report*, Bank for International Settlements, Basel, various issues.



**Table 5 Outstanding Official Foreign Exchange Reserves**

(year-end; billions of current dollars and percentages)

	1990		1996		1998		2000		2003		2005	
	amount	%	amount	%	amount	%	amount	%	amount	%	amount	%
Total reserves	790	100	1,518	100	1,636	100	1,909	100	3,010	100	4,171	100
Industrial countries	482	61	707	47	690	42	775	41	1,104	37	1,292	31
Developing countries	308	39	811	53	946	58	1,134	59	1,906	63	2,879	69
Dollar reserves	432	55	1,042	69	1,145	70	1,451	76	2,082	69	n.a. <sup>1</sup>	n.a.
Non-dollar reserves	357	45	476	31	492	30	458	24	929	31	n.a.	n.a.

*Note:*<sup>1</sup> Not all allocated. Dollar reserves were 64.7 percent of the total allocated.*Source:* BIS, *Annual Report*, Bank for International Settlements, Basel, various issues.

simply liquidate some portion of their reserve holdings for such holdings for such purposes as reducing domestic and external government debt or financing development projects. As discussed above, a possibly greater risk is that private investors – or private and official investors at the same time – could shift their investments from dollars into other currencies.

Meanwhile, some of the risks that could cause a shift in the build-up of US debt could originate in the home economy rather than externally. In the aftermath of the recent run-up in domestic debt and the probability that home prices will level-off or fall, US households could reach the limits of their capacity to borrow – the more so since increases in disposable income continue to lag both GDP growth and net borrowing in the aftermath of the recent recovery. If borrowing slows, spending is likely to slow as well and that, in turn, will trigger a slowdown in imports – an outcome that some might view as a soft landing in terms of reducing the current account deficit.

But slower import growth would also shrink the inflow of foreign capital. Losing inflows of funding from foreign current account surpluses would contract the supply of new credit to US consumers and businesses and that, in turn, would tend to raise interest rates to levels needed to attract an offsetting supply of domestic savings. The shift in the availability and terms of credit would provide incentives to save but at the cost of an additional constraint on spending and an even

sharper drop in imports.<sup>18</sup>

Should these or other developments trigger a shift in the build-up of US indebtedness, one of several unwelcome scenarios might follow. For example, a scenario in which declining housing prices halt or shrink credit growth and imports suggests a period of stagnation in both the US and global economies like the long slowdown in growth that Japan experienced in the 1990s.<sup>19</sup> A slowdown in overall foreign investment would contribute to that ongoing stagnation but could also result in significant deflationary pressures.

Given the extraordinary level of support foreign savings have provided for the build-up in debt by the US government and private sectors since the 1980s, any significant withdrawal of that support would not only constrict US credit availability but lower prices of US financial assets as well. The enormous share of dollar assets held by both private and official foreign investors would ensure that losses would be shared by both borrowers and lenders, rapidly spilling over into markets for goods, services, and financial assets in virtually every other country in the world. Of particular concern would be the deflationary impact of a contraction of global reserves as dollar reserves held by central banks as backing for domestic credit fell in value.

The worst-case scenario would be an actual drawdown of the stock of foreign investment in US financial assets. Asset sales by foreigners could drive down prices to levels that would shrink the net worth of households in the US and other countries, erode the capital of financial institutions, and precipitate a more rapid slide into deflation. Should such a scenario develop, the extent of damage to economies and financial systems would depend on the size and rapidity of the rush to exit and/or the nature and effectiveness of counter-cyclical responses. Again, the size of foreign private and official dollar holdings suggests that an effective counter-cyclical response would require the coordinated participation of many countries and, in particular, that of Japan and China.

---

<sup>18</sup> Rising US interest rates might attract speculative private foreign inflows but their effect on asset prices would quickly deflate in the context of waning aggregate demand.

<sup>19</sup> The potential for a drop in US housing prices to precipitate a significant slowdown in spending is exacerbated by the fact that residential mortgages account for over 30 percent of credit market debt of all US non-financial sectors and almost all types of financial institutions hold mortgage loans (Federal Reserve System, 2005). Falling prices for homes will lower households' net worth directly and through the feedback effect of downward pressure on prices of mortgage paper held by the institutions in which households' savings are invested.

### ***Emerging Economies: Risks and Potential Consequences***

As mentioned above, a sharp slowdown in US growth (especially of consumption), or worse its contraction, could significantly lower world aggregate demand unless sufficient compensatory expansion of aggregate demand took place in the rest of the world, both developed and developing. Clearly, the need for such expansionary policies now – and even more in the case of a rapid slowdown in US growth – is essential. This should include more expansionary macroeconomic policies especially in Europe but also in Asia and, where feasible, in Latin America and Africa. Greater reliance on a domestic demand-based growth strategy, especially in Asia but also in Latin America, would reduce excessive current account surpluses, and reduce vulnerability to a slowdown in US growth. As discussed below, space should be opened – both internationally and domestically – for developing countries to be able to adopt counter-cyclical policies, both at the macroeconomic and financial level. Rules like the Chilean one, where there is a structural level of fiscal surplus – that is fiscal results are explicitly allowed to vary counter-cyclically – and thus fiscal deficits are permitted if the economy slows down, could perhaps be usefully applied in other developing countries. Naturally, relatively low levels of debt are desirable to allow such fiscal expansion in times of slow growth. Similarly, monetary policy should operate counter-cyclically and symmetrically, tightening in times of excessive credit and economic growth and radically easing in times of slower credit and economic growth. In this sense, it is for example surprising that Brazil has maintained such a restrictive monetary policy in times of rather weak growth. Institutions like the IMF and the World Bank should encourage countries to adopt such counter-cyclical fiscal frameworks, as well as provide low-conditionality compensatory financing where this is required to make such policies feasible.

Even though such measures are taken, unfortunately a sharp slowdown in the US economy may well not be compensated by the rest of the world. There would be two transition channels to the developing world via trade and finance as well as their interactions. To an important extent, this would be transmitted via lower demand for developing country exports, initially especially to the US. Both volumes and prices (especially of commodities) would be affected. The existence of high levels of foreign exchange reserves in many developing countries would provide a valuable initial buffer, as they would allow countries to avoid import contraction, and could facilitate more domestic demand-led growth.

Developing countries, reliant on commodity exports – whose prices have risen significantly – would do well to maintain such high levels of reserves and create, as well as possibly expand, domestic Commodity Stabilisation Funds, such as have been successfully implemented in Colombia and Chile.

Any significant fall in the value of the dollar would reduce the value of foreign exchange reserves, if these are largely kept in dollars or dollar dominated securities. The case for a gradual diversification of such official reserves may therefore be desirable, possibly within an international reserve diversification standard to remove some of the uncertainty about the management of foreign exchange reserves, as suggested by Truman (2005). A fall in the dollar would also, however, have a positive effect on lowering the value of external debt of developing countries, much of which is dollar denominated.

If the US were forced to increase US interest rates significantly and if long-term interest rates also rose, there could be a negative effect on highly indebted developing economies. Furthermore, there is empirical evidence (World Bank, 2005) that there is a non-linear effect of US rates on developing country spreads. A higher US interest rates affect the creditworthiness of emerging economies (for example through trade channels), emerging market spreads rise more quickly. The fact that many developing countries have lower debt service ratios than in the past (and higher reserves) may provide some protection, even though a simultaneous reduction in private flows to developing countries and an increase in US interest rates could still be damaging. Continued prudence to contract foreign debt seems highly desirable. Furthermore, as discussed below, this is a good time for developing countries to borrow via instruments that are less vulnerable to exchange rate fluctuations (local currency bonds) and particularly less vulnerable to fluctuations of GDP (GDP-linked bonds).

Other, relatively newer, channels of transmission could emerge. As discussed above, widespread use of derivatives – which can provide valuable hedging protection for companies – may have problematic and unexpected macroeconomic effects, in particular on exchange rates. As is widely recognised, very large open derivative positions were a major factor in the Mexican and East Asian crises. The explosive growth of derivatives since then, especially via offshore or non-deliverable forward markets, may create new and unexpected sources of vulnerability. A not frequently discussed risk, which we wish to highlight, is that in the same way as asset prices in developing countries (such as property and

stock markets) often follow developed countries on the increase, they could also fall sharply in the developing world if these prices declined strongly in the US. Such falls in asset prices in developing economies could not only have negative wealth effects on consumption, but also problematic impacts on financial institutions there, especially banks and their lending.

### 3 How Should the Problem Be Addressed and By Whom?

Many advanced and emerging economies are now experiencing distortions in their domestic markets similar to those that have plagued the US economy. Associated with surges of capital inflows and reserve accumulation, growth in household debt and overheated real estate markets have become notable problems in central and eastern European countries, Russia, Korea, and Thailand. Faced with rising housing prices in the aftermath of the collapse of its credit card bubble, Korea's efforts in tackling the problem by imposing a range of fiscal and monetary restrictions have been particularly aggressive.<sup>20</sup> China has not been troubled by rising household debt but its central bank has begun to tackle the problem of excessive lending to state-owned enterprises (SOEs) by adopting quantitative controls such as changes in reserve requirements, increased interest rates on discounting and lending facilities and "window guidance" (BIS, 2004a).

The BIS gave guarded approval to these initiatives in 2004 and, in the 2005 *Annual Report*, it proposed a macrofinancial stabilisation framework that would use counter-cyclical techniques in implementing both regulatory and monetary policies. This new framework would reintroduce quantitative measures such as liquidity requirements and loan-to-value ratios, set prudential norms relating to the growth in credit or asset prices and "use monetary and credit data as a basis for resisting financial excesses in general, rather than inflationary pressures in particular" (BIS, 2005a, p. 148).

These are all welcome and sensible responses to the problem of widening imbalances in domestic economies and a notable retreat from

---

<sup>20</sup> These restrictions include higher capital gains taxes on sales of multiple residential properties; ceilings on loan-to-value ratios for mortgage loans; limits on or penalties for aggressive credit card marketing; credit ceilings based on the borrower's income; increased loan provisioning by credit card issuers, and requirements that borrowers repay a mandatory portion of their credit card debt (BIS, 2004a).

prescriptions for deregulation and inflation targeting put in place in the two decades following the ascendancy of free market ideology. We support the proposed BIS framework and believe that its adoption by US monetary and regulatory authorities, as well as those in other advanced and emerging economies, is not only desirable but necessary. Below we both develop it further and suggest broader measures to address the flaws in the international reserve and payments system.

As pointed out, the possible rapid and disorderly unwinding of the US current account deficit constitutes an important risk of a significant slowdown in developing economies and some risk for financial stability in these economies.

A key issue therefore is to design policies nationally and internationally to open space for policies (such as counter-cyclical fiscal and monetary ones) that can help sustain growth – if the US economy slows down – and avoid threats to financial stability.

In this section we would like to explore two specific areas: (a) designing market-based counter-cyclical instruments – possibly with support of multilateral or regional development banks – that would smooth debt payments throughout the business cycles, such as GDP-linked bonds and local currency bonds, and (b) issuance by public institutions, such as multilateral development banks, of guarantees with explicit counter-cyclical elements. A third important area is the need for a more counter-cyclical regulatory banking framework, including provisions for future losses linked to loan expansion, and not to actual losses; this dynamic provisioning, already implemented in Spain and Portugal (Ocampo and Chiappe, 2003), allows greater expansion of credit as growth slows down. Modifying Basel II, to reduce its pro-cyclical effect both on international and domestic bank lending, would also be important. As discussed elsewhere, introducing the benefits of diversification could be a useful and correct way to reduce pro-cyclicality.

### ***GDP-Linked Bonds: An Idea Whose Time Has Come***

We will focus particularly on GDP-linked bonds, which could be especially beneficial given the risk of slowdown of world economic growth. There has been an increasing interest in creating bonds linked to the growth of a country's gross domestic product. At the 2006 spring meetings of the IMF and the World Bank, both potential issuers and investors expressed a clear appetite for such bonds. GDP-linked bonds relate part of the annual debt servicing of the bond to the growth of the

debtor country's GDP growth, being lower in times of below-trend growth and higher in times of above-trend growth (Griffith-Jones and Sharma, 2006).

How would such an instrument work? In the simplest terms, it would imply a bond that promised to pay an interest coupon based on the issuing country's rate of growth. For example, assume a country with a trend growth rate of 3 percent a year and an ability to borrow on plain vanilla terms at 7 percent a year. Such a country might issue bonds that pay 1 percent above or below 7 percent for every one percent that its growth rate exceeded or fell short of 3 percent. The country will also pay an additional premium, which most experts expect to be very small (as discussed in greater detail below). Given the requirement for many institutional investors to hold assets that pay a positive interest rate, there may also be a need for a floor beyond which the coupon rate cannot fall.

GDP-indexed bonds could be beneficial for all countries, but especially for developing ones. They would provide two major benefits for emerging-economy borrowers. Firstly, they stabilise government spending and limit the pro-cyclicality of fiscal pressures by necessitating smaller interest payments at times of slower growth – providing space for higher spending or lower taxes – and vice versa. This runs counter to actual experience of many emerging economies, often forced to undertake fiscal retrenchment during slow growth. In this sense, growth-indexed bonds can also be said to disproportionately benefit the poor by reducing the need to cut social spending when growth slows. They could also curb excessively expansionary policy in times of rapid growth. The issuance of such bonds would make it easier for governments to follow “Chilean style” policies of counter-cyclical fiscal policy. Secondly, by allowing debt service ratios to fall in times of slow or negative growth, they reduce the likelihood of defaults and debt crisis. Crises are extremely costly, both in terms of growth, production and in financial terms (Eichengreen, 2004; Griffith-Jones and Gottschalk, 2005).

Simulations show that the gains for emerging-economy borrowers can be substantial. Research by Borensztein and Mauro (2004) shows that if half of Mexico's total government debt consisted of GDP-indexed bonds it would have saved about 1.6 percent of GDP in interest payments during the Tequila crisis of 1995.

Those emerging market economies experiencing volatile growth and high levels of indebtedness should find the instrument particularly attractive to issue. However, these countries may find it more difficult to issue them at reasonable premiums. It may therefore be better if they



were issued first by countries with greater credibility. Two such groups of countries were identified in a recent expert group meeting (UNDP, 2005). The first comprised developed countries that may have an interest in issuing GDP-indexed bonds, for example the EMU countries. The second group may be developing countries, like Mexico or Chile, whose fundamentals are attractive to markets. The precedent of introducing collective action clauses into bonds, done first by developed countries and later followed by developing ones, shows that demonstration effects can be very effective for introducing financial innovations. Indeed, the history of financial innovations is essentially one of learning by doing. Inflation-indexed bonds are another example of an instrument that initially met some scepticism, relating to measurements of inflation. In fact, once these bonds started to be issued (with an initial clear impulse from governments), they became widely accepted across the world; in the UK, they represent around a quarter of government debt. A similar evolution can be envisaged for GDP-linked bonds (Griffith-Jones and Shiller, 2006).

GDP-indexed bonds may also provide benefits for the industrialised countries, especially in Europe. They may be particularly attractive for EMU countries, given the argument that the “Stability and Growth Pact” tends to render their fiscal policies pro-cyclical. Particularly relevant for European countries, these could include those where pensions are indexed against GDP growth, such as Italy.

Investors are likely to receive two main benefits from the introduction of this instrument. Firstly, they would provide an opportunity for investors to take a position on countries’ future growth prospects, i.e. they would offer investors an equity-like exposure to a country. Though this is possible to some degree through stock markets, these are often not representative of the economy as a whole. In this respect, they should also provide a diversification opportunity. Since growth rates across emerging markets tend to be fairly uncorrelated, a portfolio including GDP-indexed bonds for several of these economies would have the benefits of diversification, thus increasing the return/risk ratio. Second, investors would benefit from a lower frequency of defaults and financial crises, which often results in costly litigations and renegotiation and sometimes in outright large losses. The fact that the risk of default would fall implies that though more variable, total payments will tend to be higher than with conventional bonds. As a result, spreads charged for these bonds should not be much more expensive than that of conventional bonds.



On a broader level, GDP-indexed bonds can be viewed as desirable vehicles for international risk sharing, as a way of avoiding the disruptions from formal default and as a mechanism to help smooth growth. For international institutions, there would be benefits from the decreased likelihood of debt crises. Reduced risk of crisis contagion would also help benefit other countries than those issuing them. These externalities and the fact that financial innovations are hard to introduce provide a justification for some public action (e.g. by multilateral or regional banks or the United Nations) to help create such a market. Multilateral or regional development banks could have a very active role as “market makers” for GDP-linked bonds, especially initially. These institutions, for example the World Bank, could begin by developing a portfolio of loans, the repayments of which could be indexed to the growth rate of the debtor country. Once they have a portfolio of such loans to different developing countries, they could securitise them and sell them on the international capital markets. Such a portfolio of loans could be particularly attractive for private investors, as it would offer them the opportunity of taking a position on the growth prospects of a number of emerging economies simultaneously. Given the low correlation among these countries’ growth rates, the return/risk ratio would be higher. As correlations tend to be lower at the global level, the World Bank may be best placed to do such securitisation. Moreover, the expertise developed by the World Bank as market-maker for the sale of carbon credits under the Kyoto protocol could provide a basis for these activities.

Given levels of still high international liquidity, and strong interest in investing in developing countries’ paper, this conjuncture is very favourable for developing countries to start issuing such debt on international financial markets. Investors’ experience with Argentine GDP-warrants, issued as part of their debt restructuring, has been very positive; their price has been rising significantly. Recent instability has reminded us of the important insurance value that these GDP-linked bonds can provide against economic fluctuations. The time seems ideal for one or two more creditworthy countries to start issuing GDP-linked bonds and for investors to buy them.

### ***Local Currency Bonds***

Another alternative for better managing the risks faced by developing countries throughout the business cycle consists of the introduction of local-currency denominated bonds. These bonds – which have been in-

creasingly issued in recent years by countries such as Mexico, Colombia and Brazil – offer a cure against the currency mismatches that characterise the debt structure of developing countries. At the domestic level, the development of domestic capital markets, especially bond markets, also creates a more stable source of local funding for both the public and private sectors, thereby mitigating the funding difficulties created by sudden stops in cross-border capital flows.

There have also been innovative proposals to make local currency investments more attractive to international investors. Dodd and Spiegel (2004) have suggested raising capital in international markets by forming diversified portfolios of emerging market local currency debt issued by sovereign governments. These portfolios of many local-currency government debt securities (LCD portfolios) would generate a return-to-risk that competed favourably with other major capital market security indices. Based on data starting in 1994, a portfolio of emerging market local currency debt can raise rates of return relative to risk that compete with those of major securities indices in international capital markets. A portfolio consisting of different securities whose returns are sufficiently independent can yield risk-adjusted rates of returns superior to those of the individual securities. Thus, the volatility of the whole is less than the sum of its parts.

### ***Counter-Cyclical Guarantees***

Another way of addressing problems created by the inherent tendency of private flows to be pro-cyclical, which could be problematic if there was a sharp slowdown in the US, is for public institutions to issue guarantees that have counter-cyclical elements (Griffith-Jones and Fuzzo de Lima, 2004). In this regard, multilateral development banks and export credit agencies could introduce explicit counter-cyclical elements in the risk evaluations they make for issuing guarantees for lending to developing countries. This would imply that when banks or other lenders lowered their exposure to a country, multilateral development banks or export credit agencies would increase their levels of guarantees, if they considered that the country's long-term fundamentals were sound. When private banks' willingness to lend increased, multilateral development banks or export credit agencies could reduce their exposure. This implies that the models used to assess risks should focus on long-term fundamentals and would therefore be less affected by the short-term fluctuations that tend to influence markets.

Alternatively, there could be a special and stand-alone guarantee mechanism for long-term private credit that had a strong explicit counter-cyclical element. This could be activated in periods of sharp decline in capital flows and its aim would be to try to catalyse long-term private credit, especially for infrastructure. Multilateral development banks could also play a more active role in issuing guarantees to bonds issued in private capital markets by developing countries during periods of limited risk appetite.

#### 4 Conclusions

A major risk for the world economy – and for developing economies – is an abrupt unwinding of global imbalances. The scale of the US deficit, its rapid growth and that of US net liabilities, make the problem an increasing source of concern. A central international policy challenge is to urgently attempt the difficult task of an orderly unwinding of major imbalances.

At the national level, developing countries need to create space for counter-cyclical policies to protect growth of their economies from any slowdown in the world economy or other adverse shocks. Both macro-economic and financial sector policies can be valuable in this context. We have emphasised here market-based counter-cyclical instruments that developing countries could issue, possible with the help of multi-lateral or regional development banks. A particularly valuable instrument for developing countries would be GDP-linked bonds; this instrument also has large potential advantages for investors. Also very useful are local currency bonds which developing countries have begun to issue.

#### References

- Artus, P. (2006), “Vieillesse et déficit budgétaire de l’État”, In: *Retraite et Société*, Vol. 47, No. 1, Paris, pp. 36-63.
- (2005), “Quel est l’effet des interventions de change sur les taux d’intérêt à long terme des États-Unis ?”, In: CDC IXIS, *Flash*, January.
- BIS (2005a), *Annual Report*, Bank for International Settlements, Basel.
- (2005b), *Quarterly Review of International Banking and Financial Market Developments*, Bank for International Settlements, Basel, March.

- (2005c), *Quarterly Review of International Banking and Financial Market Developments*, Bank for International Settlements, Basel, December.
- (2004a), *Annual Report*, Bank for International Settlements, Basel.
- (2004b), *Quarterly Review of International Banking and Financial Market Developments*, Bank for International Settlements, Basel, December.
- Blanchard, Olivier, Francesco Giavazzi, and Filipa Sa (2005), “The US Current Account and the Dollar”, CEPR Discussion Paper No. 4888, Centre for Economic Policy Research, London, February.
- Blecker, Robert A. (1999), “The Ticking Time Bomb: Why the US International Financial Position Is Not Sustainable”, Briefing Paper, Economic Policy Institute, Washington D.C.
- Borensztein, E., and P. Mauro (2004), “The Case for GDP-indexed Bonds”, In: *Economic Policy*, Vol. 19, No. 38, April, pp. 165-216.
- Borio, C. and P. Lowe (2002), “Asset Prices, Financial and Monetary Stability: Exploring the Nexus”, BIS Working Paper No. 114, Bank for International Settlements, Basel, July.
- Cornford, Andrew (2005), “Reflections on the Prediction, Management and Measurement of (Primarily Financial) Risk”, paper prepared for the International Conference on Ethics, Finance and Responsibility, Geneva, September 30-October 1.
- D’Arista, Jane (1999), “Reforming the Privatized International Monetary and Financial Architecture”, In: *Financial Markets and Society*, Financial Markets Center, Philomont VA [Reprinted in *Challenge*, May-June, 2000, Vol. 43, No. 3, pp. 44-82].
- Dodd, R. and S. Griffith-Jones (2006), “Report on Chile’s Derivatives Markets: Stabilizing or Speculative Impact”, CEPAL/ECLAC (forthcoming).
- and S. Spiegel (2004), “Up from Sin: A Portfolio Approach to Salvation”, Draft study for presentation to the XVIII G24 Technical Group Meeting, Palais des Nations, Geneva, March 8-9.
- Eichengreen, Barry and Yung Chul Park (2006), “Global Imbalances and Emerging Markets”, in this volume.
- (2004), “Global Imbalances and the Lessons of Bretton Woods”, NBER Working Paper No. 10497, National Bureau of Economic Research, Cambridge MA, May.
- Federal Reserve System (2005), “Flow of Funds Accounts of the United States”, Federal Reserve Statistical Release, Board of Governors of the Federal Reserve System, Washington D.C.

- Godley, Wynne (1999), "Seven Unsustainable Processes: Medium-Term Prospects and Policies for the United States and the World", Special Report, The Levy Economics Institute of Bard College, Annandale-on-Hudson.
- Gourinchas, Pierre-Olivier and Hélène Rey (2005), "From World Banker to World Venture Capitalist: US External Adjustment and the Exorbitant Privilege", NBER Working Papers No. 11653, National Bureau of Economic Research, Cambridge MA.
- Greenspan, Alan (2003), "The Future of the Euro", Address to the 21st Annual Monetary Conference cosponsored by The Economist and the Cato Institute, Washington D.C., 20 November.
- Greider, William (2000), "Time to Rein in Global Finance", In: *The Nation*, New York, April 24.
- Griffith-Jones, S. and R. Gottschalk (2006), "Financial Vulnerability in Asia", paper presented to the Asia 2015 Promoting Growth, Ending Poverty Conference, London, March 6-7.
- and R. Shiller (2006), "A Bond That Insures Against Instability", In: *Financial Times*, July 10, p. 13
- and K. Sharma (2006), "GDP-Indexed Bonds: Making It Happen", UN-DESA Working Paper No. 21, April
- and R. Gottschalk (2005), "Compensatory Financing for Shocks: What Changes Needed? A Study for DFID", Globalisation Team IDS Research, Institute of Development Studies, Brighton.
- and A. Fuzzo de Lima (2004), "Alternative Loan Guarantee Mechanisms and Project Finance for Infrastructure in Developing Countries", In: Inge Kaul and Pedro Conceição (eds.) *The New Public Finance, Responding to Global Challenges*, Oxford University Press, New York.
- IMF (2004), *Global Financial Stability Report*, International Monetary Fund, Washington D.C., September.
- Kaplinsky, Raphael (2005), *Globalisation, Poverty and Inequality: Between a Rock and a Hard Place*, Polity Press, Cambridge UK.
- King, Mervyn (2005), "The International Monetary System", Remarks at the Advancing Enterprise 2005 Conference, London, February 4.
- Ocampo, José Antonio (2001), "International Asymmetries and the Design of the International Financial System", Serie Temas de Coyuntura No. 15, ECLAC, Santiago de Chile.
- and L. Chiappe (2003), *Counter-Cyclical Prudential and Capital Account Regulations in Developing Countries*, Almqvist & Wiksell

- International, Stockholm.
- Plender, John (2000), "Emerging from the Gloom", In: *Financial Times*, April 11, p. 14.
- Rato, Rodrigo de (2004), "The IMF at 60: Evolving Challenges, Evolving Role", Opening Remarks at the conference on "Dollars, Debts and Deficits: 60 Years After Bretton Woods", Madrid, June, 14.
- Rubin R.E., P.R. Orszag and A. Sinai (2004), "Sustained US Budget Deficits: Longer-Run US Economic Performance and the Risk of Financial and Fiscal Disarray", Paper presented at the American Economic Association Annual Meeting, San Diego, 4 January.
- Summers, Lawrence H. (2004), "The US Current Account Deficit and the Global Economy", Per Jacobson Lecture, Washington, D.C.
- Triffin, Robert (1960), *Gold and the Dollar Crisis: The Future of Convertibility*, Yale University Press, New Haven.
- Truman, Edwin M. (2005), "Postponing Global Adjustment: an Analysis of the Pending Adjustment of Global Imbalances", Working Paper Series No. 05-6, Institute of International Economics, Washington, D.C., July.
- UNDP Financing for Development (2005), "Report on the Meeting: GDP-Indexed Bonds: An Idea Whose Time Has Come", Office of Development Studies of the United Nations Development Programme (UNDP), New York.
- UN-DESA (2005), *World Economic and Social Survey 2005 Financing for Development*, UN Department of Economic and Social Affairs, United Nations, New York.
- US Department of Commerce (2005a), "The US International Investment Position", In: *Survey of Current Business*, Bureau of Economic Analysis, US Department of Commerce, Washington D.C., June.
- (2005b), "US International Transactions", International Surveys, Bureau of Economic Analysis, US Department of Commerce, Washington D.C., December 16.
- White, William R. (2006), "Procyclicality in the Financial System: Do We Need a New Macrofinancial Stabilization Framework?", BIS Working Papers No. 193, Bank for International Settlements, Basel.
- Wolf, Martin (2005), "Global Imbalances Will Require Global Solutions", In: *Financial Times*, April 27.
- World Bank (2005), "Global Imbalances and Emerging Market Economies", In: *Global Development Finance, Mobilizing Finance and Managing Vulnerability*, Chapter 3, The World Bank, Washington D.C., pp. 51-64.

# 5

## Currency Asymmetry, Global Imbalances, and Rethinking of the International Currency System

*FAN Gang\**

The US dollar has been volatile and in repeated decline in recent decades as well as recent years, and many observers expect it to collapse sooner or later. The central importance of the dollar is due to the fact that, in addition to being the US currency, over half of all dollar bills in circulation are held outside of US borders, and almost half of the US Treasury bonds are held as reserves by foreign central banks. The US dollar is supposed to be the anchor that stabilises the global currency market, but today it is a major source of instability.

What is the background for this instability? The US fiscal deficits have been running high again under the Bush administration, up to almost 3 percent of GDP. The current account deficit was about 7 percent of GDP in 2005, and more volatility is widely expected. The situation is challenging for the central banks of Japan, China, Korea, Taiwan and Singapore, which collectively hold for about \$1.14 trillion in US Treasury bonds as part of their reserves. The moment that they reduce their purchases, the value of the dollar slips. Yet, the more they buy, the more they are exposed to a potential free fall of the US dollar.

China has been blamed, not only by US congressmen who are

---

\* The author thanks Dr. YAO Zhizhong for the assistance on data collection and processing, and thanks for comments and suggestions from Yuwa F. Wong, Jan Joost Teunissen, Age Akkerman, Ronald McKinnon, George M. VonFurstenberg, Ross Garnuat, Wing T. Woo, among others.



understandably not very familiar with either the complicated currency issues or the domestic politics in any other country, but also by many economists and business strategists. They have said that the current “global imbalance” and currency instability came about because the Chinese did not revalue the renminbi (RMB).<sup>1</sup>

How much revaluation of the RMB would remove the US deficits of \$700 billion, or at least the US-China trade deficit of \$200 billion (including Hong Kong)? 500 percent or 1000 percent? Of course, no one would ask for a revaluation of that magnitude now. Normally, smart people say 30-50 percent, with the unsaid intention to blame-then-suggest again another 30-50 percent after some initial moves, then the third, and the fourth...

This does not seem to be a new phenomenon at all. It has been all too familiar before and since the “Nixon shock” in the early 1970s, and in the 1980s with the “Plaza Accord”. The convenient targets to blame were the “gold standard”, the Deutsche Mark, and the Japanese yen. Now it is turn for the Chinese renminbi (RMB). So the question is, what are the real causes of the global imbalance and currency instability?

In this chapter, we first look at what is really going on with the Chinese economy and the trade balance. We try to identify the sources of the current imbalance, and then, as a concluding remark, think again about the possibilities of reforming the global currency system.

## **1 China’s Trade Has Been Mostly Balanced in the Past 28 Years!**

In 2005, China registered a record high trade surplus of \$101 billion and a current account surplus of \$146 billion, or about 5 percent of GDP.<sup>2</sup> Even though it could result in placing China in a position to

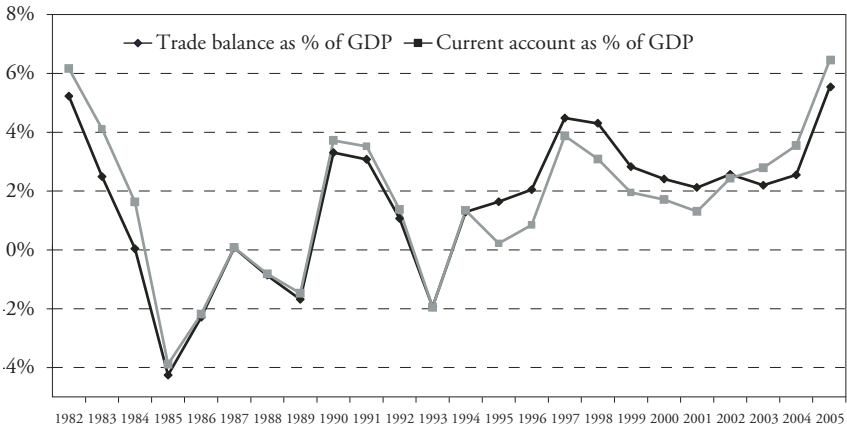
---

<sup>1</sup> *Newsweek*, C. Fred Bergsten, “Clash of the Titans”, April 24, 2006.

<sup>2</sup> The trade surplus increased by almost 300% in one year, compared to the \$30 billion trade surplus in 2004. This extraordinary rise could also be misleading – it could include some speculative capital movements under the trade pricing mechanism, as exported goods may be priced higher and imported goods may be priced lower when capital control is in place but people want to speculate on the revaluation of RMB. See a recent report in *Business Week* by Stephen Green “China’s Trade Surplus May Be an Illusion”. The article claimed that “Our numbers show that China’s trade surplus could have been as small as \$35 billion in 2005. Trade could have disguised some \$67 billion of non-trade capital inflows. We made a long list of assumptions to get to this number, and we are not claiming that it is absolutely accurate. But it does give a hint as to the potential scale of these



**Figure 1 China's Trade Balance\* and Current Account Balance**  
(in percent of GDP)



*Note:*

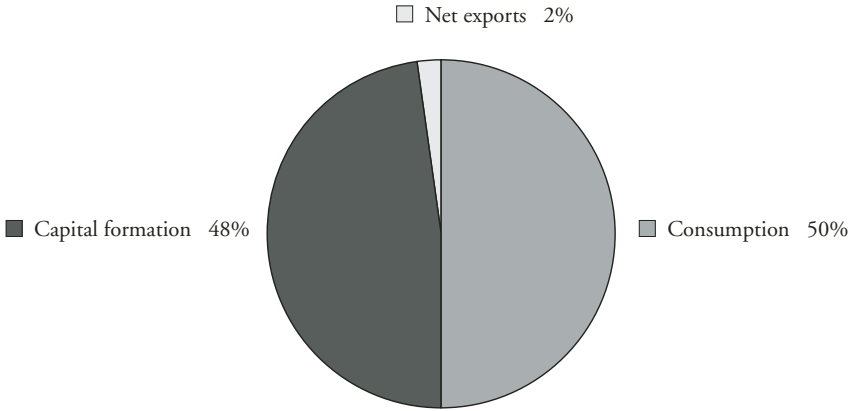
\* "Trade balance" = commodity trade + service trade.

*Source:* China State Administration of Foreign Currency, 1999-2006.

receive more blame, we should look into the situation in more detail. On many counts, 2005 was a special year for China since it was facing a slowdown in aggregate demand after the overheating in the previous 2 years. This is evident from the fact that the growth rate of imports was 17.4 percent in 2005, sharply down from almost 36 percent in 2004 and 39 percent in 2003, while the growth of exports also slowed down to 28 percent from previous years of 35 percent.

foreign currency inflows." I could question the scale of the problem, but even if the number would be cut by half, it would be a serious problem. In the first half of 2006, this "factor of disguised capital inflow" became a "must" in explaining the statistics, otherwise we would be not able to put things together: during these 6 months, the investment growth accelerated to 31%, consumption growth also accelerated to 13.6% in real terms; meanwhile, on the other side of the national income account identity, the current account surplus accelerated to almost 7% of GDP (annualised) from previous year's 6.7%. Only capital inflow through trade channels (by overinvoicing exports, underinvoicing imports, or making the advanced financial transaction for imports, etc.) can make the accounting equation to hold. This may also explain why the figures of the current account and capital account switched suddenly in such a dramatic way as contributors to the growth of foreign exchange reserves (see Figure 4).

**Figure 2 China's Composition of GDP, 2004**  
(in percent of GDP)



*Source:* China's Statistic Yearbook, State Bureau of Statistics, 2005.

Except for 2005 (and maybe 2006, if our expectation is correct that China will be in a slowdown phase for a while after the overheating), in most of the past 27 years, China's trade was more or less balanced, with small surpluses in some years and small deficits in others. Take 2004 as an example. In this year, since it had already been under fierce pressures for a revaluation, China only registered a surplus of about \$30 billion, or about 2 percent of GDP (see Figure 2). The previous record high trade surplus of \$43 billion occurred in 1998 when China was in a slowdown and deflation period, and everybody in the world was guessing when China would devalue while the US government was pressing China not to do so.

## **2 China's Trade Imbalance With the US and the New Supply Chain in Asia**

Why did China get its trade balanced? Because China not only exported, but it also imported, and it imported a lot! In most years, China's imports grew by double digits, and during 2003-2004, China's imports grew by almost 40 percent per year!

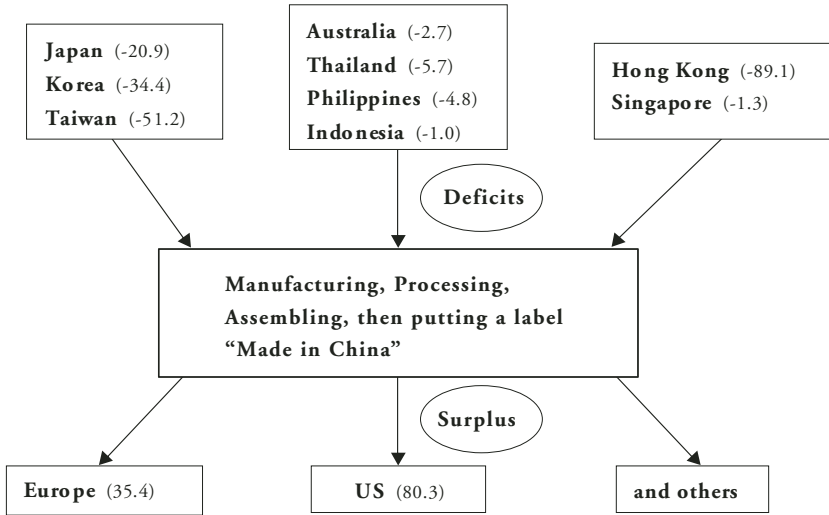
**Table 1 Trade Balance between China and its Neighbouring Economies**  
(in billions of dollars)

	1999	2000	2001	2002	2003	2004	2005
Taiwan, China	-15.6	-20.5	-22.3	-31.5	-40.4	-51.2	-58.1
Korea	-9.4	-11.9	-10.9	-13.0	-23.0	-34.4	-41.7
Japan	-1.4	0.1	2.2	-5.0	-14.7	-20.9	-16.5
Malaysia	-1.9	-2.9	-3.0	-4.3	-7.9	-10.1	-9.5
Thailand	-1.4	-2.1	-2.4	-2.6	-5.0	-5.7	-6.2
Russia	-2.7	-3.5	-5.3	-4.9	-3.7	-3.0	-2.7
Philippine	0.5	-0.2	-0.3	-1.2	-3.2	-4.8	-8.2
Singapore	0.4	0.7	0.7	-0.1	-1.6	-1.3	0.1
Indonesia	-1.3	-1.3	-1.1	-1.1	-1.3	-1.0	-0.1
India	0.3	0.2	0.2	0.4	-0.9	-1.8	-0.8
Brunei	0.0	-0.1	-0.1	-0.2	-0.3	-0.2	-0.2
Mongolia	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Lao	0.0	0.0	0.1	0.0	0.1	0.1	0.1
Myanmar	0.3	0.4	0.4	0.6	0.7	0.7	0.7
Pakistan	0.2	0.2	0.2	0.7	1.3	1.9	2.6
Bangladesh	0.7	0.9	0.9	1.0	1.3	1.8	2.3
Vietnam	0.6	0.6	0.8	1.0	1.7	1.8	3.1
Hong Kong, China	30.0	35.1	37.1	47.7	65.2	89.1	112.3
Total	-0.7	-4.5	-2.9	-12.5	-31.8	-39.2	-23.0
of which:							
total deficits	-33.8	-42.7	-45.4	-58.9	-102.1	-134.6	-144.2
total surplus	33.0	38.2	42.5	46.4	70.3	95.4	121.2
World	292.3	241.1	225.5	304.3	254.7	31.9	101.9

Source: United Nations, WTO, PC-TAS; The Ministry of Commerce of PRC.

**Figure 3 Triangle Trade Relations-China’s Bilateral Balance in 2004**

(in billions of dollars)



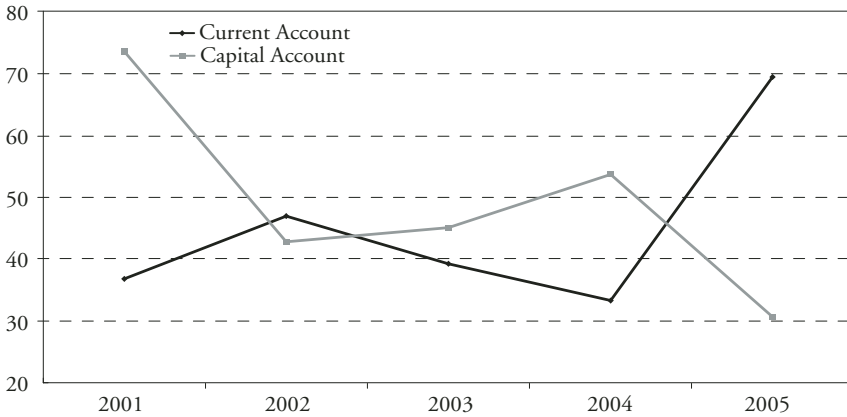
Source: China’s State Administration of Foreign Currency and Ministry of Commerce, 2006.

But why did China still run large trade surpluses with the US, if China imported a lot? The only problem here is that China imported a lot, but not from the US. China imported from the rest of the world – by large margins, particularly from Asian economies.

Table 1 shows how China ran trade deficits with almost all Asian economies except Hong Kong, which has been a major trade outlet of the Mainland. What happened in Asia was a newly emerged production and supply chain with China as a centre of assembling and manufacturing. Figure 3 shows how it actually worked, and how many things with a label “Made in China” are actually “Made in Asia”. This is also reflected in the fact that more than 50 percent of China’s exports are from “reprocess manufacture sectors” of which the value-added in China only counts for 10-20 percent of the total price.

What Figure 3 does not show is another relationship – over 50 percent of China’s exports are produced in China by foreign companies, including US companies. This fact is also relevant to the currency issues we are discussing because one of the factors that determines the currency balance is the labour cost, which is one of the major considerations for foreign investors or outsourcing companies.

**Figure 4 Structure of Foreign Exchange Reserve Increase**  
(Growth in percent)



Source: China State Administration of Foreign Currency, 1999-2006.

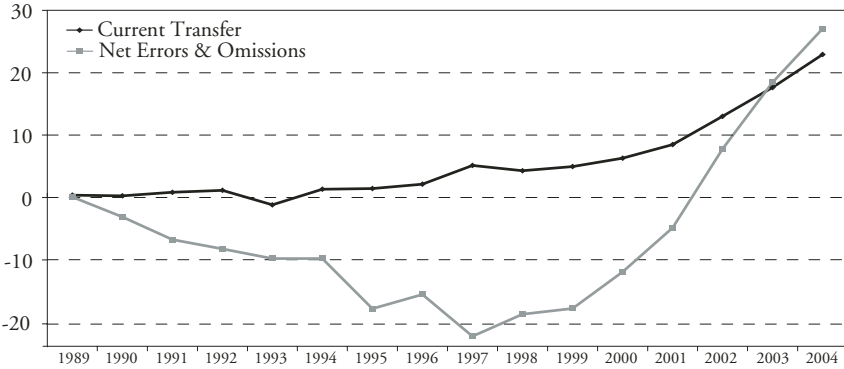
### 3 Where Did China's Large Foreign Exchange Reserves Come From?

One of the striking phenomena in middle of the global imbalance problem is the surge of foreign exchange reserves in China. It increased by more than \$200 billion per year for the years of 2003, 2004, and 2005.

Take 2004 as an example. In this year alone, China's foreign exchange reserves increased by \$210 billion. This of course included the current account surplus of \$68.9 billion. But the rest (i.e. capital account plus the item called "errors & omissions" which is also part of capital flows), as much as \$137.7 billion, were from capital inflows! The capital which had been accumulated in other countries, including \$50 billion FDI (suppose it all came in cash and bought goods in the Chinese domestic market), and \$20 billion in the increases of foreign debt and foreign security investment, and other inflows came into the economy through various channels motivated by the speculation on RMB revaluation.

For example, the "errors & omissions" item in China's capital account went from negative (outflow) to positive (inflow) in 2001 as the "market sentiment" went from RMB devaluation to revaluation, and has increased steadily ever since. Also, we can see that the item "current transfer" in the current account, which includes the remittances between family members or movements between personal bank accounts, increased more rapidly after 2001.

**Figure 5 Current Transfer and Errors & Omissions, China**  
(in billions of dollars)



Source: China State Administration of Foreign Currency, 1999-2006.

This situation changed a bit in 2005 because almost 50 percent of the increase in foreign exchange reserves can be explained by current account surplus. Capital inflows reduced to \$100 billion, due to calmed expectation-speculation on RMB revaluation, particularly after China's foreign exchange regime was changed back to "managed floating".

The fundamental issue here is that the foreign exchange reserves in one country may not be all its own national savings, but may be the capital inflows from other countries driven by some market forces including speculation.

#### 4 National Savings and Global Imbalance

The so-called global imbalance is often interpreted as the result of Chinese oversaving and American overspending. There might be overspending in the United States, but it does not necessarily follow that there is Chinese oversaving in the sense of international balance of payments.

The Chinese do save a lot, often up to 40 percent of GDP. But as a nation, it spends a lot too – it may not spend much on consumption (only less than 60 percent of GDP in recent years), but it invests up to or even more than 40 percent of its GDP in industrial capacities, housing, and public infrastructures.

Therefore, as a nation, China buys a lot in the international market, of course not in the way of consumer goods, but a lot of investment

goods. As a result, China has pushed up resource or commodity prices on the international market in recent years.

This means that China's high saving rate may have little to do with the global imbalance – it saves, but it spends the savings in domestic investments! Sometimes China overspends too – during 2003-2004, it over-invested and therefore the economy was overheated. Moreover, China registered trade deficits for almost 11 months during this period of time!

What is really relevant to the global imbalance problem is not the total savings of the nation, but what we may call the “net savings” reflected in the current account surplus (if any).

It is also important to remember (from the previous section) that the net national savings is not equal to the total increase of foreign exchange reserves – increase in reserves includes the capital inflows which may be the result of foreign savings (or the wealth which was saved before). Only those parts contributed by the current account surplus are national net savings related to the international imbalance.

From this point of view, China did not have much net national savings in recent years, normally only less than \$30-40 billion per year. But then, the large scale of global imbalances measured by the US trade deficits of up to \$600-700 billion per year should be explained by the sum of current account surpluses of economies everywhere, some of them (including almost all economies in Asia) also run a surplus against China!

From this perspective, we can see the following:

1. If the US wants to blame someone for its trade deficits, it should blame everyone who has some surplus, and therefore “contributes” to the matter directly (as having a surplus against the US) or indirectly (through countries which have a surplus with the US);
2. If the US wants someone to revalue its currency in order to help to reduce US deficits, it should ask everyone who has a surplus.

However, here comes the problem: if you want everyone to revalue its currency, it actually just shows that the real problem is not in others' currencies, but in yours! *The real question we should ask is not why China's RMB has not revaluated, but why the US dollar has always had the tendency of devaluation against everyone else since the 1960s.* First we had the devaluation against the gold standard or against all other currencies in the 1970s (the Nixon Shock), then the devaluation against the Deutsche Mark and Japanese yen in the 1980s, and now the Chinese RMB.

## 5 The “Currency Asymmetry” and the Persistent Tendency of US Dollar Devaluation

Many have said again and again in the past 40 years that under the present “US dollar standard” global currency system, global financial stability depends on the “good behaviour” of the United States or the good monetary policy of the Fed.<sup>3</sup> However, analyses show that the fundamental problem is not in US policies, but in the global currency system itself which makes the US follow a certain behaviour pattern. It is a very “old” issue, dating from the 1960s, but we may still need to pay some attention to it or we may fail to identify the real source of the imbalance.

The breakdown of the Bretton Woods system and the de-linking of the US dollar from the gold standard in 1971 created a global currency system without a “neutral standard” (such as gold) other than a national currency (i.e. the US dollar).<sup>4</sup> From then on, the world had got a major “asymmetry”, as it divided all nations into two categories: the nation which issues its own currency that serves at the same time as international currency (the US), and the nations which only issue their own currency and use the US dollar in international financial markets.

On one hand, this arrangement of “currency asymmetry” has its positive effects. The US is the largest and strongest economy with the most efficient financial markets in the world. The world financial system needs someone strong enough to play the role of anchor against the torrents. Unstable economies, such as developing countries, would like to hold some commonly trusted assets to increase their credibility in the international financial market. In some sense, Japan and China, which are the two largest foreign exchange reserves holders, do not finance the US debts, they are paying, to a certain extent, the seigniorage of the US by using the US dollar as their security against their own weakness in the economic and financial system, either in the form of asset bubbles (Japan), or non-performing loans in the domestic banking sectors (Japan and China), or massive underemployment of the rural

---

<sup>3</sup> As pointed out most recently by Clyde Prestowitz: “When President Nixon announced the end of the dollar’s link to gold and created today’s dollar standard, he effectively made the global financial system dependent on America’s good behaviour.” (Prestowitz, 2005, p. 169).

<sup>4</sup> The world has never faced such a situation before. Even when the British sterling was the *de facto* global currency, it was pegged to gold.



labour force in the process of economic transformation (China). And it is seen as convenient to have a national currency (the dollar) serve these purposes since it may be cheaper than if the international public goods such as an international currency would be provided by an expensive international bureaucracy, presuming that the US would be a good anchor.

On the other hand, such a currency asymmetry can have negative consequences. A government of any country has the right to print more money to stimulate domestic demand when growth is weak. But it has to bear its negative consequences such as inflation and financial instability within the country. Financial crises occurred because irresponsible domestic policies led to high fiscal deficits and current account deficits (or “twin deficits”). However, the country that prints international money may face fewer penalties – along with the about 50 percent of total printed papers and 50 percent of US dollar denominated financial assets used or held by all other economies,<sup>5</sup> the financial risks spread over or externalised to other corners of the world. As a result, it seems that no matter how large the US fiscal deficits are, no matter how loose the monetary policies become and how much the excessive liquidity provided are, the US is not likely to run into financial crisis like anyone else in the world would. This may delude, if not “corrupt”, people and policymakers in the “anchor country”, as they may not see it as “their problem” that they run high deficits and print more money when the bad consequences become the “others’ problem”. Therefore, such a system would naturally result in the persistent fiscal deficits and/or overprovision of liquidity that we have seen in the US since the 1960s. From this perspective, the US twin deficits problem is not even a policy issue; it is an institutional issue – not of the US domestic institutions, but of the international financial institutional arrangement! In some sense, the US is subject to a kind of “soft-budget constraint”, and this external condition “softens” the domestic policy disciplines and results in excessive liquidity to both the domestic market and the world.

Meanwhile, whether they are aware or not, other countries may face greater financial risks. The huge stock of (over-supplied) financial assets denominated in US dollars moves around knocking down the doors of developing countries that still have fragile domestic systems and are incapable of handling the risks that the liberalised financial market and

---

<sup>5</sup> See United States Department of the Treasury (2003).

**Table 2 Asymmetry in Asset Value Changes by Devaluation**

	US	Any other country
Foreign Assets	Up	Up
Domestic Assets	Unchanged	Down

free capital flows may bring them. But many countries were seduced into welcoming more capital flows because those loans or portfolio investments were so attractive to the capital scarce economies and they simply looked so cheap! When the trade deficits were financed by the provision of more cheap dollars (the present magnitude of capital flows is related to the previous money printing), the other economies may become overheated and have to face the consequences of overcapacity of production and oversupply sooner or later. The so-called global imbalance today seems much more dangerous for other countries rather than the US.

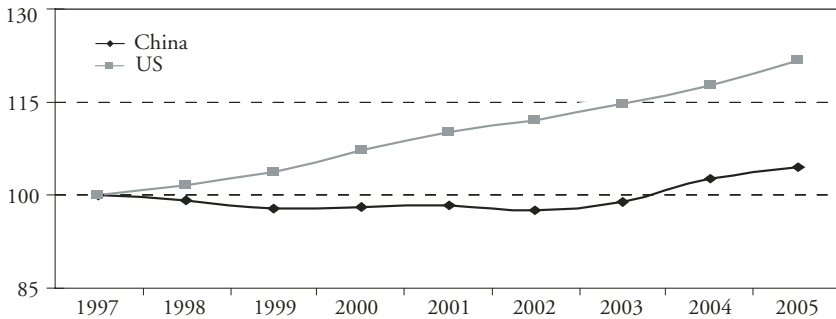
The “currency asymmetry” is reflected most clearly in the following fact: In the world of everybody else using the dollar as denominating currency, when the dollar devalues, US foreign assets appreciate, but US domestic assets do not depreciate, while for everyone else, if you devalue your currency, your own assets all depreciate! That is, while everyone else may lose by devaluation, the US only gains from it! No wonder devaluation for the US is such an attempting thing to do.

The problems created by the “US dollar standard” currency system had been debated and discussed repeatedly by many people for a long time. We are repeating it here simply because history is repeating itself in today’s new circumstance between the US and China, similar to what happened between the US and Europe in the 1960s and the US and Japan in the 1970s and 1980s. The repeated similarities in the history just show it is not the problem of policies, but the problem of institutional arrangements!

## **6 Effective and Real Exchange Rates: What Is Developing Countries’ Responsibility for Global Imbalance?**

As economists can tell, two factors play a role in determining changes of real effective exchange rates and therefore the trends of exchange rates:

**Figure 6 Inflation: China and US Differential**  
(CPI, 1997=100)



Source: China Statistic Yearbooks, various years.

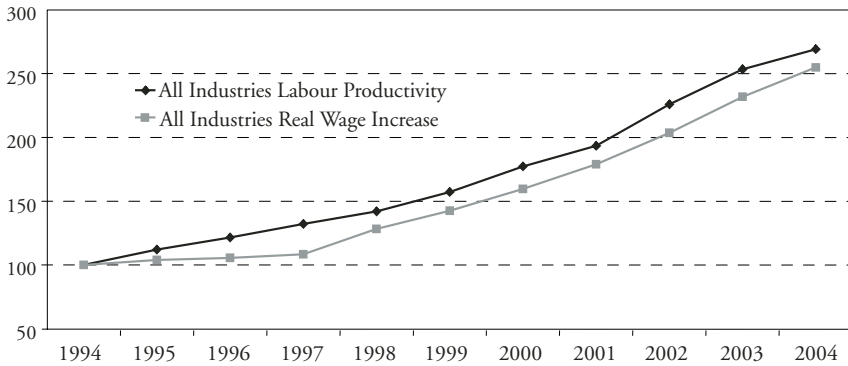
1. The differences of inflation rates between two countries. If country A's inflation is higher than B's, A's currency has to depreciate or be overvalued otherwise;
2. The differences of wage changes related to the labour productivity changes in the two countries respectively. Productivity changes may vary country to country during different periods of time, but as long as their wages can be adjusted fully to the extent the productivity changes, the real exchange rate will remain unchanged. Otherwise, the country whose wage increase is less than productivity change should appreciate its currency; if not, its currency is undervalued.

In the previous section, we were actually dealing with the factor that may cause the changes of effective exchange rates, i.e. the factor of inflation. The current currency arrangement, which makes the US run high fiscal deficits and provides excessive liquidity to the world, results in higher inflation rates in the US than in some other countries such as China in past years. As a result, the US dollar tends to devalue against the RMB.

The main conclusions we can draw from the above arguments are that:

- If we only look at the financial factors, the current problem is not RMB revaluation, but dollar devaluation! This is the major cause of the current imbalance.
- This means that RMB revaluation will not solve the problem of US deficits, not only because China's surplus is not equivalent to the US deficit – as we have seen in previous sections – but also because the real root of the problem does not lie in China. US inflation continues due to the loose monetary policies of the US!

**Figure 7 China's Real Wage and Labour Productivity Changes**  
(1994 = 100)



Source: China's Statistic Yearbooks, various years.

- The only thing China could do in this regard would be to race against the US in creating inflation or printing money. But those are things China may not want to do because China does not print international money so it has to bear all the negative consequences of inflation within its own boundaries.

However, if we also take the productivity/real wage factor into consideration and think of the real exchange changes, the picture becomes more complicated and China seems less innocent with regard to the current problem. The issue is that, while in the US the wages increase basically up to the level of productivity changes (about 3 percent per year), China's wages seem to be more sticky. In recent years since the early 90s, China's labour productivity improved at an annual average rate of 10.41 percent (see Figure 7; also see McKinnon, 2005<sup>6</sup>) thanks to the reforms and technology progresses. But the wages increased slower than that – they increased at an annual average rate of 9.81 percent in the manufacturing sectors. This is indeed a factor that may make the RMB undervalued, although only by less than 1 percentage point annually.

<sup>6</sup> In this paper, the author writes: "China's money wages had to grow in line with its rapid productivity growth. From 1994 through 2004, money wages in manufacturing increased 11.7 percent in China per year and by just 3.0 percent in the United States – see Figure 5. This wage growth differential approximately reflected the differential growth of labour productivity: about 9.5 to 12 percent in China versus 2.7 percent in the United States over the decade." (p. 7).

But why are the wages in China more sticky than in the US? Is this because of Chinese government's control? No, the Chinese government seems concerned about the slow increase of blue-collar wages as the income disparities widen and social stability is threatened. The real reason behind the wage stickiness in China is the market force in the labour market. Although about 200 million rural labourers have been reallocated from the agriculture to the industry and service sectors earning about \$1000 per year, there are another 200 million or more still in the countryside earning about \$400 per year and eager to move out looking for better paid jobs! It is the job competition and the still infinite labour supply that keep the Chinese wages changing more slowly compared to the labour productivity gains (this also explains the higher capital gains for foreign investment and domestic savings, and explains the enlarging income disparities during this stage of industrialisation and development, just like most countries experienced in history).

So now we are blaming rural poor Chinese labourers for the global imbalance!

This sounds ridiculous, but this actually reveals that there is another global issue, i.e. the need for poverty reduction and economic development in poor countries. We know that these issues are somehow related to the currency problem, but in fact, they are even more important.

Of course, the analysis in this chapter shows that China has some responsibility for the imbalance and it calls for a revaluation of the RMB. But it also shows that a reasonable revaluation of the RMB should not be more than the difference between the changes in wages and the increase of Chinese productivity. In a normal year, it may be less than 1 percent – not big enough to solve the US deficit problem! The main part of the cause of global imbalance lies still in the currency asymmetry, which is out of China's control.

## 7 Concluding Remarks

A number of conclusions can be drawn from the discussions above:

*Conclusion 1: China's role in the "global imbalance" is limited*

Within the current global monetary system, characterised by a "currency asymmetry" that keeps the US providing excessive liquidity to the world, the global imbalance will persist and the global market will continue to

face high volatility. China cannot be said to be the cause of this “global imbalance.”

China may well have contributed to the “global imbalance” through its slower rising wages compared with productivity growth, via the real effective exchange rate mechanism. The renminbi, in this context, could be undervalued at about 1 percent per year. China has certainly to face up to its responsibility to addressing the “global imbalance”, but it must do so with due consideration to the task of poverty reduction and raising the living standards of its rural poor.

From this point of view, the “managed floating” is a right exchange rate regime for a country like China. In today’s global monetary system of “currency asymmetry”, a fully floating exchange regime for many developing countries means that they would bear the major consequences of the liquidity glut created in the US, or “unilaterally” bear the burden of adjustment for reducing the global imbalance if the US refuses to do anything. Not exactly a sound recipe for global stability, and not fair.

*Conclusion 2: It is time to think again about alternatives to the “currency asymmetry”*

From a policy point of view, the policy implication of the “currency asymmetry” is simple: if this asymmetry is not removed, the situation could continue to worsen. The US dollar is no longer a stable anchor in the global financial system, nor is it likely to become one: thus, it is time to look for alternatives.

Ideally, there should be an international currency standard which is truly independent of self-interests of participating countries, and provides common benefits to all. It should not be a currency of any particular country no matter how strong or dominant that country is in the world market.

Here the “gold standard” readily comes back to mind again. Gold, a gift of Mother Nature, is not something that a government can print at will. A gold standard is totally impartial as well as unsparing when it comes to punishing those who are fiscally irresponsible and the profligate. And at least, with a gold standard, the global imbalance caused mainly by US dollar’s tendency to depreciate would not be interpreted or misunderstood as another currency’s failure to appreciate. But the critics of the gold standard have repeatedly pointed out, and correctly, that it is a rigid system, which leaves no room for any policy

action, however prudent and sensible it may be.

A second alternative that has often been suggested is some form of “international currency”, governed by a truly disinterested internal body tasked with the job of maintaining global financial stability.<sup>7</sup> This could be started with using IMF special drawing rights (SDRs) as the reserve currency unit. One of the recent efforts to think about alternatives is the “World Currency Unit” (WCU), which would be based on the inflation-adjusted real GDP of major economies (see Lok Sang HO, 2006). It is suggested that governments and private firms may issue bonds denominated with this WCU against the market risks and hold these bonds as part of their reserve assets, as the first step towards a true global currency.

The gold standard and an international currency represent two ends of the spectrum. Both ends are extreme: the gold standard is extremely rigid, whereas a genuine international currency may prove to be unrealistically utopian. A practical answer may lie somewhere in between. That is precisely the challenge – the devil is in the details.

This highlights the core problem of our age: the utter lack of accountable global governance and the sufficient provision of global public goods in a rapidly globalising world.

As stop gap measures, there are some regional efforts in order to deal with the problem.

For example, partially encouraged by the success of euro, Asians are trying to take some collective actions. In early May 2006, the Asian Development Bank held its annual general meeting in the Indian city of Hyderabad. At the meeting, the finance ministers of China, Japan, and South Korea met with their counterparts from ASEAN and announced that they would sponsor a research project entitled “Towards greater financial stability in the Asian region: Exploring steps to create regional monetary units”. This is no ivory tower academic exercise. Both China and Japan are very serious about it.

An Asian currency unit (ACU) would be an index that seeks to capture the value of a hypothetical Asian currency by taking a weighted average of several of the key regional currencies. The weight for a particular currency in the index could be determined by the size of the economy and the volume of its total trade. The reason why progress is

---

<sup>7</sup> Actually, M. Keynes was thinking some kind of international currency named “bancor” when he was preparing for the Bretton Woods conference in 1944 (see M. Rothbard, 1995, pp. 271-73).

likely to be quite fast in this development is an unusual consensus between China and Japan. While Japan has championed this idea ever since the 1997-98 crisis, China had been reluctant to be involved in a scheme that could potentially be dominated by the Japanese yen. In the more recent past, the weight of China's GDP and total trade volume has made itself felt. And there is now no fear of potential dominance by the Japanese yen. While the research will be done in Japan, the final determination of the composition of the ACU will be led by ASEAN, which has come increasingly under China's influence in recent years.

What is intriguing is that the ACU is not meant to be a real currency to replace the regional currencies, as is the case of the euro. It is meant to be a guide for the Asian countries to coordinate and manage their exchange rates. In other words, the ACU could become a new benchmark independent of the US dollar. Thus, the potential is for the ACU to become a viable "currency" for Asian countries to denominate their export prices, cross-border loans, and cross-border bond issuance; thus weaning themselves away from their current total reliance on the US dollar.

The question remains if it is an answer to replacing the "currency asymmetry" and thereby reducing the "global imbalance". An Asian currency unit may well reflect the monetary relationships among the Asian economies, but it could lead to a "collective revaluation" against the US dollar under the pressures of market speculations and bear all of the burdens of "currency asymmetry" by themselves collectively and unilaterally, leaving the US doing nothing. Remember here, without the US doing something against its own short-term interests in the present global monetary system, nothing else can really solve our problem of global imbalance for the long run. The real solution must be global and multilateral, not regional and unilateral.

## References

- Bergsten, Fred (ed.) (2005), *The United States and the World Economy: Foreign Economic Policy for the Next Decade*, Institute for International Economics, Washington D.C.
- Bernanke, Ben (2005), "The Global Saving Glut and the US Current Account Deficit", Remarks by the Governor of the Federal Reserve Board at the Sandridge Lecture, Virginia Economics Association, Richmond, March 10.



- Blanchard, Olivier J., Francesco Giavazzi and Filipa Sa (2005), "The US Current Account and the Dollar", MIT Department of Economics Working Paper No. 05-02, MIT, Cambridge MA, January 26.
- Ho, Lok Sang (2006), "A Sustainable Currency Regime for East Asia: WCU", paper presented at the conference on 'New Monetary and Exchange Rate Arrangement for East Asia', Bellagio, May 22-27.
- Lindbeck, Assar (1979), *Inflation and Unemployment in Open Economies*, Amsterdam.
- McKinnon, Ronald (2005), *Exchange Rates under the East Asian Dollar Standard: Living with Conflicted Virtue*, MIT Press, Cambridge MA, (Chinese translation, 2005; Japanese forthcoming, 2007).
- (2006), "China's Exchange Rate Trap: Japan Redux?", paper prepared for the American Economic Association Meetings, Boston, 7 January.
- Obstfeld, Maurice, and K. Rogoff (2005), "The Unsustainable US Current Account Position Revisited", revised version of the NBER Working Paper 10869, In: Richard Clarida (ed.), *G7 Current Account Imbalances: Sustainability and Adjustment*, National Bureau of Economic Research, Cambridge MA, November.
- Prestowitz, Clyde (2005), *Three Billion New Capitalists: The Great Shift of Wealth and Power to the East*, Basic Books, New York.
- Qiao, Hong (2005), "Exchange Rates and Trade Balances under the Dollar Standard", Working Paper No. 259, Stanford Center for International Development, Stanford University, September.
- Rothbard, Murray N. (1995), *Making Economic Sense*, Ludwig von Mises Institute, Auburn AL.
- United States Department of the Treasury (2003), *The Use and Counterfeiting of United States Currency Abroad, Part 2*, Second Report to the Congress by the Secretary of the Treasury, in consultation with the Advanced Counterfeit Deterrence Steering Committee, pursuant to Section 807 of PL 104-132, March.
- Zhang, Xiaobo, and Kong-Yam Tan (2004), "Blunt to Sharpened Razor: Incremental Reform and Distortions in the Product and Capital Markets in China", DSGD Discussion Paper No. 13, Development Strategy and Governance Division, International Food Policy Research Institute, August.

# 6

## China's Macroeconomic Imbalances: The Liquidity Tango Mechanism

*Wing Thye Woo\**

The post-1978 marketisation of China's economy has interacted with the continued state ownership to create an inflationary "liquidity tango" between the state-owned enterprises (SOEs) and the state-owned banks. Whenever the hard budget constraint is imposed on the SOEs, China's dysfunctional financial system imparts a deflationary bias to the economy and renders China a capital exporting country by constraining the growth of domestic demand. Foreign economic advisers recommend that China solve its internal and external imbalances by raising the interest rate and appreciating the exchange rate. However, the use of price mechanisms as the only instrument for all economic problems is not appropriate for China's transitional economy. Trade surpluses are better handled by establishing an efficient financial intermediation mechanism and by faster import liberalisation than by appreciation of the yuan; and investment expenditure of the SOEs is better curbed by administrative controls than by higher interest rates.

The year 2006 could well turn out to be a year of sizzling growth. The annualised real GDP growth rate, which hovered at 10 percent in the 2003-2005 period, climbed to 10.3 percent in the first quarter of 2006 and then to 11.3 percent in the second quarter of 2006 (see Table 1). These high growth rates were driven by record high investment spending and record export performance. Investment rose to over 45 percent of

---

\* I am deeply indebted to Ariel Buiara, Jane D'Arista, Zdeněk Drábek, Stephany Griffith-Jones, Yung Chul Park and Jan Joost Teunissen for their valuable comments on an earlier draft of the chapter.

**Table 1 The Boom-Bust Nature of China's Economy**  
(annual growth rates in percentages)

	Annual growth rate	Deviation from 9.7% average growth in 1979-2005 (percentage points)	Memo: Old GDP series, annual growth (average=9.4%)
1979	7.6	-2.1	7.6
1980	7.8	-1.9	7.8
1981	5.2	-4.5	5.2
1982	9.1	-0.6	9.1
1983	10.9	1.2	10.9
1984	15.2	5.5	15.2
1985	13.5	3.8	13.5
1986	8.8	-0.9	8.8
1987	11.6	1.9	11.6
1988	11.3	1.6	11.3
1989	4.1	-5.6	4.1
1990	3.8	-5.9	3.8
1991	9.2	-0.5	9.2
1992	14.2	4.5	14.2
1993	14.0	4.3	13.5
1994	13.1	3.4	12.6
1995	10.9	1.2	10.5
1996	10.0	0.3	9.6
1997	9.3	-0.4	8.8
1998	7.8	-1.9	7.8
1999	7.6	-2.1	7.1
2000	8.4	-1.3	8.0
2001	8.3	-1.4	7.5
2002	9.1	-0.6	8.3
2003	10.0	0.3	9.5
2004	10.1	0.4	9.5
2005	9.9	0.2	9.4
2005:1Q	9.9	0.2	
2005:2Q	10.1	0.4	
2005:3Q	9.8	0.1	
2005:4Q	9.9	0.2	
2006:1Q	10.3	0.6	
2006:2Q	11.3	1.6	

*Note:* GDP data from 1993-2006 are based on a new GDP concept released in December 2005.

GDP, and the current account surplus surged to 7 percent of GDP.

The Chinese government announced in July 2006 that it was tightening further the growth of bank credit and the approval of investment spending. Two months later, the IMF told China to do even more to curb the fast output growth; China should undertake “additional hikes in benchmark interest rates and/or reserve requirement ratio” and “further currency appreciation” to “prevent the emergence of a boom-bust economic cycle.”<sup>1</sup>

The IMF's choice of the term “boom-bust” was not rhetorical because “stop-and-go” has been a constant feature of China's post-1978 economy. Table 1 shows the following see-saw pattern in real GDP growth rates:

- 7.8 percent in 1980 to 5.2 percent in 1981;
- 15.2 percent in 1984 to 8.8 percent in 1986;
- 11.6 percent in 1987 to 3.8 percent in 1990; and,
- 14.2 percent in 1992 to 7.6 percent in 1999.

This boom-bust pattern of China's growth pattern is so well established that it became a dominant feature in the predictions of China analysts in the last few years. To see this point, Table 2 reports the predictions on China's GDP growth rates that were published in the *Emerging Market Monthly* published by the Deutsche Bank, which has one of the best groups of China analysts in the world. We want to stress two patterns in Table 2:

1. The December prediction for the GDP growth rate in the same year was always greater than the earlier June prediction, and the actual GDP growth rate was usually higher than the December prediction. For example, the June 2002 prediction of the 2002 GDP growth rate was 7.7 percent, the December 2002 prediction was raised to 8.0 percent, and the actual growth rate in 2002 turned out to be 8.3 percent;<sup>2</sup>
2. When the December prediction for the GDP growth rate in the same year was adjusted upward from the June prediction, the December prediction for GDP growth rate in the next year was always lower than the revised prediction for the same year. For example, the December 2002 prediction for 2002 (8.0 percent) was higher than

---

<sup>1</sup> “IMF urges Beijing to tighten grip on monetary policy to avoid boom-bust.”, In: *Financial Times*, September 12, 2006.

<sup>2</sup> Similarly, the June 2003 prediction of the 2003 GDP growth rate was 7.5 percent, the December 2003 prediction was raised to 8.7 percent, and the actual growth rate in 2003 turned out to be 9.5 percent.

**Table 2 The Evolution of Forecasts by Deutsche Bank on China's Real GDP Growth Rate**  
(in percentages)

	2002	2003	2004	2005	2006	2007
<i>Part 1: Predictions and outcomes, using GDP concept NOT revised by economic census released in December 2005</i>						
Prediction made in						
2001 December	7.7					
2002 June	7.7	7.7				
2002 December	8.0	7.7				
2003 June	8.0	7.5	7.6			
2003 December		8.7	8.4	8.0		
2004 June		9.1	9.0	8.0		
2004 December		9.4	9.3	8.4	8.0	
2005 June		9.3	9.5	8.7	8.3	
2006 January			9.5	9.4	8.6	8.0
Actual outcome	8.3	9.5	9.5	9.4		
<i>Part 2: Predictions and outcomes, using GDP concept revised by economic census released in December 2005</i>						
Prediction made in						
2006 June			10.1	9.9	9.5	8.9
Actual outcome	9.1	10.0	10.1	9.9		

Source: Deutsche Bank, *Emerging Market Monthly*, various issues.

the December 2002 prediction for 2003 (7.7 percent) when the June 2002 predictions for both years were the same.<sup>3</sup>

The first pattern reveals that growth in 2002-2005 was consistently higher than what analysts were expecting, which is why the June forecast was lower than the December forecast, which was in turn lower than the actual outcome. This pattern might suggest the hypothesis that there was a policy regime change in 2002 that analysts had not yet detected. Analysts were still thinking that the low-inflation-cum-lower-growth regime of Zhu Rongji would continue after he stepped down from the prime minister position in late 2002.

The second pattern of the expected future growth rate to be lower than today's unexpectedly high growth rate is consistent with the

<sup>3</sup> Similarly, the December 2003 prediction for 2003 (8.7 percent) was higher than the December 2003 prediction for 2004 (8.4 percent) even though the June 2003 prediction for 2004 (7.6 percent) was higher than for 2003 (7.5 percent).

hypothesis proposed above. Because analysts believed that the strongly anti-inflationary policy regime was still in effect, they expected the higher than expected growth rate to be followed soon by a lower growth rate that was policy-induced. This belief explains why, even though Deutsche Bank forecasted in June 2003 that GDP growth in 2003 (7.5 percent) would be lower than in 2004 (7.6 percent), it reversed its predictions for 2003 and 2004 in December 2003 (8.7 percent and 8.4 percent respectively) when GDP growth in 2003 came in stronger than anticipated.

To sum up, the natural pattern in China's output growth for most of the post-1978 reform period was a relatively sharp boom-bust cycle. However, as we will argue, Zhu Rongji significantly reduced the boom-bust output pattern in the 1997-2002 period. The moderation can be seen in Table 1 where the average absolute deviation of the growth rate from the sample average growth rate was 2.8 percentage points in the 1979-1996 sub-period and 1.3 percentage points in the 1997-2002 sub-period. As we shall document later, there was also a change in the behaviour of the current account balance in 1994 after Zhu Rongji, then deputy prime minister, took over management of the economy in 2003. The current account balance started running persistent surpluses from 1994 onward. The interpretation we will propose in this chapter is that the intrinsic boom-bust cycle reflected an internal macroeconomic imbalance caused by a dysfunctional state banking system, and that the persistent current account surpluses after 1994 reflected an external macroeconomic imbalance which was caused also by the dysfunctional state banking system.

We will make the case for our interpretation as follows. First, we explain the recent macroeconomic record by focusing on the interaction between China's policies and its structural characteristics. Then we examine the working of the financial system and highlight the fiscal implications of the situation. Finally, we discuss the exchange rate issue and the fixing of the banking sector within the general macroeconomic context.

## **1 Systemic Inflationary Tendency: The Liquidity Tango Until 1995**

Our contention is that China has a built-in inflationary tendency because of the partially-reformed nature of its economic system. Specifically, the post-1978 marketisation of the economy has interacted with the continued state ownership of the key industrial and financial enterprises

to create an inherent inflationary tendency within the economy. The marketisation of China's economy began by emphasising decentralisation reforms rather than the promotion of private economic activities, and this created an inflationary "liquidity tango" between the state-owned enterprises (SOEs), and the state-owned banks (SOBs). We describe the mechanics of this "liquidity tango" below.

The increased operational autonomy given to the SOEs caused the "thirst for investment" phenomenon to appear. This large surge in demand for investment funds by SOEs is the product of three factors:

1. the decline in the authority of the state to veto the investment decisions of the SOEs;
2. the decline in the ability of the state to monitor the financial integrity of the transactions of the SOEs. Once the SOEs had the rights to make purchases and sales at prices they negotiated themselves, it became very difficult for the state to detect embezzlement via under-invoicing of sales, over-invoicing of purchases, and purchases of consumption goods disguised as production inputs; and,
3. the unwillingness of the state to close loss-making SOEs. This unwillingness resulted in the SOEs operating under the soft budget constraint.

These three factors produced an asymmetry in the investment decisions of the SOEs. The SOEs developed "a thirst for investment" because they could privatise the profits from successful investments through accounting shenanigans, and they could socialise their losses from unsuccessful investments through new bank loans; see evidence in Fan and Woo (1996). The catch is that every application for an investment loan has a good justification. A profitable SOE's application is justified by the opportunity to make more profits for the state. And a loss-making SOE's application for new investment loans is justified by the need to improve its competitiveness through technical upgrading or to develop new product lines.

However, this "thirst for investment" by SOEs can result in inflation only when it is quenched by investment funds, and the decentralisation reforms have allowed the SOBs to accommodate these higher loan demands – hence the term "liquidity tango". The SOBs began playing a more important role in 1983 when the state stopped providing circulating capital to the SOEs and gave this function to the SOBs. At the same time, SOBs were allowed to make long-term investment loans. (The budget continued to be a source of investment funds, albeit decreasing in importance over time.) The big institutional change

occurred in 1984 when the SOBs were granted greater autonomy in their loan decisions. However, the administrative structure of the financial system has been even slower to change. The local branches of the SOBs are required to promote the development of the local economy and subordinate themselves to the guidance of the local government. The staff of the bank branches depend on the local government for housing allocation and medical and social services, and it is common for a manager of the local branch to be appointed on the local government's recommendation.

Although the system of credit quotas set by the central financial authority was left intact by the decentralisation reforms, after 1984 the local banks faced greater financial incentives and political pressure to expand credit beyond their quotas. The greater incentives followed from the fact that the personal incomes of the local banks had become more dependent on the volume of their lending. The greater pressures from the local governments came about not only because their tax revenues had become more dependent on the prosperity of the local economy, but also because they were often co-investors in the local SOEs.

This confluence of self-interest and external pressures resulted in many SOBs not only ignoring the credit quotas when they had excess reserves but also resorting to ingenious ways to "squeeze" more reserves from the central bank. A common method was to lend local enterprises the funds designated for projects in the central plan. When a centrally-directed project began to draw on its centrally-allocated credits, the local bank would present the central bank with the dilemma of supporting or stopping the fulfilment of the central plan. Since many banks were doing this, the central bank (until about 1995) usually opted for accommodation rather than closure. It is this combination of actions by the local governments, SOEs and local banks that has raised aggregate demand continuously and caused inflation to be a constant threat in the 1984-1995 period.

The institutional reforms of the central bank and the state banks implemented in July 1993 as part of an austerity campaign have not been successful in changing things. In 2005, the former vice-governor of the central bank, Guo Shuqing acknowledged:

"that branch managers are still too independent from head office and under intense personal pressure to keep marginal enterprises afloat in order to support local economies and employ. 'Just like in the US and the UK, when you want to shut down enterprises, the local government will object,' he says. 'Some older general managers (in the provinces)



will have closer ties to the government if they want to be elected to the (local) People's Congress."<sup>4</sup>

It should be noted that this tendency to create credit excessively is also a tendency to increase the amount of non-performing loans (NPLs) quickly. The counterpart of the embezzlement of profits in the SOEs is the growth of NPLs in the SOBs. Ultimately, the price of the liquidity tango is more than just inflation, it also includes a public-to-private transfer because of the need to recapitalise the SOBs periodically.

## 2 Suspending the Liquidity Tango: Current Account Surpluses in 1994-2005

When GDP growth jumped from 3.8 percent in 1990 to 14.2 percent in 1992 with no signs of a growth slowdown in 1993, it was plain to policymakers that China was experiencing serious overheating and that much higher inflation would soon appear. In mid-1993, vice-premier Zhu Rongji was put in charge of restoring macroeconomic balance.

Stopping the SOE-SOB liquidity tango was not an easy task. Banks were still exceeding their credit quotas in 1995; growth and inflation in that year were 10.5 percent and 14.8 percent respectively.<sup>5</sup> Zhu Rongji then began removing top bank officials whenever their banks over-lent or allowed the proportion of NPLs to increase too rapidly. He also resorted to public berating of high provincial officials who did not (or could not) slow down investment growth. The rest, as they say, is history. In 1996, GDP growth was down to 9.6 percent, and RPI inflation was down to 6.1 percent; and in 1997 they were 8.8 percent and 0.8 percent respectively. Zhu Rongji might not go down into history as a popular administrator, but he will be credited for stopping the liquidity tango during his term of office.

One unanticipated consequence of ending the liquidity tango was the appearance of a chronic current account surplus since 1994. To see how the liquidity tango featured in this external imbalance, consider

---

<sup>4</sup> "China's banks smarten up as they switch from state control to commercial lending", In: *Financial Times*, 20 June 2005.

<sup>5</sup> Chen Yuan, then deputy governor of the central bank, reported in a 1995 conference that "the enthusiasm for economic growth in some localities is so strong that it is very difficult to stop completely excessive investment financed through forced bank credit" (Chen, 1996, p. 25, emphasis added).

the following accounting relationship:<sup>6</sup>

$$\begin{aligned} \text{(current account surplus)} = & \\ & \text{(government budget surplus)} \\ & + \text{(savings of SOEs – investments by SOEs)} \\ & + \text{(savings of the non-state sector – investments of the non-state sector)} \end{aligned}$$

Table 3 reports the above decomposition of the current account balance. China's proclivity to generate persistent current account surpluses managed to manifest itself only after 1994 because of major policy changes implemented in that year. Before 1994, with the government budget deficit being usually small, the voracious absorption of bank loans by SOEs to invest recklessly usually kept the current account negative. When Zhu Rongji implemented stricter controls on the SOBs from 1994 onward, the lower growth rate in SOE investments allowed China's built-in propensity toward current account surplus to manifest itself from 1995 onward. The pronounced tendency toward higher current account surpluses is mainly caused by the secular rise in the savings of the non-government sector. The combined savings of the SOE and non-SOE sector rose from 20 percent in 1978 to 30 percent in 1987, and then mostly stayed close to 40 percent from 1992 onward.

With the SOEs' "thirst for investment" curbed in 1994-2002, there was an excess of savings because the SOB-dominated financial sector did not then re-channel the growing amount of savings to finance the investment of the private sector. This failure in financial intermediation by the SOBs is quite understandable. One, the legal status of private enterprises was, until recently, lower than that of the state enterprises; and, two, there was no reliable way to assess the balance sheets of the private enterprises, which were naturally eager to escape taxation. The upshot was that the residual excess savings leaked abroad in the form of the current account surplus. Inadequate financial intermediation had made China a capital exporting country!

This perverse current account outcome is not new. Taiwan had exactly this problem up to the mid-1980s when all Taiwanese banks were state-owned and operated according to the civil service regulation that the loan officer had to repay any bad loan that he had approved. The result was a massive failure in financial intermediation that caused

---

<sup>6</sup> It is important to note that the equation applies only to China's total trade surplus, not to any bilateral trade surplus between China and that country. The equation in standard textbook notation is:

$$CA = (T-G) + (S-I)$$

**Table 3 Decomposition of China's Current Account Balance<sup>1</sup>**  
(as percentage of GDP<sup>2</sup>)

	current account balance	government budget surplus	excess savings (SOEs plus non-SOEs)	savings (SOEs plus non-SOEs)	investment (SOEs plus non-SOEs)	govern- ment investment
1978	-0.32	0.28	-0.45	20.12	20.57	17.65
1979	-0.48	-3.35	4.18	23.69	19.52	16.67
1980	-0.33	-1.53	3.03	25.25	22.21	12.72
1981	0.23	0.77	1.41	24.64	23.23	9.03
1982	1.66	-0.33	4.71	27.57	22.86	9.20
1983	0.84	-0.72	4.58	27.61	23.04	9.96
1984	0.02	-0.81	3.41	28.39	24.97	9.48
1985	-4.17	0.01	-2.69	26.93	29.62	8.89
1986	-2.52	-0.81	-1.72	28.11	29.83	8.12
1987	0.10	-0.53	0.34	30.75	30.41	6.27
1988	-1.03	-0.90	-0.31	32.12	32.43	4.94
1989	-1.13	-0.94	-0.47	32.19	32.66	4.35
1990	2.79	-0.79	3.72	34.57	30.84	4.33
1991	2.90	-1.10	4.19	37.14	32.96	2.37
1992	1.07	-0.97	1.94	38.65	36.71	0.55
1993	-1.97	-0.85	-1.14	41.97	43.11	0.36
1994	1.36	-1.23	2.49	44.17	41.68	-0.43
1995	1.71	-0.99	1.23	41.81	40.57	0.23
1996	2.14	-0.78	1.73	40.85	39.12	0.20
1997	3.81	-0.78	4.94	42.19	37.25	0.75
1998	3.86	-1.18	4.58	40.20	35.62	1.78
1999	2.72	-2.12	4.34	37.97	33.63	3.50
2000	2.51	-2.78	4.67	36.39	31.72	4.65
2001	2.24	-2.59	5.74	37.52	31.79	6.21
2002	2.59	-2.99	5.53	36.66	31.14	8.07
2003	2.21	-2.50	5.52	38.94	33.41	8.87
2004	2.86	-1.53	4.39	39.28	34.89	9.26

*Notes:*

<sup>1</sup> Current account balance is net exports in GDP accounts; government investment is the difference between government revenue (fiscal accounts) and government consumption (GDP accounts). The fiscal year data were not realigned to be compatible with calendar year GDP data.

Current account = (government revenue - government consumption - government investment) + (savings of SOEs - investments of SOEs) + (savings of non-SOEs - investments of non-SOEs): CA = (T-G) + (S-I)SOE + (S-I)non-SOE

<sup>2</sup> GDP data 1993-2004 are based on a new GDP concept released in Dec. 2005.

Source: *China Statistics Yearbook*, compiled from various annual editions.

Taiwan's current account surplus to be 21 percent of GDP in 1986. The reason why China has not been producing the gargantuan current account surpluses seen in Taiwan in the mid-1980s is that there is still an excessive amount of SOE investments.

In discussions on the increase in the savings rate, a common view is that the increase reflects the uncertainty about the future that many SOE workers feel in the face of widespread privatisation of loss-making SOEs. We find this explanation incomplete because it seems that there has also been an increase in the rural saving rate even though rural residents have little to fear about the loss of jobs in the state-enterprise sector because none of them are employed there.<sup>7</sup> Other changes that could have caused urban and rural saving rates to rise significantly would include:

- the lower birth-rate policy. Because children have been traditionally the source of support in old age, the limit on the number of children (one child in urban area, and two children in rural area) would have caused people to save more for retirement;
- the steady decline in state subsidies to medical care, housing, loss-making enterprises, and education led to people saving more to insure against future bad luck, buy their own lodging, and invest in their children;
- given the high rate of return to capital, the secular improvement in the official Chinese attitude toward market capitalism has no doubt encouraged both rural and urban residents to save for investment.

Based on the work of Liu and Woo (1994) and Woo and Liu (1995) on savings behaviour, we speculate that the heightened desire to invest is a possibly important reason why the rural sector has increased its savings rate. The most dynamic industrial expansion in China in the 1984-1994 period occurred in the rural areas. Since non-state firms in the rural areas could not borrow from the bank, the only way they could establish themselves was through self-financing, which required the would-be entrepreneurs to save first. In the very first phase of rural industrialisation, the amount of capital that was needed to start a factory workshop was very low. After a decade of rapid industrial growth, the Chinese countryside is saturated with labour-intensive enterprises. Since competition among rural enterprises is very fierce at the present, it is no longer profitable to invest in the same type of factory workshop.

---

<sup>7</sup> The Economist Intelligence Unit (2004, p. 23) reported that “farmers’ propensity to save seems to have increased.”

Rural enterprises must move up to the next stage of value added production in order to be profitable. This new generation of rural enterprises is much more capital-intensive, and thus requires a much larger amount of start-up funds. And rural residents have responded to the higher capital requirements by increasing their saving rates.

Since the phenomenon of investment-motivated saving must also be present within the Chinese urban community, the usual pessimism-based explanation for the rise in the urban saving rate is only partially correct. With the steady relaxation of regulations against the establishment of private businesses in the rural and urban areas, the amount of investment-motivated savings in China could only have risen more. Our investment-motivated savings hypothesis is not new, according to Jeffrey Williamson (1988), the historical record of Western Europe and North America shows that “investment demand seems to have been the driving force behind private saving and accumulation, past and present.”

Table 4 reports the investment trends in China in the post-1978 era. Total fixed investment has increased secularly as a proportion of GDP: an annual average of 30.0 percent in 1984-1988, 33.7 percent in 1992-1996, and 36.7 percent in 1997-2004. SOE investment was 19.5 percent in 1984-1988 and 1992-96, and then fell to 17.0 percent in 1997-2004. We are of the opinion, however, that the amount of *state-directed* investment in the 1997-2004 period could be more than three percentage points higher than 17.0 percent of GDP because many of the big SOEs that existed in 1988 had converted themselves (or components of themselves) by 2000 to share-holding companies listed on the stock exchanges – while remaining state-controlled. Furthermore, many SOEs have formed joint-venture firms with domestic and foreign companies, with themselves as the controlling shareholders.

Contrary to the secular rise in total investment and the possibly secular rise in state-controlled investment, rural investment has fallen secularly from 8.6 percent in 1984-88, to 7.6 percent in 1992-96, and then to 7.1 percent in 1997-2004. Our hypothesis is that a major reason for the decline in the rural investment ratio is that the traditional labour-intensive factory is no longer profitable, and rural entrepreneurs have been unable to borrow the money to undertake the more capital-intensive investments required for the next generation of rural enterprises.

Obviously, increasing budget deficits and SOE investments to make up for the shortfall in private investment in order to reduce the trade surplus can only be a satisfactory solution in the short run. In the long run,

**Table 4 Investment Trends by Ownership<sup>1</sup>**

(investment as percentage of GDP)

	Total	Rural <sup>2</sup>	SOE <sup>3</sup>
1981	29.0	7.5	20.1
1982	25.6	6.8	17.6
1983	27.2	7.9	18.1
1984 <sup>4</sup>	28.1	8.5	18.2
1985	29.7	7.9	19.6
1986	30.0	8.2	20.7
1987	30.6	8.9	19.3
1988	31.8	9.3	19.5
<i>(June 4th Tian An Men Disruption, 1989-1991)</i>			
1992	27.9	7.1	18.7
1993	32.2	7.1	19.8
1994	37.6	7.7	21.2
1995	36.1	7.9	19.7
1996	34.7	8.1	18.2
1997	34.2	7.9	17.9
1998	33.6	7.0	18.2
1999	35.0	7.2	18.7
2000	35.7	7.3	17.9
2001	36.5	7.1	17.3
2002	37.3	6.9	16.2
2003	38.9	6.8	15.1
2004	42.1	6.8	15.0
average 1984-1988	30.0	8.6	19.5
average 1992-1996	33.7	7.6	19.5
average 1997-2004	36.7	7.1	17.0

*Notes:*

<sup>1</sup> Investment refers to fixed asset investment. Components were adjusted proportionately so that total investment equals fixed asset investment in the Expenditure Approach to Computing GDP; e.g. for 2004, investment is from *China Statistical Yearbook*, Table 6-4 and then adjusted to be identical to Table 3-14; and GDP is from Table 3-13 (expenditure approach).

<sup>2</sup> Rural = rural collectives and rural individuals.

<sup>3</sup> SOE = state-owned units only, does not include state-controlled units listed under various types of joint-owned units (e.g. share-holding units, joint-venture units). So state-directed investment exceeds SOE investment.

<sup>4</sup> 1984 was the year that the central government gave the clear signal that it had no ideological objection to the formation of rural enterprises.

Source: *China Statistics Yearbook*, compiled from various annual editions.

the increased public investments could follow an increasingly rent-seeking path that is wasteful (e.g. building a second big bridge to a lowly-populated island to benefit a politically-connected construction company as in Japan), and the increased SOE investments could convert themselves into non-performing loans at the SOBs. The right solution to the problem of excess saving is not for the government to absorb it by increasing its budget deficit but to establish an improved mechanism for coordinating private savings and private investments. This solution is desirable for microeconomic efficiency regardless of the extent that investment-motivated savings has contributed to the rise in the saving rate.

### 3 The SOBs Are Undermining the State's Fiscal Position

The high inflation that China's banks enabled whenever they participated in the liquidity tango, and the large trade surpluses that they generated whenever they were barred from the liquidity tango are not intrinsic features of a banking system. These are outcomes from a monopoly SOB system operating in an economic environment where state-controlled companies exert significant influence on resource allocation. It should now be pointed out that the SOBs also constitute a potentially grave threat to the public finances of the state.

To see the fiscal implications of the SOB system, one has only to be reminded of two recent events. First, in 1998-1999, the government injected new capital into China's banks and transferred a large proportion of the non-performing loans (NPLs) to the state-owned asset management corporations (AMCs) in order to raise the capital adequacy ratio (CAR) of the four largest state-owned banks, commonly referred to as the Big Four,<sup>8</sup> from 4.4 percent at the end of 1996 to over 8 percent at the end of 1998. However, the rapid appearance of new NPLs after 1998 had lowered the average CAR of the Big Four to 5.0 percent by the beginning of 2002.

The second event is that since 2003, China has been engaging in a second round of recapitalisation of the SOBs. Some unorthodox methods have also been used, e.g. in late 2003, Bank of China and China Construction Bank received a capital injection of \$22.5 billion each from

---

<sup>8</sup> The Big Four are Agricultural Bank of China, Bank of China, China Construction Bank and Industrial and Commercial Bank of China.

the foreign reserves of the People's Bank of China.<sup>9</sup> The result of this still-ongoing second recapitalisation, and the rapid expansion of loans in the last two years is that the NPL ratio has improved, and the CAR of the Big Four was about 8 percent at the end of 2004.

The important question is how many more rounds of bank recapitalisation can China afford without generating a fiscal crisis? The simple fact is that fiscal sustainability lies at the heart of whether a banking crisis would actually occur. As long as the state is perceived to be able and willing to bail out the SOBs, depositors would retain their confidence in the SOBs regardless of the actual state of their balance sheets. Since the stock of publicly-acknowledged government debt in 2004 is only about 33 percent of GDP, it is common to hear official assurances that the current fiscal deficits of less than 2 percent of GDP do not pose a problem for debt servicing by the state.<sup>10</sup> However, the current value of the debt-GDP ratio is not a good indicator of the sustainability of the existing fiscal policy regime; a better indicator would involve working out the evolution of the debt-GDP ratio over time.

Briefly, a fiscal regime that causes the debt-GDP ratio to:

- grow explosively is unsustainable;
- decline secularly to zero is sustainable;
- attain an equilibrium steady-state value that is "low" is unlikely to destabilise the economy; and vice-versa.

To put the issue formally, the evolution of the debt-GDP ratio as given by:

$$d(\ln[\text{Debt}/\text{GDP}]) / dt = r + [\text{GDP}/\text{Debt}] \cdot [f + b] - y \quad \text{where}$$

$r$  = real interest rate on government debt

$f$  = primary fiscal deficit rate

= [state expenditure excluding debt service - state revenue] / GDP

$b$  = NPL creation rate

= [change in NPL in SOBs] / GDP

$y$  = trend growth rate of real GDP

---

<sup>9</sup> The People's Bank of China established an investment company (Central Huijin Company) under the State Administration of Foreign Exchange to undertake this injection of capital. This gave Huijin 85 percent of the ownership of China Construction Bank, and 100 percent of Bank of China.

<sup>10</sup> One should really use the consolidated debt of the state sector because it includes at least some part of the contingent liabilities (e.g. foreign debts of SOEs and SOBs, and unfunded pension schemes in the SOE sector) that the state might have to assume responsibility for when the state-owned units default on their financial obligations.



As long as  $y > r$ , then the Debt/GDP ratio will have a steady-state value that is nonzero when sum of  $(f + b) > 0$ . Specifically,

$$(\text{Debt/GDP})_{\text{steady-state}} = (f + b) / (y - r) \text{ when } y > r$$

China appears to belong to this case because its post-1978 annual growth rate has averaged 9.4 percent, its growth rate in the next ten years is likely to be above 8 percent; and the real interest rate has been about 4 percent. For the generation of likely future scenarios, we will make the conservative assumptions that  $y$  is 8 percent,  $f$  is 1 percent, and  $r$  is 6 percent.<sup>11</sup> It is difficult to predict  $b$ , the rate that banks would generate NPLs, because it depends on the type of banking reform undertaken. If no meaningful reforms are undertaken, then  $b$  is likely to remain at the historic value of 6 percent. So conditional on the effectiveness of reforming the SOBs, we get:

$$\begin{aligned} (\text{Debt/GDP})_{\text{steady-state}} &= 350 \text{ percent when } b = 6 \text{ percent} \\ (\text{Debt/GDP})_{\text{steady-state}} &= 200 \text{ percent when } b = 3 \text{ percent} \\ (\text{Debt/GDP})_{\text{steady-state}} &= 100 \text{ percent when } b = 1 \text{ percent} \end{aligned}$$

The noteworthy finding from above scenarios is that China will produce a level of  $(\text{Debt/GDP})_{\text{steady-state}}$  that is high by international experience despite the optimistic assumptions that the long-run growth rate is 8 percent and that that  $b$  will be lowered from 6 percent of GDP to 1 percent. The most optimistic outcome is still two-thirds larger than what the European Union has set to be the “safe” debt-GDP target (60 percent) for its members. The banking system has made China vulnerable to a fiscal crisis even though there is a theoretical steady-state level for the debt-GDP ratio. Of course, we cannot attribute the creation of NPLs entirely to the SOBs; their chief customers, the embezzlement-ridden and inefficiency-ridden SOEs,<sup>12</sup> deserve an equal share of the blame.

---

<sup>11</sup>  $f$  has been above 1.5 percent for the past seven years.  $r$  was 4 percent in the past only because the interest rate was regulated. We think that the implementation of financial deregulation that is necessary for normal healthy development of the financial sector will render  $r$  to be at least 6 percent because, one, according to Solow (1991), the stylised fact for the real interest rate in the United States is that it is 5 to 6 percent; and, two, both the marginal rate of return to capital and the black market loan rate have been more than 20 percent.

<sup>12</sup> See Woo *et al.* (1994).

#### 4 Freeing the Interest Rate and the Exchange Rate to Address Macroeconomic Imbalances?

A change in the macroeconomic situation appeared to have occurred near the end of 2002, which coincided with the transfer of political leadership from Jiang Zemin and Zhu Rongji to Hu Jintao and Wen Jiabao. Monthly investments in fixed assets, which had grown (on a year-to-year basis, y-o-y) mostly below 20 percent during 1996-2001 and mostly below 25 percent in 2002, jumped to 33 percent in January 2003 and stayed at about that growth rate for the rest of 2003. The positive CPI inflation rate (y-o-y) in January 2003 also turned out to be the beginning of a new trend, especially after the monetary spigots were opened and administrative controls on investments were relaxed to combat the expected deflationary impact of SARS.

By the third quarter of 2003, it became clear that inflation had replaced deflation, and on August 23, the People's Bank of China (PBC) announced that the required reserve ratio for commercial banks and most other deposit-taking financial institutions would be raised from 6 percent to 7 percent with effect from September 21.<sup>13</sup> At the same time, the state started implementing administrative measures like the closing down of investment projects in unauthorised development zones.<sup>14</sup> The economy, however, continued to surge ahead causing prices of industrial inputs to soar, and power shortages to worsen.<sup>15</sup>

On March 25, 2004, PBC raised "the base rate for re-lending among financial institutions by 0.63 percentage points ... [and later in] April, the State Council issued an order that reduced the maximum loan percentage for steel, aluminium, cement and property investments to 60 percent from 75 percent."<sup>16</sup> Then on April 25, 2004, PBC raised the required reserve ratio to 7.25 percent. Although official GDP growth was 9.1 percent in the third quarter of 2004 compared to 9.6 percent in the second quarter of 2004, there was an unexpected re-acceleration of economic activities (especially investment spending) in September

<sup>13</sup> "China Moves to Tighten Bank Credit", In: *New York Times*, August 26, 2003.

<sup>14</sup> "2,400 development zones closed", In: *South China Morning Post*, December 29, 2003.

<sup>15</sup> "China's Dark Days and Nights: Industrial Growth Exceeds Supply of Electrical Power", In: *Washington Post*, January 5, 2004

<sup>16</sup> "Central bank chief juggles hot economic potato", In: *South China Morning Post*, May 14, 2004.

that reignited fears of overheating. “The new Goldman Sachs China Activity Index ... shows that the economy accelerated modestly to 12.5 percent [in September] from 11.9 percent [in August].”<sup>17</sup> The result was that, on September 9, 2004, the Deutsche Bank economist, Jun Ma (2004), raised his forecast for output growth in 2004 to 9.4 percent from his August 12, 2004 forecast of 9.1 percent. This perception of an economy on the verge of an inflationary spurt was also shared by PBC.

On October 28, 2004, China raised the official benchmark interest rate for the first time in nine years to slow down what the *New York Times* described as its “breakneck economic growth and inflation.”<sup>18</sup> This news report quoted a foreign bank economist as hailing “the interest rate increase ...[to be] a historic embrace of free-market tools of economic management despite possible internal political repercussions” – an intellectual victory for market regulation of investment level through the interest rate mechanism over quantitative control of investment level through the administrative mechanism.

Earlier, China, which had been under US and Japanese pressure to appreciate the yuan as part of its international responsibility to eliminate imbalances in the global balance of payments, had been told that yuan appreciation was also for its own good.<sup>19</sup> Morris Goldstein and Nicholas Lardy (2003) advised the Chinese government to appreciate the yuan by 15 to 25 percent because this step would remove “the incentive for further speculative capital inflow and reserve accumulation. No longer would the foreign component of the money supply by working at cross-purposes with the needs of domestic stabilisation.”

In our opinion, the above instinctive calls by foreign economists for the use of the price mechanism to solve China’s internal imbalance and external imbalance, via the interest rate and the exchange rate respectively, are only partially correct. These pronouncements miss the basic point that free-market tools can work only in a free-market environment.

---

<sup>17</sup> Goldman-Sachs, Charting China, Issue No: 04/09, August/September 2004.

<sup>18</sup> The 1-year deposit rate and the 1-year base lending rate were both raised on October 28, 2004 by 27 basis points to 2.25% and 5.58% respectively. PBC also removed the ceiling on loan rates, see Keith Bradsher, “China’s Banks, in Transition, Raise Rates”, In: *New York Times*, October 29, 2004. On November 10, 2004 the PBC raised the reserve requirements on commercial bank foreign exchange deposits to 3%.

<sup>19</sup> For example, “Snow calls on Beijing to let currency float”, In: *Financial Times*, September 2, 2003; and Kuroda and Kawai (2002).

First, on the effectiveness of the interest rate as a policy tool to reduce the demand for loans, the relevant issue is whether China has the free-market environment where the SOEs are no longer operating under the soft budget constraint. Raising the cost of capital will not reduce the “thirst for investment” by SOEs unless hard budget constraints are credibly imposed on the still-large SOE sector. The imposition of hard budget constraints on the great number of loss-making large SOEs is naturally as much a political decision as an economic one. This means that the decision to enforce hard budget constraints is dependent on whether there have been enough institutional changes – like adequate social safety nets, enhanced political legitimacy, and improved social controls – such that the government has more ability to handle the social fallouts from economic restructuring. The answer to this question in 2006 is that the government still does not have an adequate social safety net in place to accommodate mass unemployment.

Second, on the effectiveness of the exchange rate as a policy tool to reduce the balance payments surpluses, we begin by mentioning that, given China's capital controls, a freely floating currency regime could mean a value for the yuan that would be greatly over-appreciated compared to what its value would be under free capital flows, and would therefore reduce economic growth significantly.<sup>20</sup> Freeing capital flows is not an option, however. Given the weakness of the balance sheets of China's state-owned banks and the considerable embezzlement of state assets that has occurred, the experience with the Asian financial crisis cautions strongly against allowing the free movement of capital in the medium term.

Our biggest reservation about the Goldstein-Lardy recommendation is that there are alternate combinations of macroeconomic policies that will produce results superior to the one generated by appreciating the yuan alone. The general point is that because the balance of payments is only one of the main outcomes of concern and the exchange rate is only one of the ways to affect the balance of payments, it is seldom optimum to concentrate exclusively on one policy target (which does not dominate the other policy targets in importance) and then to employ only one

---

<sup>20</sup> In Robert Mundell's opinion: “China's growth rate could fall by half and foreign direct investment (FDI) could slow to a crawl if the country were to abandon its long-standing support of pegging the currency”, quoted in “Abandoning peg will slash growth 50 percent in China”, In: *South China Morning Post*, September 15, 2003.

particular policy tool (which is chosen idiosyncratically) to achieve that one policy target. We also want to point out here that speculative inflows into China cannot expand the money supply without the agreement of the People's Bank of China. Goldstein and Lardy are remiss in that, besides sterilisation through open-market operations, PBC can also impose credit quotas on the banks, and/or use existing capital controls to stem the speculative capital inflows.

The correct way to think about exchange rate management is to analyse the issue within the context of overall macroeconomic management and not just in regard to its impact on the balance of payment. In the preceding sections, we have established that whenever the hard budget constraint is imposed on the SOEs, China's dysfunctional financial system would impart a deflationary bias to the economy and render China a capital exporting country by constraining the growth of aggregate demand to be less than the growth of aggregate supply. Prior to 2003, the government had actively sought to neutralise deflation through an aggressive fiscal policy. We recommend that the present leadership continue the hard budget policy toward the SOE sector, and seek to reduce the resulting current account surplus in the medium run by:

- reshuffling and slightly expanding the state investment programme to incorporate large import-intensive infrastructure projects; and,
- accelerating the implementation of the tariff reductions contained in the WTO accession agreement.

It needs to be emphasised that the most efficient solution for macroeconomic and external balance management in the long run is to have private investment rather than public investment to recycle the pool of private savings back into the economy. The key to eradicating the deflation bias in a hard budget constraint environment, and the tendency toward current account surplus lies primarily in establishing an efficient financial intermediation mechanism and secondarily in appreciation of the yuan.

When one takes a longer view of Chinese economic management, the realisation that China would emerge as a major economic power in the medium term (upon the near completion of its transition to a normal market economy) makes it clear that a freely floating regime would be the inevitable fate of the yuan. A "good" float would be one where there is also free movement of capital so that the residents of this large economic entity could hedge their portfolios with worldwide asset diversification. Right now, because of China's weak domestic banking system, it is unwise to allow free capital outflows. An appreciation of the yuan

that would render the balance of payments zero now, will have to be followed by a depreciation when capital outflows are freed. This means that the 15 to 25 percent appreciation recommended by Morris and Lardy is an overkill that will result in a see-saw movement of resources within the economy as it continues to be deregulated. It is perhaps better to avoid this initial overvaluation by engineering a series of much smaller movements of the yuan, say 3 percent each time, in the near term.

Because of the state ownership of the banks, the effectiveness of credit quotas, and the existence of capital controls, anticipations of this series of minor revaluation would not cause the government to lose control of the monetary situation because of the inflow of speculative capital. In short, the expansion of foreign reserves from speculative inflow cannot cause the non-profit-maximising SOBs to expand the money supply without the acquiescence of PBC.

## **5 Fixing the Banking System to Facilitate Macroeconomic Management**

Given the pivotal role of the SOBs in helping to generate the internal and external imbalances, fixing the banking system would lower the costs of macroeconomic management. The most important priority for financial sector reform is the appearance and growth of competitive *domestic* private banks. Since China is required by its WTO accession agreement to allow foreign banks to compete against its SOBs on an equal basis by 2007, it would be akin to self-loathing not to allow the formation of truly private banks of domestic origin. There is no reason to favour foreign private banks over domestic private banks, and no reason why China should not allow its best financial minds compete with, and achieve the same glorious success of, the best foreign financial minds. We therefore recommend that, right after the recapitalisation of the big four state banks, at least two of them be broken into several regional banks, and that the majority of these regional banks be privatised. At the same time, the laws on the establishment of new banks should be loosened, and interest rates deregulated. However, it is most crucial that financial sector liberalisation proceeds no faster than the development of the financial regulatory ability of the state. Even then, the danger of substituting financial crash for financial repression is still a real one. A modern financial system requires a modern system of financial supervision and prudential regulation for its proper functioning.

It would be a good idea to sell a few of the regional state banks to foreign banks. This will facilitate the transfer of modern banking technology to Chinese banks. The more local staff the foreign bankers train, the larger the pool of future managers for Chinese-owned banks. An accelerated process of promoting the growth of sound domestic private financial institutions and allowing the entry of foreign financial institutions would certainly shorten the time it would take for Shanghai to assume its rightful place among the major international financial centres, and to contribute to more efficient intermediation of the world's savings.

We should mention that entry of Western banks into China's financial markets is not the same thing as liberalisation of the capital account in the balance of payments. We do not believe that China would be well served by a rapid opening of the capital account, since that could subject China to rapid swings of short-term capital in the same manner that whipsawed the economies of South-East Asia and Latin America. Just as in financial market liberalisation, capital account opening should also proceed gradually and in stages, because it must be accompanied by sophisticated financial market regulation, something that is definitely not in place at this time. The reality is that foreign banks could suddenly become conduits for large-scale capital flight, or for rapid swings in short-term lending and repayments, or facilitators of bank runs (in which depositors do not merely switch banks, or switch from domestic banks to domestic currency, but actually switch from domestic deposits to foreign assets).

An important part of financial reform should be the promotion of the development of sound rural financial institutions. The government can usefully draw upon the wealth of international experiences with various schemes in developing countries to direct investment credit to the rural areas. In particular, we wish to draw attention to the successful Indonesian experience of establishing a self-sustaining and profitable banking system (the *Unit Desa* system) in the countryside to provide a starting point for discussing how to accelerate financial development in rural China.<sup>21</sup> China should allow the appearance of new small-scale rural financial institutions that will mobilise local savings to finance local investments as quickly as adequate prudential supervision can be put into place.

---

<sup>21</sup> Indonesia is very similar to China in key economic and institutional features: a geographically vast, and heavily populated economy, and the rural financial system is dominated by branches of a state bank (Bank Rakyat Indonesia, and Agricultural Bank of China respectively); see Woo (2005).



## 6 Conclusion

We conclude with three observations.

First, while it is important to manipulate aggregate demand via monetary-fiscal policies to maintain the highest sustainable growth rate that is compatible with price stability, China is in the fortunate position where it can implement other economic policies that will not only increase the natural growth rate but also reduce its internal and external macroeconomic imbalances. The most important economic task for China is to adopt the best economic growth engine that world economic history has identified: a market economy where competitive private enterprises constitute the norm, and where the state focuses mainly on the provision of public goods and social insurance.<sup>22</sup> The switch to the new growth engine necessitates that China continues the privatisation of non-defense-related state enterprises that are not natural monopolies, begins the privatisation of SOBs, and drastically reduces the legal discrimination against the private sector. These reforms will, one, greatly moderate the boom-bust cycle by stopping the liquidity tango between the SOBs and the SOEs, and, two, reduce the tendency toward current account surpluses by reducing savings and increasing investments.

Second, the use of price mechanisms as the only policy instruments for all economic problems at this point is not appropriate for a partially-reformed economy like China. It will be more effective and efficient to prevent a chronic current account surplus by improving financial intermediation than either to use large exchange rate movements to affect China's saving-investment behaviour or to re-start the liquidity tango.

Third, the widespread international attention on the value of the yuan is possibly the first time in international monetary history that the value of the currency of a developing country has so greatly exercised the finance ministries and central banks of the largest developed countries for such a sustained period. This anomalous situation reveals two noteworthy points about China's return to the international stage. One, it

---

<sup>22</sup> Our view that China's impressive growth rate has been generated by its steady convergence to a normal private market economy is a contested one, however. There is also the popular view that China's growth is the result of successful policy experimentation that has discovered growth mechanisms (most of which are non-capitalist in nature) that are optimum for China's particular circumstances. This convergence-experimentalist debate is reviewed in Woo (1999) and Woo (2001).



shows the significant economic impact that China is now already having on the world. Two, it portends that the anticipated continued rapid growth of China in the next two decades will not only force more structural adjustments in other countries, but will also require that China assumes a broader “global system” perspective in resolving disputes caused by cross-border spillovers from its policies. The most contentious international disputes presently are about China’s management of the exchange rate, trade regime, and patents’ rights enforcement. However, as China continues to grow rapidly, there is the unfortunate possibility that the range of international disputes could expand, possibly in the medium term, to include international concerns about China’s public health readiness, and environmental protection. Hopefully, the world would be more multilateral in its approach to the solution of these future common issues rather than insisting on a unilateral solution by China as in the present case of the yuan.

## References

- A Chen, Yuan (1996), “Opening Remarks”, In: Manuel Guitián and Robert Mundell (eds.), *Inflation and Growth in China*, International Monetary Fund, Washington D.C., pp. 23-28.
- Fan Gang and Wing Thye Woo (1996), “State Enterprise Reform as a Source of Macroeconomic Instability: The Case of China”, In: *Asian Economic Journal*, Vol. 10, No. 3, November.
- Goldstein, Morris and Nicholas Lardy (2003), “Two-Stage Currency Reform in China”, In: *Asian Wall Street Journal*, September 12.
- Kuroda, Haruhiko and Masahiro Kawai (2002), “Time for a Switch to Global Reflation”, In: *Financial Times*, December 1.
- Liu, Liang-Yn and Wing Thye Woo (1994), “Saving Behavior Under Imperfect Financial Markets and the Current Account Consequences”, In: *Economic Journal*, Vol. 104, No. 424, May, pp. 512-27.
- Liu, Yia-Ling (1992), “Reform From Below: The Private Economy and Local Politics in the Rural Industrialization of Wenzhou”, In: *China Quarterly*, No. 130, June, pp. 293-316.
- Ma, Jun (2004), “China Economic Analysis Newsletter”, Deutsche Bank, issues of August 12 and September 9.
- McKinnon, Ronald (2004), “US Savings Shortfall Is Hurting Workers”, In: *Financial Times*, October 20.
- Solow, Robert (1991), “Sustainability: An Economist’s Perspective”, 18<sup>th</sup>

- J. Seward Johnson Lecture to the Marine Policy Center, Woods Hole Oceanographic Institution; Published in: Robert N. Stavins, *Economics of the Environment: Selected Readings*, 4th edition, W.W. Norton, New York, 2000, pp. 131-38.
- The Economist Intelligence Unit (2004), *Country Report: China*, December.
- Williamson, Jeffrey (1988), "Comments on 'Reflections on Development'", In: Gustav Ranis and T. Paul Schultz (eds.), *The State of Development Economics: Progress and Perspectives*, Basil Blackwell, New York, pp. 24-30.
- Woo, Wing Thye (2005), "China's Rural Enterprises in Crisis: The Role of Inadequate Financial Intermediation", In: Yasheng Huang, Anthony Saich and Edward Steinfield (eds.), *Financial Sector Reform in China*, Asia Public Policy Series, Harvard University Asia Center Publications, Cambridge MA, pp. 67-91.
- (2001), "Recent Claims of China's Economic Exceptionalism: Reflections Inspired by WTO Accession", In: *China Economic Review*, Vol. 12, No. 2/3, pp. 107-36.
- (1999), "The Real Reasons for China's Growth", In: *The China Journal*, No. 41, January, pp. 115-37.
- and Liang-Yn Liu (1995), "Investment-Motivated Saving and Current Account Malaise", In: *Asia-Pacific Economic Review*, Vol. 1, No. 2, August, pp. 55-68.
- , Wen Hai, Yibiao Jin and Fan Gang (1994), "How Successful Has Chinese Enterprise Reform Been? Pitfalls in Opposite Biases and Focus", In: *Journal of Comparative Economics*, Vol. 18, No. 3, June, pp. 410-37.

# 7

## How Effective Is Monetary Policy in China? A Comment on Woo's "Inflationary Tango"

*Zdeněk Drábek*

The spectacular performance of the Chinese economy over the last two decades or so has been only matched by the spectacular changes in the country's economic policy. From a centrally planned economy, China has turned into an economy in which markets have become a powerful instrument of resource allocation. Even though the "hand" of the bureaucrat continues to be still very "visible" in many spheres of economic policy, the "invisible hand" of markets for labour, capital and foreign exchange has been clearly playing an important role. From a country virtually completely closed to foreigners, China has become by now one of the biggest markets for foreign investment, an attractive destination for foreign tourists and businessmen and a country which has made a powerful mark on the ongoing process of globalisation. As a WTO Member, China is already treated as a "market economy" which was, after all, one of the main strategic objectives of the Chinese government in pursuing its interest in the WTO Membership.

However, the Chinese economy is still by no means a "laissez-faire" market economy. What continues to make the Chinese economy different from a *bona fide* market economy is the presence of state enterprises, which were the backbone of the centrally planned system before the introduction of reforms and which continue to play an important economic role in the economy even today. While the share of state enterprises' output in GDP has declined, it still represents about 30 percent of GDP. But even more significant is the engagement of

state enterprises in the financial sector. The share of loans contracted by state enterprises from local banks is currently about 70 percent of the total! It is evident, therefore, that the performance of state enterprises is still critical in many ways for the Chinese economy.<sup>1</sup>

It is this high share of state enterprises in economic activities in China that has motivated Professor Wing Thyee Woo in the previous chapter to look more closely at their role in the macroeconomic performance of the economy. His interest is in assessing the role of state enterprises in the process of building up inflationary pressures. China's inflation rate has been respectable over the years. However, inflationary statistics may be sometimes quite misleading as noted by Professor Woo. He observes cycles in the build-up of inflationary pressures in the form of the size of non-performing loans. The latter always carry the potential of open inflation if they are accompanied by accommodating monetary policy. Moreover, changes in the current account surpluses can also be traced to the cycles in the build-up of non-performing loans. His conclusions are quite stark and surprising – state enterprises have been responsible for the periodic build-up of inflationary pressures and the authorities have been fully aware of the problems and dangers arising from the lack of financial discipline in the public sector. Furthermore, observes Woo, the authorities have not been able to effectively use monetary policy to contain those inflationary pressures, and they have only succeeded in doing so by relying on non-market instruments such as credit rationing.

Professor Woo raises several issues that are interesting as well as unorthodox and controversial. The first important point of his chapter is that the Chinese economic performance has not been as sparkling as one is typically made to believe from figures on growth and international trade. The economy has been subject to dangerous inflationary pressures even though these pressures have not been shown in the movements of either retail price or wholesale price indices. The treatment of China as a market economy in the WTO notwithstanding, the second interesting feature of the chapter is that the Chinese authorities have to rely on non-market instruments to contain inflationary pressures.

---

<sup>1</sup> A recent McKinsey's report provides figures that are even more dramatic with regard to the share of state-owned enterprises in bank credit – 73 percent. McKinsey estimates the share of public sector companies in GDP at 48 percent. See McKinsey (2006).

There is a third element of Professor Woo's chapter that is particularly intriguing. As economic theory tells us, domestic inflationary pressures cannot be contained to the domestic economy and the pressures will inevitably spill over to the external balance. How the pressures affect the domestic economy and how they affect the external balance will depend on the transmission mechanism of those pressures – from the build-up of non-performing loans to the emergence of internal and external imbalances. That mechanism is not discussed in the chapter at great length and it is, therefore, the issue to which I want to turn in this note.

The purpose of this note is twofold: (1) To shed further light on the model used by Woo; and (2) to explore in some more detail the linkages between the external and internal imbalances of the Chinese economy. I shall address the latter by raising a number of questions that seem to me pertinent to a better understanding of Professor Woo's model and his argument. Given the nature of the Chinese economy, it is quite easy to misunderstand the logic of Professor Woo's argument.

I shall start by outlining again the main general features of Professor Woo's model with a particular attention to the linkage between the external and internal imbalances. Section 2 will address the issue of the transmission mechanism by raising questions about policy responses of agents and by making comments about specific issues raised in Woo's chapter. Policy implications of Professor Woo's chapter are discussed in Section 3.

## **1 The Model of “Inflationary Tango”**

The first important feature of Professor Woo's model is its structure. The model has four sectors of the economy: government, state-owned enterprises (SOEs), private sector and banks. This structure may not appear unusual except that private sector firms operate alongside state-owned enterprises and that many banks are also state-owned with close ties to state enterprises and (provincial) governments and they operate alongside state banks.

The second important feature of the model is that markets do not necessarily clear. This feature comes out from the objective functions of the agents, and those objectives differ a great deal. The behaviour of state-owned enterprises is not driven by the desire to maximise profits since the only shareholder is the state, and the profits are appropriated by

the state through taxation. Their incentives are related to profitability only tangentially at best. What matters more is their “hunger” for new investments that lead to more employment, bonuses and non-pecuniary benefits for enterprise managers. The state may be concerned about profitability of its enterprises but it also has other objectives such as employment, and this often determines its response to failures of state-owned enterprises to be profitable. When state enterprises are not profitable on a prolonged basis they are not closed down for fear of unemployment and they will be urged to continue their operations.

The only way in which the system can be maintained is if somebody is prepared to pay for the losses and that “somebody” is Chinese banks (and ultimately, the taxpayer, of course). It is the banks that lend to state-owned enterprises, and it is also the banks whose balance sheets will be affected by the emergence of non-performing loans. The model is characterised by a “dichotomy” between those who save and those who invest, and between those who manage and those who control. When the size of non-performing loans becomes “excessive”, the government or monetary authorities have to act. They will either have to recapitalise the affected banks or they will have to impose restrictions on new lending.

This unorthodox behaviour of banks has two major effects. First, the accumulation of non-performing loans on banks’ balance sheets leads to a build-up of inflationary pressures. Bank-financed activities of state-owned enterprises increase incomes of households, which are not matched by a corresponding increase of output and availability of consumer goods. Second, the demand for investment by state-owned enterprise and the willingness by banks to lend are the critical forces behind changes in the current account. By definition, and as can be seen from equation (1), any change in investments of state enterprises will affect the size of the current account imbalance, *ceteris paribus*.

$$CA = (T-G) + (S-I) \quad (1)$$

where CA is the current account imbalance, T stands for tax revenues, G for government expenditures, S for savings and I for investment.

The term (S-I) has been persistently highly positive in China, reflecting strong savings habits and high propensity to save by Chinese households. Professor Woo devotes considerable attention to the reasons why China generates large excess savings (over domestic investment) – arguments which I find very credible. The reasons include, *inter alia*, the

one-child policy, the uncertainty created by incomplete reforms of state-owned enterprises, the precautionary motive, and, ingeniously, investment motivated savings.<sup>2</sup>

Now, consider the case in the model of increased investments by state-owned enterprises. What will be the effect on the current account? Under normal circumstances and *ceteris paribus* conditions, the increased investment would result in a *reduced* current account surplus. Considering the concerns of the outside world about the large trade surpluses of China, this would be a desirable policy alternative since it would reduce the size of the Chinese trade surplus. In contrast, this would be an unattractive option for Chinese policymakers.

However, the model does not describe “normal” circumstances. Increased investments of state enterprises funded by loans that are not repaid will lead to increased spending, but the effect on current account will depend on the response of banks to the emerging difficulties of enterprises in servicing their loans. In competitive markets, increased commercial debt of firms raises the risk of lending. This leads to a higher rate of interest on loans to the indebted firms. In the circumstances of China’s markets, banks do not necessarily reduce lending to SOEs even if the latter accumulate excessive debts. The only solution is a kind of moratorium on bank lending (a “freeze”).

If banks cut access to new loans and refuse to disburse the outstanding loan balances, actual spending will be reduced. The adjustment will take place through a reduction in *desired* spending once the adjustment works itself out through a reduction of incomes and savings. On the other hand, if banks continue to provide funding, actual spending will be equal to desired spending and the adjustment will take place through increased nominal incomes and savings. Moreover, the adjustment may be also in the form of a higher rate of inflation and, hence, in the form of an appreciation of the real exchange rate.

The effect on current account may also depend on what banks do and, in addition, the outcome is ambiguous in the case of a lending freeze. If banks do not stop lending, the current account surplus is reduced as SOEs expand their investments and demand for imports. However, if lending is reduced the surplus will be unchanged or may even increase.

---

<sup>2</sup> Investment-motivated savings result from the imperfections of financial markets which discriminate against small and medium-scale enterprises, regulated deposit rates, and, in general, a low level of financial sophistication.

The current account surplus will also be reduced by inflation as the real exchange rate appreciates.<sup>3</sup>

What will be the actual outcome with regard to the current account surplus will critically depend on what happens to the saving and spending pattern in the private sector, which has played a major role in the improved performance of the Chinese economy. Unfortunately, this issue is not covered by Professor Woo.

## 2 Questions About the Response Functions of Chinese Economic Agents

The simple macroeconomic model of the Chinese economy outlined above is an interesting way of explaining current account imbalances in China. The model starts from the traditional “open economy” model derived from national income identities, which are then applied to the Chinese economy. In addition, the model follows the tradition of the literature on state enterprises in centrally planned economies, which emphasises elements of objective functions other than profit maximisation. However, what makes the model rather different from the traditional literature is the presence of the private sector, both in the real sector and in the banking sector. These features raise several questions.

1. The first question is perhaps the easiest to answer. If banks do not cut off loans to state enterprises in the face of cumulating non-performing loans, why is that the case? In a normally functioning market economy in which banks have to account for their performance to shareholders, the banks in question would indeed have to take the responsible action of cleaning up their balance sheets. This does not happen in China for reasons mentioned above.
2. This leads to another question. What is the size of non-performing loans and how does it change over time?<sup>4</sup> Is the size correlated with the performance of the economy?

---

<sup>3</sup> Movements of the exchange rate of renminbi have been seen by many observers as key to changes in the Chinese current account. The point has been made forcefully by John Williamson in our discussions of Professor Woo’s paper. For more recent evidence see, for example, Marquez and Schindler (2006).

<sup>4</sup> According to a recent Ernst & Young report, the estimated value of China’s non-performing loans was \$911 billion. The report caused a major controversy which the US-based accounting firm had to retract and called “an error”. See *Time Magazine*, May 2006.



3. When the size of non-performing loans is increasing, so is the credit risk of banks' clients. As a result, demand for credit by SOEs should fall as lending rates rise and the willingness of banks to lend falls at the going rate of interest. Profit maximising banks would shift their lending activities to the private sector. This, too, did not happen. Why not? Was it because there was a lack of projects in the private sector or were there other reasons?
4. If the authorities were concerned about inflationary pressures due to the build-up of non-performing loans, what about households and private firms and their concerns? If inflationary pressures rise, should we not expect a fall in savings as real interest rates fall? Or was the government perfectly capable of hiding inflationary pressures from the public?
5. This leads to the fifth question. In order for the model to work it is important to assume that savings be made by households, investments by SOEs and that the level of investment be determined jointly by state banks and the government. In other words, changes in investments of SOEs are unrelated to changes in *aggregate* investments and savings as well as to changes in government revenues from taxation and government expenditures. Even though the SOE sector accounts for 70 percent of bank loans and represents therefore most likely the "critical" mass of bank lending, does this not mean that both the variable "T" and the variables "G" and "S" are completely exogenous? Surely, a part of "T" – tax revenues – comes from incomes and spending in the non-state enterprise sector.
6. Most importantly, why should banks and the Chinese government worry when their non-performing loans are rising? As long as real GDP growth exceeds that of rate of interest, banks' stock of debt will fall. Few individual banks may be hurt but the banking sector as a whole remains solvent. My own impression is that the authorities should be concerned – the "Chinese economic growth has apparently come to depend on a high rate of investment and a rising one. In the first half of the 1990s, China required \$3.30 in investment to generate \$1 of additional income, but since 2001 it has required \$4.90, which is 40 percent more than the amount required by other Asian Tigers in their high-growth period."<sup>5</sup> In other words, the incremental capital-output ration has been rising since the early 1990s.

---

<sup>5</sup> The quote comes from the McKinsey's report cited in Martin Wolf, *Financial Times*, column 7, June 2006. For more details, see McKinsey (2006).

Woo's position is basically the same – he, too, is concerned about the size of debt and the potential dangers arising from it. He reaches the conclusion by carrying simulations using different assumptions about the rate of growth of GDP, interest rate on government debt and the rate of bad loan creation. His simulations lead to the conclusion that the dangers are even more dramatic than those implied in the numbers above.

### **3 Policy Implications**

The discussion in the previous section indicates that it may be somewhat premature to draw strong policy conclusions. Nevertheless, if the model is fine-tuned in a manner that addresses the outstanding issues, the policy implications would be extremely important. Here are a few suggestions.

Perhaps the most important policy implication is that monetary policy continues to be ineffective in China – due to the presence of state-owned enterprises and the way the firms are treated by the economic policy-makers. What lies behind the unorthodox behaviour of those enterprises is their objective function, which is not driven by profit maximisation as is the case of firms with private ownership. Changes in interest rates may be important for the private sector but they are far less important for state-owned enterprises. Moreover, changes in interest rates are unlikely to affect the level of savings and investment as long as the share of state-owned enterprises in GDP and bank lending is large. Here I find myself arguing the same point as Professor Woo.

Another policy lesson that can be learned from the model is that the effects of monetary policy could be perverse. For example, a rise in interest rates will lead to higher savings, a greater liquidity of banks and further expansion of lending to state-owned enterprises, and larger investments.

It is evident that as far as the public sector is concerned, the costs of capital of state-owned enterprises are less than the true opportunity costs of capital. This also implies that, for the SOEs, the costs of loans from China's banks are lower than the true opportunity costs of capital since non-performing loans are financed through various interventions of the government and they represent, therefore, a subsidy. This could potentially raise serious questions in the WTO, which disciplines the use of subsidies since they affect the competitiveness of countries in world markets.

Further reforms of the banking sector are clearly needed, a point fully recognised by Wing Thye Woo. Banks' ties to the government remain too close, which is one of the main origins of their problems. This leads to inefficient use of capital and "excessive" dependence of Chinese growth on investment. The latter is already extremely high and rising.<sup>6</sup> Thus, it will be necessary to introduce measures to create strong and competitive banks by recapitalising the big four state banks, possibly by breaking two of them into regional banks.<sup>7</sup> Sale of banks to foreigners should be encouraged. Banks' balance sheets may again have to be cleaned up but only if the banks are fully privatised. These and other measures should be undertaken with a speed not exceeding the regulatory capacity of the monetary authorities.

Some revaluation of renminbi will be necessary. An exchange rate adjustment may be required as much as an instrument of domestic adjustment as well as a part and parcel of an international solution to the current problems of global imbalances. A revaluation would also be desirable to slow down the inflow of speculative capital as well help reduce inflationary pressures. Such an adjustment is likely to be effective because of China's extraordinary exposure to international trade. In 2005, China's ratio of trade to GDP was much the same as that of South Korea, even though the latter has only 4 percent of China's population! China's current account surplus already reached 7.1 percent of GDP and the country's foreign currency reserves are now 40 percent of GDP – the world's largest (Min Zhao, 2006).

Wing Thye Woo is far more sanguine on the question of revaluation. His argument is that revaluation will not help, especially since it will be eroded by capital movement upon the liberalisation of capital account. In this respect, he is probably too conservative given the role of the private sector in the "real" segment of the economy and its role in the process of macroeconomic stabilisation.

---

<sup>6</sup> These conclusions are echoed in a recent IMF paper, which argues that the risk that a banking sector underpinned by government guarantees would be motivated to make another round of bad loans rises as liberalisation proceeds. See Prasad and Rajan (2006).

<sup>7</sup> Wing Thye Woo offers an interesting discussion and a review of the arguments for and against recapitalisation of banks. Some observers argue strongly in favour of recapitalisation (e.g. Lardy), others are against as long as banks are lending to state-owned enterprises (Fan Gang). My position combines both arguments.

## References

- McKinsey & Company (2006), "Putting China's Capital to Work: The Value of Financial System Reform", Executive Summary, McKinsey Global Institute, May.
- Marquez, Jaime and John W. Schindler (2006), "Exchange Rate Effects on China's Trade: An Interim Report", International Finance Discussion Paper No. 861, Board of Governors of the Federal Reserve System, Washington D.C., May.
- Min Zhao (2006), "External Liberalization and the Evolution of China's Exchange System: An Empirical Approach", World Bank China Office Research Paper No. 4, The World Bank Beijing Office, Beijing.
- Prasad, Eswar S. and Raghuram G. Rajan (2006), "Modernizing China's Growth Paradigm", IMF Policy Discussion Paper 06/3, Research Department, International Monetary Fund, Washington D.C., March.
- Wing Thye Woo (2006), "China's Macroeconomic Imbalances: The Liquidity Tango Mechanism", in this volume.

# 8

## Asian Monetary Coordination and Global Imbalances

*Yonghyup Oh*

An important reason for monetary cooperation in East Asia is that it can help resolve global imbalances. Global imbalances existed well before the 1990s, but they intensified after the 1990s. While the United States bears large responsibility for the creation of these imbalances, the fact that they have not yet been successfully corrected has cast doubts on whether the United States is the only one to blame for the lack of resolution. In particular, Asia might be seen as a region that could contribute to decreasing the imbalances.

One market-based measure to help resolve global imbalances would be balancing investments and savings (I-S) in Asia. Here investment refers to real investment. Facilitating cross-border real investments, including mergers and acquisitions, would make a meaningful contribution. Another measure would be exchange rate adjustments by each of the East Asian economies. This would be, in part, market-driven as well since most of the East Asian currencies are floating either freely or with limited government intervention.

While market-driven individual actions by member economies are welcome, I would like to stress the need for government-level monetary cooperation, both to facilitate cross-border investments as well as exchange rate adjustments in East Asia. East Asian economies have a lot to gain from such cooperation, for their own sake, as well as for the sake of contributing to the correction of global imbalances.

## 1 Asia's Crisis and the Call for Monetary Cooperation

The Asian financial crisis of 1997-98 showed the world that the Asian economic miracle was vulnerable. This was new; people had become used to the success stories of Japan in the 1970-80s and the subsequent success stories of the so-called tiger economies. Problems that would collectively affect the performance of most of the Asian economies were difficult to imagine. The crisis-hit countries – Thailand, Indonesia, Malaysia, the Philippines, and Korea – and their affected neighbours suddenly realised that they were vulnerable due to the close trading links among countries in the East Asian region.

At a macroeconomic level, one may argue that imprudent investment practices leading to too-risky overseas commitments were one of the reasons behind the crisis. However, a more microeconomic look at the sources of the crisis in Korea's case supports the hypothesis that one of the main culprits of the crisis was a strain in the short-term liquidity of small-sized investment companies in their foreign investments in other Asian markets. Financial risks differ between markets whose rules and regulations are different. Rules and regulations are important elements of a financial system. The Asian financial crisis was, in part, the outcome of clashes between different financial systems. In the case of Korean financial firms that went bankrupt during the crisis, it has become clear that they miscalculated and believed that their working principles would function as well in foreign markets as in the domestic market.

The Asian crisis of 1997-98 was obviously also the result of a sudden reversal of capital flows in the international capital markets, caused by contagion and the herding behaviour of investors.

Because of the crisis, a movement toward Asian monetary cooperation ensued. There had never really been such common sentiment on the need for concerted efforts toward creating and stabilising regional financial markets. The series of policy suggestions that followed the crisis included the establishment of an Asian Monetary Fund, the Chiang Mai Initiative (CMI), and the Asian Bond market initiatives. Proposals on exchange rate arrangements, ranging from a basket system to a single currency similar to the European euro, have been discussed in the context of academic and policy forums. Very recently, the introduction of an Asian Currency Unit has gained momentum.<sup>1</sup> However, so far only the Chiang Mai Initiative – bilateral swap arrangements for

---

<sup>1</sup> See the chapter by Fan Gang in this volume.

liquidity shortages – has obtained binding policy commitments from the participating member countries.

## 2 Investing Abroad or At Home?

Around the time of the 1997-98 crisis, East Asian countries became capital exporters. The risk-adjusted rate of return for overseas investment was much lower than they thought. What happened afterwards shows this rather clearly. Many East Asian economies continued to produce local capital, and instead of investing in more risky assets at home or in the region, the main destination of this capital has been safer US treasury bonds and foreign reserves.

It is no longer attractive to keep purchasing US government securities at the same level, especially since US dollars will continue to devalue vis-à-vis East Asian currencies, and levels of foreign reserves in most East Asian economies are already high. However, investing in East Asian securities is not yet attractive enough.

A weakness of the East Asian financial markets lies in the absence of local financial institutions capable of intermediating local capital to regional overseas markets. This is one of the reasons why local financial capital is not circulating sufficiently inside the region. As a result, local financial capital is either invested back to the country of origin or in low-risk US assets, while financial capital from developed countries is invested in risky assets in East Asian markets, a well-known fact today. Research (Jeon *et al.*, 2006) shows that East Asian markets seem better integrated with the US market than among themselves.

East Asia needs to create regional financial markets for Asian capital. This can be fostered effectively through monetary cooperation by Asian policymakers. While only successful with the active participation of market players, there is demand for building a monetary infrastructure that will facilitate this movement. This requires concerted efforts by national or regional authorities. A regional clearance system, harmonisation of regulations, even preferential tax treatment between regional economies, and the extension of a bilateral swap arrangement to enhance further macroeconomic stability are immediate examples of monetary cooperation for this purpose. Financial market development in each Asian nation is becoming even more important as the management of financial wealth becomes more important. Cross-border barriers within the region should be lowered for regional financial capital. The kind of

clash that was observed during the last crisis should be avoided. Building regional financial infrastructure will lessen the risks involved in overseas financial investments between Asian markets.

Another reason for enhanced monetary cooperation is to reinforce the macroeconomic stability of regional economies to better endure shocks that are transmitted faster and in a larger scale due to stronger trade linkages across economies within the region. Note in this regard that trade among East Asian economies is high. The share of East Asia in total exports and imports has been increasing and currently ranges between 40 to 60 percent for China, Japan, Korea, and the block of main ASEAN countries (with ASEAN being highest, followed by Korea). The trade channel is strongly present in the transmission of shocks to other economies. The more open the economy is, the larger the effects from the shock would be. The share of imports plus exports in domestic production is highest for ASEAN countries, at over 60 percent, followed by Korea and China both well over 40 percent, but it is below 20 percent for Japan. Although Japan is a relatively closed economy compared to its East Asian counterparts, given its important position in East Asia and the world and the high magnitude of macroeconomic interdependency across the region, monetary cooperation including Japan is necessary.

### **3 Hurdles to Monetary Cooperation**

The most advanced form of monetary cooperation in Asia today is the coordination of monetary policies, in particular the coordination of exchange rate policies. This has been a focal area of policy discussions in Asia since the 1997-98 crisis. Yet no agreement has yet been reached, and Asian countries still carry out their exchange rate policies quite independently.

While exchange rates are the most effective policy tool for correcting external balances and allowing the domestic economy to adjust quickly, when jointly done, the abolition of national exchange rates has the benefit of almost instantly leading to financial integration, especially of money markets, creating a larger and more external-shock-resistant financial market. As seen in post-EMU Europe, the costs can also be high as adjustment processes differ across countries, and some countries invariably lose while others gain. Thus in practice, this form of monetary cooperation is hard to achieve and requires strong political commitment.



**Table 1 Macroeconomic Heterogeneity in East Asia**

	CA	Credit	GDPR	INF	M2	M2M1	Open	GDP per Capita
China	2.67	1.36	8.46	1.55	1.52	2.61	0.05	1,702
Hong Kong	6.65	1.48	3.54	-0.11	2.23	13.16	2.91	24,439
India	-0.49	0.53	5.97	5.75	0.56	3.30	0.26	729
Indonesia	2.65	0.56	2.57	12.95	0.52	4.94	0.64	1,279
Japan	2.62	1.46	1.34	-0.05	1.24	2.40	0.21	35,729
Korea	2.50	0.81	4.57	3.68	0.63	7.47	0.73	16,201
Malaysia	7.72	1.50	4.68	2.35	0.98	3.93	2.09	5,090
Philippines	2.67	0.63	3.88	5.55	0.60	5.17	1.03	1,157
Singapore	20.44	0.80	4.76	0.80	1.10	5.00	2.83	26,840
Taiwan	5.51	1.61	4.29	0.91	2.02	0.25	0.87	15,280
Thailand	4.59	1.10	2.63	3.06	0.98	8.10	1.13	2,813

*Notes:*

Average of the annual figures of 1996-2004 for CA (Current Account Balance as percentage of GDP), Credit (Domestic Credit as percentage of GDP), GDPR (GDP growth in percentage), INF (Inflation in percentage), M1 (M1/GDP), M2 (M2/GDP), M2M1 (M2/M1), Open ([Exports+Imports]/GDP). M1 is defined as "currency in circulation+holdings of sight deposits" and M2 as "M1+holdings of time deposits". GDP per capita is in dollar and is as of the end of 2005.

*Source:* Data from Global Insight, Inc., 2Q/2006.

To get an idea of the complications this type of monetary cooperation is likely to face, it is useful to look at the differences between countries. Obviously, economies that are more homogeneous will find it easier to reach more advanced types of monetary cooperation than less homogeneous countries since conflicts of interests are smaller in the former.

The macroeconomic statistics of Table 1 show that East Asian economies are very heterogeneous. But they are also institutionally heterogeneous. Table 2 shows that the degree of heterogeneity is high in the development and styles of the legal systems that reflect the practices and quality of the business services sector. For example, financial capital that prefers a common-law system and equity participation would not find Indonesia or Korea attractive. It is no wonder that financial capital from developed financial centres of New York

**Table 2 Degree of Investor Protection**

	Tradition of Legal System	Equity holders	Creditors	Efficiency of Judicial System
Japan	Civil	4	2	10
Hong Kong	Common	5	4	10
Singapore	Common	4	4	10
Korea	Civil	2	3	6
Taiwan	Civil	3	2	6.75
India	Common	5	4	8
Indonesia	Civil	2	4	2.5
Malaysia	Common	4	4	9
Philippines	Civil	3	0	4.75
Thailand	Common	2	3	3.25

*Note:*

The higher the figure is, the better the investors are protected.

*Source:* La Porta *et al.* (2000).

or London chooses Hong Kong or Singapore as their first destination. The projected costs can be estimated for a specific type of monetary cooperation. If we take a single currency area as an example, what would be the impact of a symmetric external shock in this area on member economies?

Table 3 indicates how different the reactions of each economy would be for the same magnitude of external exchange rate shocks over 1 year to 15 year-time after the shock, assuming a fixed exchange rate system or a single currency. Economies react very differently to symmetric external economic shocks. The absence of a national exchange rate policy under a single currency would make each member country go through very difficult, time consuming, and often costly adjustments, e.g. labour wages or prices, to correct them. This is evident in post-EMU Europe.

*Ex ante* heterogeneity in economies and institutional infrastructure across East Asia together with the lack of leadership and the concerns of the potential costs that would result from stricter exchange rate arrangements are significant reasons why more concrete commitments have not been reached.

**Table 3 Asymmetric Effects from Symmetric External Shocks:  
Projected Effects of Devaluation of the Dollar by 20%<sup>1</sup>**  
(percentages)

		Korea	Japan	China
Price <sup>2</sup> (% changes)	+1 year	-5.36	-0.82	-1.86
	+5 year	-13.93	-2.53	-6.00
	+15 year	-25.56	-7.69	-12.36
GDP (% changes)	+1 year	-3.83	-1.14	-1.78
	+5 year	-5.19	-2.03	-3.42
	+15 year	-3.02	-2.85	-2.99
Trade Balance with the US Market (% of GDP)	+1 year	-0.91	-0.39	-1.12
	+5 year	-0.68	-0.58	-1.11
	+15 year	-0.15	-0.56	-1.10
Trade Balance with the Extra-East Asian Market (% of GDP)	+1 year	-1.54	-0.21	-1.31
	+5 year	-1.66	-0.31	-1.20
	+15 year	-0.43	-0.30	-1.08
Trade Balance with the Intra-East Asian Market (% of GDP)	+1 year	-0.05	-0.16	-0.12
	+5 year	0.05	-0.20	-0.67
	+15 year	-0.37	-0.22	-0.31

Notes:

<sup>1</sup>The effects are estimated compared to those at the time of the shock.

<sup>2</sup>Price is GDP price.

Source: Saglio *et al.* (2005).

#### 4 Concluding Remarks

The creation of Asian financial markets for attracting local financial capital and market initiatives to increase the level of cross-border real capital investment within the region would help to resolve global imbalances, but it takes time before tangible results will be achieved. A more direct and effective measure would be the simultaneous appreciation of East Asian currencies vis-à-vis the US dollar. However, whether Asian economies are ready to coordinate their monetary policies and what the best way would be to go about doing that remain unanswered.

The hurdles are greater in the East Asian case compared to the EMU countries. Because of that, East Asia may not want to aim at a strong commitment such as a single currency. More flexible arrangements could be more suitable.

The present social, economic and political landscape of East Asia is evolving rapidly as China surfaces. Barriers are being lifted and market players as well as policymakers have learned their lessons from past experiences. With or without government-level initiatives, Asian markets appear set to develop and further explore opportunities. This is an essential and necessary condition for any type of macroeconomic-level cooperation to gain momentum and be successful. Therefore, the present state is an opportunity for Asian policymakers to develop and intensify their cooperation and coordination. Such coordination will help to resolve global imbalances.

## References

- Jeon, J. K., Y. Oh and D. Yang (2006), "Financial Market Integration in East Asia: Regional or Global?", In: *Asian Economic Papers*, Vol. 5, No. 1, forthcoming.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny (2000), "Investor Protection and Corporate Governance", In: *Journal of Financial Economics*, Vol. 58, pp. 3-27.
- Saglio, S., Y. Oh, J. Mazier (2005), "Exchange Rates, Shocks and Inter-Dependency in East Asia: Lessons from a Multinational Model", KIEP Working Paper 05-05, Korea Institute for Economic Policy, Seoul, December.

# 9

## Understanding Imbalances in a Globalised International Economic System

*Jan A. Kregel*

This chapter provides an alternative approach to the traditional analysis of the problem of international imbalances and their implication for global financial stability. While the problem of imbalances is usually simplified by looking at bilateral imbalance between two countries, in the current case the US and China, or more broadly Asia, a global approach is more relevant to an understanding of the possible persistence of any individual bilateral imbalances.

Second, following traditional trade theory, there is a tendency to emphasise trade in domestically produced final goods between nations who specialise according to their respective comparative advantages. Actual international trade flows, however, tend to be dominated by intra-industry trade, and semi-finished intermediate goods rather than final goods, and these two trade flows have become the fastest source of trade growth. Integrated global production chains break the identity between countries, firms and trade flows, making analysis of imbalances more complicated.

This emphasis on domestically produced final goods has meant that financial flows are primarily considered as compensating flows required to offset trade deficits, rather than being the result of global investment and production decisions that determine the global pattern of trade in intermediate and final goods. Thus, the sustainability of the current imbalances is discussed in terms of the willingness of foreign lenders to continue to finance the US deficit, rather than in terms of whether

surplus countries are willing to continue to invest their surpluses in the US in order to finance their exports.

Balance of payments adjustment analysis is designed primarily to deal with imbalances across industrialised countries at roughly similar levels of development and presumes sufficient income and price elasticity to allow for reduction in domestic expenditures and expenditure switching. This lies behind the proposals for China to allow exchange rate appreciation or to increase wages sufficiently to reduce exports and allow consumers to import more from the United States. But, it may be the case that wage differentials are so high and the US production structure so inappropriate of Chinese consumption patterns, or that US companies have outsourced the production of those goods that China might choose to buy, that the impact occurs in some third country, rather than in recorded US imports and exports. Adjustment may thus depend more on the location of production and the location of the firms that direct globally dispersed production chains than on policies by countries.

Finally, it is important to recognise that international imbalances have been the rule rather than the exception in the post-war period, and that frequently they have been linked with the emergence of a newly industrialising developing country, such as Japan, and then Korea and the NICs, and then the little tigers and now the little dragons. The adjustment of imbalances between industrial countries may be qualitatively and quantitatively different from that between industrialised and developing countries that are following catching-up industrialisation policies. Thus, the important question may not be how can we eliminate imbalances, but rather how can they best be managed to support the policies of developing countries to achieve successful industrialisation.

Nonetheless, economists have been recommending more explicit global coordination of national economic policies in order to eliminate imbalances. This movement has culminated in the recent decision taken by the International Monetary Fund to extend its Article IV surveillance function to include multilateral assessments of the coherence and compatibility of individual countries' domestic policies with international stability. This response to international imbalances seems ill-conceived if we recognise that imbalances are usually the result of mutually incompatible domestic policy objectives. Implementing coordinated policies that would remedy global imbalances usually requires changes in domestic policies that produce politically unpalatable and unsupportable national economic conditions. Reactions to counter these conditions eventually take priority over any commitment to

international policy coordination, and the international incompatibility of national policies thus tends to be resolved through exchange rate crises and domestic recessions. This explains why coordination has not been generally accepted and when applied, has been less than successful in eliminating imbalances.

Today there is general agreement that large fiscal and external imbalances are unsustainable, but there is disagreement on the effects of their elimination. Many, including former Federal Reserve Chairman Greenspan, note that prior large international imbalances in industrialised economies have all been remedied without major disruption in domestic and international financial markets (Croke *et al.*, 2005). It is unclear whether he believes that this extends to developing countries. Others argue that the imbalances represent a clear and present danger of financial meltdown on a global scale that will be produced by a collapse of the dollar under the weight of the increasingly large US trade deficit.

In contrast to these positions, the analysis presented here suggests that past experience may not be a good guide to understanding the current imbalances. Instead, it suggests that they are the result of unique factors and conditions in which growing imbalances have made substantial differences in national policy preferences compatible. This means there will be little appetite to reduce them, while pressure to do so will require some countries to implement policies that they consider contrary to their national interest. However, there are some longer-term elements, in particular changes in income distribution, that may promote changes in domestic policies.

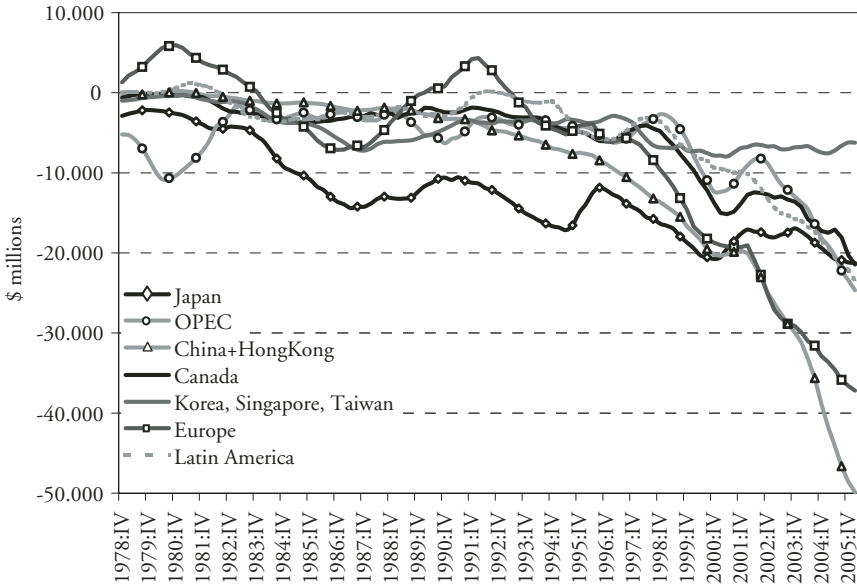
## 1 Why the Current Imbalances Are Unlike Any Other

### *The Imbalance is Multilateral*

As previously noted, the post-war period has been characterised by imbalances that were generally bilateral: first between the US and Europe (post-war dollar shortage, then post-reconstruction dollar glut), then between the US and Japan, and then the US and OPEC. Today, the imbalance is multilateral, between the US on one hand and Europe, OPEC, Japan, China and the rest of developing Asia, and Latin America on the other. This situation is different in two respects. First, the imbalances include a much larger number of countries or regions.

**Figure 1 US Balance on Goods Trade**

(quarterly data; 4-quarter moving averages 1978-2005)



Source: Bureau of Economic Analysis, US International Transactions Accounts Data, June 2006, Table 2b, US Trade in Goods.

Second, the imbalances include both industrialised countries, and OPEC, and rapidly industrialising Asian developing countries and, more recently, Latin America. Thus solving the problem involves more than adjusting an exchange rate, or coordinating policies between industrialised economies (US and Europe or US and Japan) with different policy preferences; it has the added dimension of policy differences between developed and developing countries.

These differences have important implications. First, because there are more countries in imbalance with the US, the size of the imbalance will be much larger. Second, the presence of a large group of newly industrialising countries adds another dimension – the integration of a group of developing economies amongst themselves and into the international trade and payments system. These changes are illustrated in Figure 1, which shows that while Japan has ceased to be the major cause of US trade imbalances, it remains important. Figure 1 also shows that Europe, which was once in deficit with the US, has now surpassed Japan and was until very recently as important as China in the US trade imbalance. If Korea, Singapore and Taiwan are added to



China and Hong Kong, it is clear that the policy differences between the US and developing Asia are as important as those between the US and Europe and Japan. Since it is likely that a different type of policy coordination would be necessary to solve the imbalance with the former group compared to the latter, no uniform coordination may be possible.

### *Capital Flows Dominate Trade Flows*

The second difference in the current situation is the dominant role of capital flows in determining international trade and payments flows. Our existing external accounts were predicated on the Bretton Woods system of fixed exchange rates designed to support the expansion of international exchange of final goods and services through exchange rate stability. This required keeping private international capital flows, and the build-up of international indebtedness, to a minimum. The architects of Bretton Woods envisaged that any international capital flows would be under the control of governments through their central banks and the international financial institutions, rather than the internationally operating private sector.

Balance of payments accounts were thus based on the expectation of domestic policy management that would produce roughly balanced trade in goods supported by stable exchange rates, minimal private capital flows, low interest rates, and low international indebtedness. They were also based on the presumption that, after post-war European reconstruction, trade flows would be dominated by trade in manufactured goods between Europe and the US, with trade between industrial and developing countries concentrated in primary materials.

As a result, the treatment of international trade emphasised exchange of final goods, and virtually ignored the rise of semi-finished intermediate goods as well as the importance of private autonomous capital flows and their impact on factor service payments. The assumed absence of capital flows led to a theory of adjustment to external imbalances based on changes in domestic absorption via the Keynesian multiplier. In exceptional circumstances of “fundamental” imbalance, this mechanism could be supplemented by once-over exchange rate adjustments designed to produce expenditure switching through changes in relative prices of traded and non-traded goods.

The implication of these presumptions is that the current account can be represented by the movements in goods and services trade as

given by the commercial balance, and that this balance will remain in rough balance over time through appropriate demand management or exchange rate adjustment. In short, large global imbalances should not exist or persist in the presence of appropriate national macro management, with exchange rate adjustment used sparingly and only in exceptional cases. If external imbalance were to become persistent enough to threaten the preservation of fixed exchange rates, the IMF would intervene and force the implementation of the appropriate policies to bring the trade account back into balance.

However, the post-war environment has turned out to be rather different. Private capital flows have become the rule rather than the exception, and there have been massive accumulations of international debt. Moreover, exchange rates are no longer stable. Indeed, from this point of view the current environment looks much like the pre-Depression world that the architects of the Bretton Woods System were trying to banish from existence and in which it was commonly held that trade flows were determined by international capital flows. And earlier, in the 19<sup>th</sup> century, it was understood that British foreign lending existed in order to finance the export of British capital goods. Indeed, British exporters often organised the borrowing to support the lending themselves (Wilkins and Schroeter, 1998).

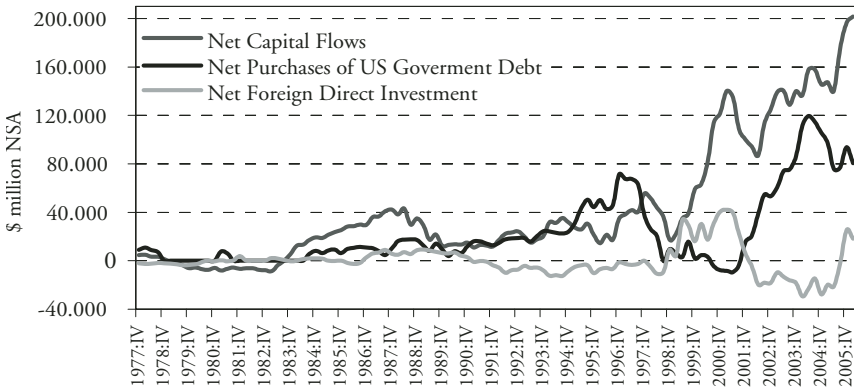
While some of the recent increase in global capital flows is associated with a similar process of geographical dispersion of production chains, it was preceded by a sharp increase in international financial flows driven by interest rate arbitrage and currency speculation and foreign portfolio investment. These flows were the result of the volatility in exchange rates after the breakdown of the Bretton Woods System. In addition, policies to support the liberalisation and deregulation of domestic banking markets led to a sharp increase in cross-border bank lending.

Figure 2 shows that net capital flows went from being negligible for the US until the beginning of the 1980s, to reaching a higher level through the mid-1990s, and then increasing steadily ever since, expanding by a factor of four since the late 1990s.

In addition to their rapid increase, what is interesting is that they go against the traditional view that international capital flows – when they exist – should move from developed countries, where capital is relatively abundant and thus facing declining returns, to developing countries, where capital is scarce and returns are higher. This is another reason why the imbalances should be seen in the light of the integration of developing countries into the global trading system, for the

**Figure 2 US International Transactions**

(quarterly data; 4-quarter moving averages 1977-2006:I)



Source: US Department of Commerce, Bureau of Economic Analysis, US International Transactions, Table 1.

large developing country surpluses are just the opposite from what was traditionally believed to be necessary to support development.

### ***External Accounts Respect National Boundaries, Production Does Not***

The third important difference is the change in the productive structure of the US economy – the geographical dispersion of different parts of the production process around the globe, or the existence of geographically integrated production and supply chains. For the US, this is largely the result of the restructuring of US manufacturing after the profits crisis of the 1980s, the increased role of capital flows in the global economy after deregulation and the fall of Bretton Woods, and the opening of developing economies to trade after the Uruguay Round, which sharply reduced their tariffs. This has meant that the most important components of trade are no longer final goods, but trade in semi-finished intermediate inputs required by the production processes of transnational corporations, predominantly American. These corporations have geographically dispersed their production processes across various national economic systems.

In this process, the design and marketing of internationally traded goods has tended to remain in the developed countries, while the various stages of the actual production process are spread across low-wage developing economies. Whereas Japan had built its industrialisation on

the purchase and import of technology that provided the basis for domestic expertise in new technological development through reverse engineering and learning-by-doing, in the 1990s there was relatively little technology transfer or technological development in developing countries.<sup>1</sup>

This has also distorted recorded trade figures since the export of a single traded good may now be represented by a series of passages across national boundaries at various stages in the production process of its various components, each recorded as an import and export, thus inflating the rate of growth of trade volumes and values.<sup>2</sup>

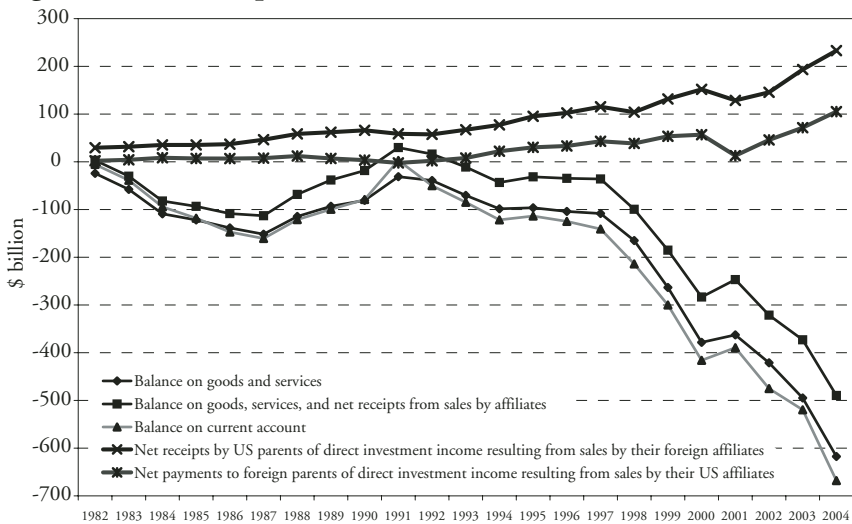
But this geographical dispersion of production creates an additional misrepresentation of trading relations. If a US transnational company undertakes foreign direct investment through the creation of a foreign subsidiary to produce goods it had formerly produced in the United States, the balance of payments shows a capital outflow from the US to establish the foreign subsidiary and records the imports of the foreign subsidiary produced goods and services. If the increased profits that result from the lower production costs in the foreign subsidiary of the US corporation are not repatriated, they are recorded as a credit in the factor services balance offset by foreign direct investment of an equal amount. Rather than appearing as the export of technology, what appears is the profit of the foreign affiliate of the US company in the capital services account.

Alternatively, if a US corporation develops a production design that it sends via electronic means for fabrication by a foreign owned production facility and imports the produced output into the US for final sale, the accounts would record the imports of the final goods incorporating the design or the technology, valued at only the foreign value added – i.e. its low wage costs. Rather than appearing as the sale of fashion design or industrial design or use of technology abroad, the value of the design technology only appears in the increased domestic profit reported by the US company arising from the difference between the low foreign production cost and the domestic selling price. The accounts only record the deterioration in the trade balance; they don't reflect the non-recorded exports of technology or the improved earnings of the

---

<sup>1</sup> Although this may be changing as both India and China are building research and design capacity.

<sup>2</sup> The problems raised by re-export in the case of Chinese trade through Hong Kong are analysed in Schindler and Beckett (2005).

**Figure 3 Ownership Based Current Account 1982-2004**

Source: US Department of Commerce, Bureau of Economic Analysis, Ownership-Based Framework of the US Current Account, 1982-2004.

US company and the increase in wealth to its shareholders. Thus it is possible for the deterioration of the recorded US trade balance to be highly profitable for US companies operating in the global market. These accounting problems are further complicated by the influence of national taxation regimes on the location of profit accrual.

When national corporations operate their activities as if there were no national boundaries, keeping external payments accounts on the basis of national boundaries may not provide a good representation of the sustainability of trade imbalances. One attempt to measure the US external account that takes the earnings of US companies operating abroad into account is presented in Figure 3. As might be expected, the US external imbalance is reduced by over \$127 billion when the overseas operation of US companies is taken into account. It is interesting to note the accelerating trend after the 2000-2001 recession.

Further, as a result of the increased influence of capital flows on trade and the geographical dispersion of intermediate stages of production, the current account in many countries is increasingly determined by capital factor incomes representing interest, profits and dividends on foreign production, and borrowing and lending. All of these capital factor incomes are fully recorded by national origin, while goods and factor services balances are no longer representative of real underlying flows.

Paradoxically, in the modern world, capital flows may no longer represent transfer of resources or the financing of productive activity and goods flows may no longer represent production of final goods for import or export.

The US Department of Commerce provides data on the impact of foreign corporations operating in the US and US corporations operating abroad. They show that on average for the years 2000-2003, the last year for which data are available, around 40 percent of US imports are accounted for by the export sales of US companies' foreign affiliates into the US market (US Department of Commerce, 2006, p. 45). As direct investment continues to grow and outsourcing continues to increase, we can expect that this distortion in the external accounts will increase and that exchange adjustment will be slow to reverse it.

For European companies operating affiliates in the United States, the figures for 2003 show that for countries such as the UK, Netherlands and Germany, the direct sales of their affiliates producing in the US are around 40 times the value of their direct goods and services exports to the US market (Zeile, 2005, p. 214). Thus, direct exports of European goods for sale in the US have been increasingly displaced by the production and sale of goods produced by affiliates of European companies operating in the US.

However, the problem is made more difficult by the fact that on average, foreign affiliates operating in the US import semi-finished inputs for use in production. Figures for 2003 show that for all countries affiliated company imports in value terms were nearly double the value of their exports. For Europe it was around 1.8 times and for Asian companies the ratio was well over three to one.

These factors are important for policy purposes because as noted above, under the Bretton Woods scheme, the most important policy variables were domestic income growth and relative prices of traded and non-traded goods. However, if the production and trade in goods is dominated by international capital flows, these variables have only limited impact, and monetary variables such as relative wages, productivity, interest rates and profit rates become much more important. For example, a fall in domestic income will have little impact on the capital factor services balance of the current account represented by debt service; nor will it have much impact on the decision of a corporation to manufacture abroad and import, rather than producing domestically. For foreign companies operating affiliates in the US, the initial impact of exchange rates is thus primarily on the translation of dollar profit

remittances, and thus on the bottom line of the parent company's balance sheet, rather than on the flow of imports of goods and services. Since it takes much more time and it is much more costly to close a foreign production operation than to divert exports from one market to another, it is unlikely that these foreign affiliates will be closed even if dollar depreciation induces large increases in the costs of their imported inputs. Depreciation is thus unlikely to have much impact on the European share of the US bilateral deficit accounted for by these operations.<sup>3</sup>

Taking all these factors into consideration, it becomes clear that any analysis of the impact of the international imbalances on economic performance of countries and on the performance of currencies should take into account the fact that we do not have a good idea of the dimension of the problem. Second, it becomes clear that we need to analyse the impact of the increasing dominance of international investment flows on the behaviour of the current account, the changes in the structure of international goods flows and, finally, the existence of a much larger area than Japan in the Far East that is using a policy of export-led development to support full employment policies and stable real exchange rates.

## **2 Analysing Regional Imbalances Through Regional Policy Choices**

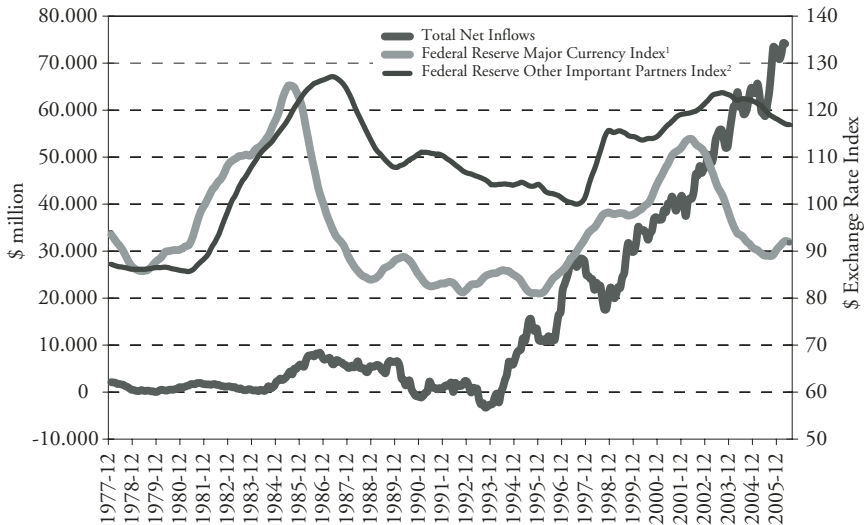
To simplify the discussion and avoid some inessential regional differences, consider the world as represented by three regions – the US, Europe and developing Asia. Although most of the attention in the discussion of international imbalance is given to the US-China bilateral imbalance, this is not the most important in understanding the global imbalances. Broadly, Asia – China, South, South East and North Asia – represents developing countries that are applying domestic policies that create export surpluses to support domestic demand and employment growth, and thus generate domestic savings. Europe is applying restrictive domestic fiscal and monetary policies to keep demand repressed at the level that keeps the economy from growing more rapidly than 2 percent with 2 percent inflation, the resulting excess capacity creating

---

<sup>3</sup> The figures quoted are elaboration of data available in US Department of Commerce (2006).

**Figure 4 Net Foreign Acquisition of US Long-Term Securities and Exchange Rates**

(1977-04 to 2006, monthly data, 12 month moving averages)

*Notes:*

- <sup>1</sup> *Major Currency Index* includes a trade-weighted average of the euro, the Australian and Canadian dollars, Japanese yen, Swedish krona, Swiss franc, and British pound.
- <sup>2</sup> *Other Important Partners Index* includes the currencies of Argentina, Brazil, Chile, Colombia, Mexico, Venezuela, China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, Thailand, Israel, Saudi Arabia and Russia. Since the dollar has depreciated or remained stable against most of the non-Asian currencies in the index, it may overstate the depreciation against these currencies.

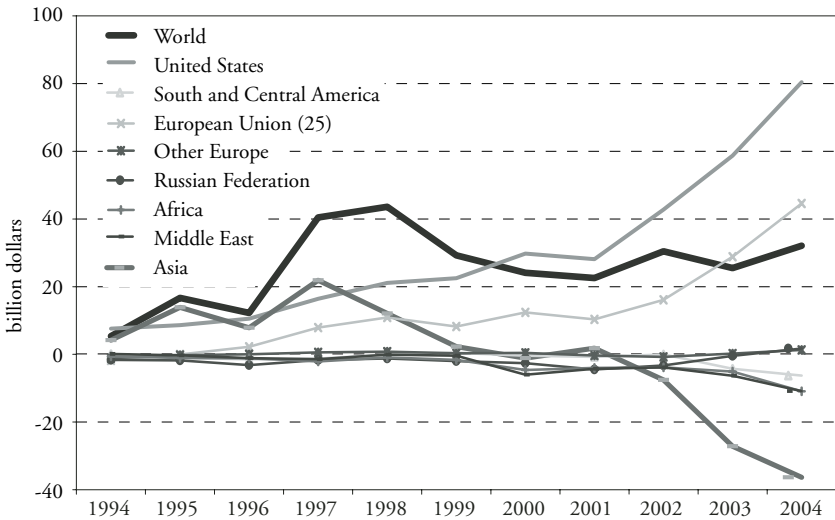
*Source:* Elaboration of US Treasury, Treasury International Capital System (TIC) Database, July 2006 and Federal Reserve System, Foreign Exchange Rates, Table G.5

positive trade balances. The Asian developing countries traditionally, and currently, favour stable intra-regional exchange rates and relative to their major extra-regional export market in the US. Thus, since the Japanese yen and the euro fluctuate relative to the dollar, Asian developing countries have a *de facto* dual exchange rate policy – flexibility relative to the yen and the euro, and relative stability against the dollar and within the Asian region.

The results of these Asian and European domestic policies on bilateral regional exchange rates can be seen in Figure 4. It shows that over the last four years, substantial dollar exchange rate adjustment has taken place in the euro-dollar exchange rate – while the US-Europe bilateral trade balance has continued to deteriorate. It also shows the relative stability of the exchange rates of Asian developing countries

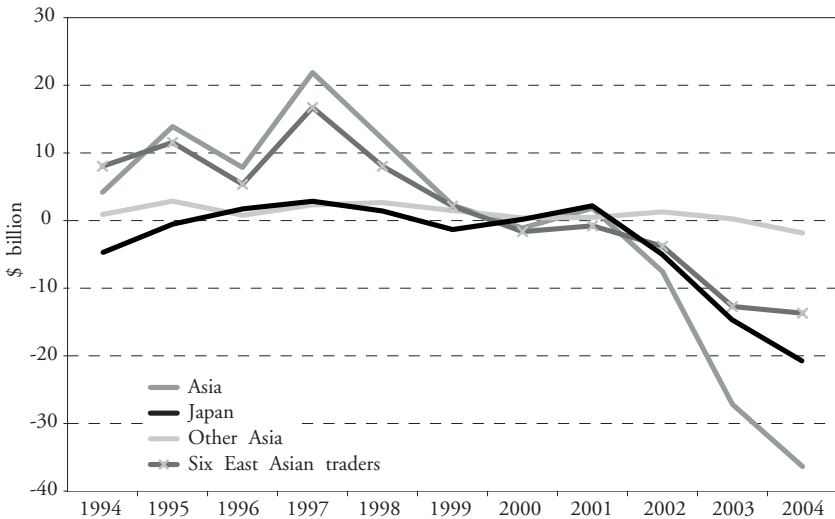


**Figure 5 China Merchandise Trade Balances**



Source: World Trade Organization, International Trade Statistics 2005, Table A19.

**Figure 6 China's Asian Trade Balance**



Source: World Trade Organization, International Trade Statistics 2005, Table A19.

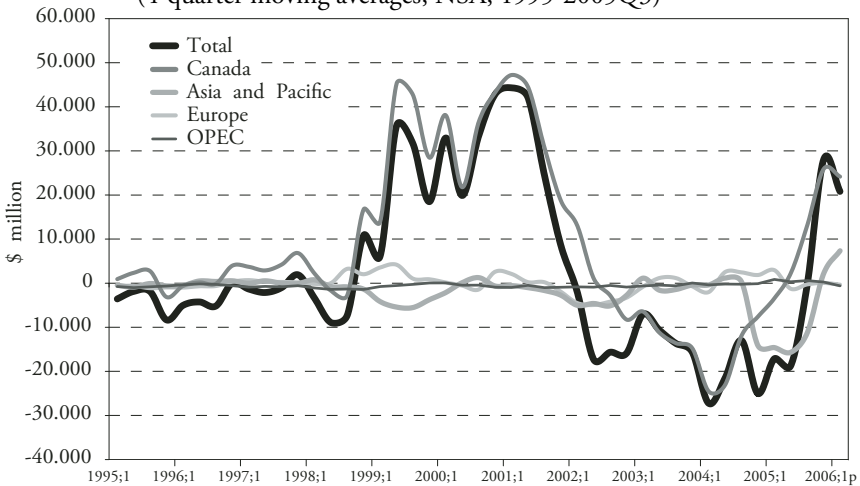
relative to the dollar – while the US trade balance with these countries has also continued to deteriorate.

In both Europe and the developing Asian countries, the trade surpluses are balanced by capital outflows that generate counter flows of capital service earnings; these earnings provide further increases in their positive current account balances.

As mentioned above, global imbalances can be understood as the global outcome of various national policy objectives. The primary aim of Asian developing countries is to preserve their internal expansion and employment growth, as well as to insure their economies from the volatility of international capital flows that produced crisis in 1997. In particular, China seeks to preserve the market-based, export-led transformation of the state sector into a market economy. There are two standard methods of supporting domestic activity – domestic or foreign borrowing through government expenditure deficits, or foreign lending through export surpluses. For structural production reasons, developing countries cannot borrow domestically to finance demand. However, when foreign borrowing has been used, financial crises have tended to eliminate any domestic benefit. Thus, Asian countries from Japan onwards have used foreign lending to support export surpluses in order to achieve their domestic policy objectives. In the absence of alternative extra-regional final export markets, the Asian economies would have to give up their policies to support domestic employment if they wanted to reduce their rate of increase in lending to the US. They are unlikely to do this. Lending to the US to support demand for exports can thus be seen as a substitute for public sector domestic borrowing to support increased domestic expenditure. It is clear that this cost is considered less onerous than the cost of domestic or external borrowing. Indeed, if this cost is measured by the difference between domestic interest rates and external rates earned on reserves, the low level of interest rates in countries like China, Malaysia and Thailand suggests that their reserves may have negligible costs or even provide net earnings. For countries such as India and Korea, with higher interest rates, costs could be in the range of a half percent of GDP (Genberg *et al.*, 2005). The recent increases in US interest rates will further reduce the costs of excess reserves, while any further depreciation of the US dollar would increase them. In the presence of policies to keep currencies stable against the dollar, or if US interest rates provide support for the dollar, the former factor should offset the latter. In any event, the objective function of the government is clearly to maximise employment, with any foregone earnings on its

**Figure 7 US Net FDI Flows**

(4-quarter moving averages, NSA, 1995-2005Q3)



Source: US Department of Commerce, Bureau of Economic Analysis, US Direct Investment Abroad: Country and Industry Detail for Capital Outflows and Foreign Direct Investment in the US: Country and Industry Detail for Capital Inflows, various years.

foreign exchange holdings considered as an acceptable cost.

As noted above, most attention in the international imbalance discussion has focused on the bilateral balance between China and the US. However, this is particularly misleading in a multilateral trading system given the role that China increasingly plays as the centre of regional trade growth and integration as a result of its increased processing trade, importing goods from the rest of the region, especially Japan, and exporting to developed country markets. Since China has partially taken on the role of Asian export platform for multinational firms, the direction of Japanese trade has shifted from exporting final goods to other developed countries to exporting components and importing final goods from China.<sup>4</sup> In Figure 5, China's trading position with its major extra-regional partners shows a marked difference from its trade within the region. While it is running increasing surpluses relative to the US and Europe, it has run nearly offsetting deficits with its regional trading partners. Figure 6 shows the increasing integration of China within the region.

<sup>4</sup> For a more detailed analysis of the changes in the segmentation of production of multinationals operating in Asia and its impact on regional trade flows, see Gaulier *et al.* (2006).

**Table 1 Firms with Foreign Capital in China's Trade with Selected Partners 2002**  
(percentage of total flows)

	World	EU-15	US	Japan	Hong Kong	Singapore	Korea	Taiwan
China's Total Exports	100	100	100	100	100	100	100	100
FFC* Total Exports	52	50	58	62	63	65	49	57
FFC Processed Exports	41	40	48	47	54	54	35	45
China's Total Imports	100	100	100	100	100	100	100	100
FFC Total Imports	54	49	48	67	63	61	63	67
FFC Imports to Process	32	12	21	39	53	36	41	49

Note:

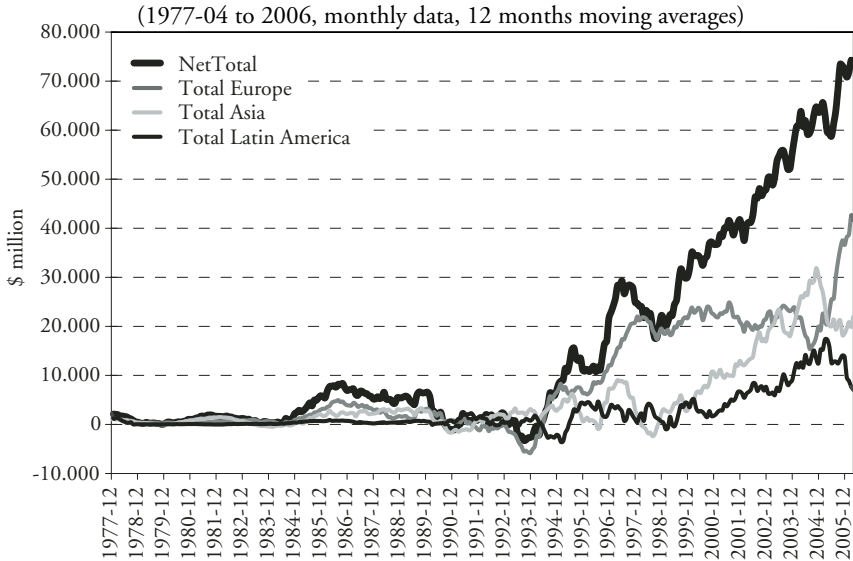
\* Firms with Foreign Capital.

Source: Gaulier *et al.* (2006).

The extent to which this processing trade is through the integrated production chains of international companies can be seen from Table 1, with around 50 percent of China's total exports accounted for by processed exports of firms with foreign capital participation. The extremely high share of processed exports in total exports (over 40 percent) and the extremely high import content of those exports (around two-thirds) means that exchange rate adjustment will have a much different impact than represented by simple expenditure switching in a world where final goods are wholly domestically produced for export.

Policy in Europe, on the other hand, no longer has any formal or informal employment goal or domestic demand support policy; rather, policy is guided by an inflation target and a fiscal and public sector borrowing target. Given these targets, along with free capital flows, the euro area can have no formal exchange rate policy. As a result, Europe has adopted the same policy as in Asia; net exports are required to support demand. If the Stability and Growth Pact and the monetary target prevent government borrowing to support domestic demand, and private demand is insufficient to produce growth that provides stable employment growth, the only alternative is foreign lending to support

**Figure 8 Net Non-Resident Acquisition of US Long-Term Securities**



Source: US Treasury, TIC Database, July 2006.

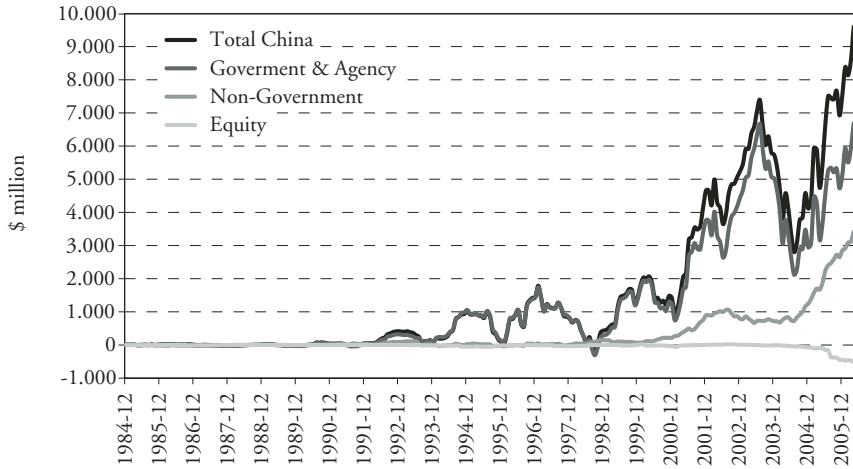
acquisition of European exports or the acquisition of foreign companies that can produce exports. Thus, European lending to the United States has been supported by European firms and investors acquiring US assets and US technology firms. These investments were driven on the one hand by the recognition that European companies could not recover the information technology gap except by buying the technology by taking over US companies. On the other hand, they were driven by the attempt of European firms to use their US subsidiary corporations to export technology to low-cost foreign producers whose products are then imported to Europe or the US. Figure 7 shows the dominant position of European direct investors in the 1990s until the falloff in their direct investments after the collapse of the dot-com bubble. But, recently, driven by the weakness of the dollar, direct investments are again increasing, as opposed to US exports to Europe recovering.

As Figure 8 shows, European flows have not only been in direct investment, they have also been in long-term US securities, being surpassed by Asia for only a short period after 2001.

In difference from Asia, any reduction in EU lending to the US would likely produce further currency appreciation of the euro, relative

**Figure 9 China Composition of Acquisition of US Long-Term Securities**

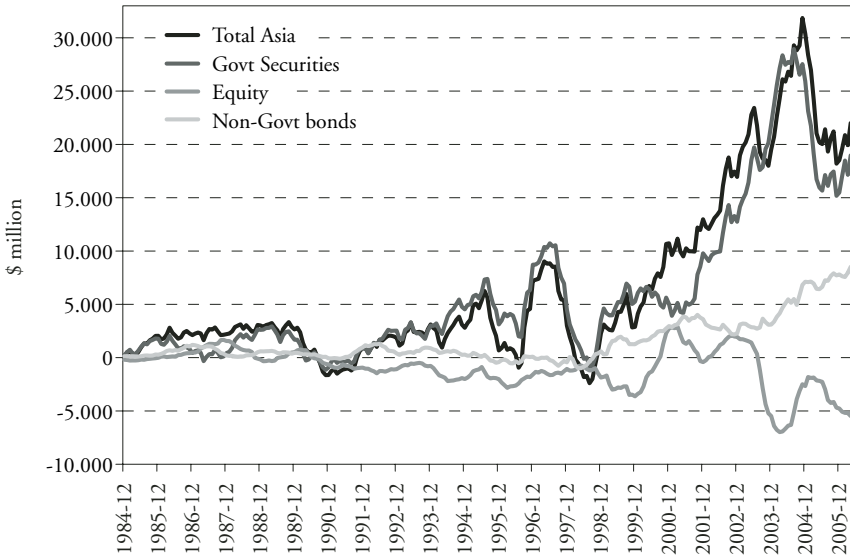
(1984-04 to 2006, monthly data, 12 month moving averages)



Source: US Treasury, TIC Database, July 2006.

**Figure 10 Distribution of Asian Net Purchases of US Securities**

(1984-04 to 2006, monthly data, 12 month moving averages)



Source: US Treasury, TIC Database, July 2006.

to both the US and to developing Asia, which represents the only growing alternative export market. Not only would this reduce the competitiveness of EU produced exports, undermining domestic demand, but given the large presence of European corporations in the US, it would also reduce the domestic currency value of their US subsidiaries' profits. If this feeds through into lower domestic share prices, it could dampen investment.

If the US would raise interest rates, the impact of the increased capital service earnings on the European current account could further reinforce the upward pressure on the exchange rate. Were Asian countries to decide to diversify away from the dollar into EU assets, as predicted by those who expect a sharp dollar collapse, this would further aggravate the pressure on the exchange rate and export competitiveness. Paradoxically, in these conditions, maintaining support for European net exports on domestic demand would require even greater lending to the US. Indeed, it is interesting to note that Figure 7 shows that European direct investment flows to the US tend to increase with appreciation of the euro.

However, to the present time, instead of diversifying investment out of the dollar, Asia has diversified its holding of dollar assets, in particular increasing holdings of non-government securities as can be seen in Figures 9 and 10.

### **3 The Imbalances Are Likely to Persist Unless Regional Policies Change**

Thus, as long as both Asia and Europe continue to use positive net exports to support their differing domestic policy goals, and to employ stable and flexible exchange rates respectively, achieving those goals requires that both regions continue to lend to the US. This means that as long as these policy goals are maintained, a sharp decline of the dollar is unlikely since this would mean a change in either the Asian development strategy or the European insistence on inflation targeting and low fiscal deficits. It also means that the desired national policies of Asia and Europe are mutually consistent with continuing international imbalances, which are thus unlikely to be eliminated quickly. In short, the imbalances could only be eliminated if one of the three regions changed its domestic policy preferences.

#### 4 Are There Medium-Term Forces that Can Undermine Policies?

However, there are forces at work that might undermine this locally stable position. As noted, if current policies are continued, Asia must continue to accumulate foreign reserves and Europe must continue to see its competitiveness deteriorate relative to its major developed and developing country trading partners. Also, with the maintenance of current policies in the US, Asia and Europe, the US external imbalance will continue to rise. Since there is little reason for the US to take measures to change its policy, adjustment will have to come from the other two regions.

One of the main consequences of the geographical dispersion of production has been a sharp recovery of profitability in US corporations, accompanied by stagnation in real wages. This has been in part offset by the falling prices of most general consumer goods imported from abroad, and the ability of households to borrow at extremely low interest rates or to convert rising house prices into equity, allowing them to maintain consumption patterns. However, the recent battle over an increase in minimum wages in the US suggests that eventually there will be some pressure coming from the increasing inequality of income distribution. A recent study on the impact of the globalisation of production on wages in the US suggests that of the two major scenarios for the US labour market – the impending shortage of high-tech workers leading to higher real wages, and the global surplus due to undeveloped country labour driving down wages – it is the latter that is most likely to prevail (Freeman, 2006). As the study shows, US wage behaviour depends on wages in the developing world.

China faces a similar problem. The inflationary threat of rapid reserve accumulation and the potential for speculative external inflows on domestic monetary conditions does not appear great, given large, and currently increasing excess labour supplies. Indeed, the problem has more frequently been one of deflation, and speculative pressure appears to have been dampened by very marginal adjustments in exchange rate determination. However, the suggested alternative to exchange adjustment, allowing domestic incomes and domestic consumption to increase,<sup>5</sup>

---

<sup>5</sup> It is important to note that from 1993 to 2003, the contribution of household consumption fell, and in 2004 represented only 40 percent of GDP, contributing less than a third to demand growth. See Asian Development Bank (2005), pp. 120-23.



would further exacerbate the wage differential between urban and rural residents that has widened from 2.9 to 1 in 2001 to 3.2 to 1 in 2005 as China faces the traditional development problem of declining terms of trade between agriculture and industry. Further, as increasing profitability has allowed the build-up of an entrepreneurial class, it is likely that they will seek increased representation in government policy determination. Thus, just as in the US, widening inequality in income distribution may be the most pressing force for change in Chinese policy.

European policy, on the other hand, could eventually be undermined by the fact that given stability in Asia, most of the exchange rate adjustment from global imbalances will fall on the euro. Such a euro appreciation will have to be countered by downward adjustment of domestic wages and prices that would be required to preserve competitiveness, eventually producing a politically unsustainable situation. This has already started in some countries such as Germany, where real wage increases have been minimal.

In the 1980s, Japan was able to withstand the impact of yen appreciation on international competitiveness through domestic measures and wage flexibility linked to the bonus system, but eventually the cost pressures led to the outsourcing of production – the “hollowing out” of the Japanese industrial base shifting production to the US and to South-East Asia. It is unclear that Europe can be more successful in defending against appreciation than Japan. Whatever strategy is adopted, it will not provide support to domestic growth and employment.

Further, the trend towards reducing social safety nets in the European welfare systems, along with policies to increase labour market flexibility to reduce costs, will only increase pressure for a policy change. In the absence of a policy to increase domestic demand, there is little option except continued direct investment and portfolio investment in dollar assets – providing continued support for the dollar.

The basic problem facing Europe is that the development strategy adopted by Asia, and increasingly in South America, is to generate domestic demand and financing through external surpluses. As noted above, this reverses the traditional approach of developed countries using their external surpluses to transfer resources to developing countries. If developing countries follow this alternative path, it changes the role of their development partners to providing markets for their goods and running external deficits. European policy, much like Japan's, is a policy for developing countries, and needs to be changed to one of growth through internal demand. Europe and Japan are thus the odd

men out in the new international development pattern and are currently paying the cost in terms of low economic growth.

There are internal problems to Europe that will make this transition to greater reliance on domestic demand problematic. For example, Germany has been much more successful than some other euro-zone countries in countering euro appreciation with reductions in real wages and unit labour costs and thus preserving external demand. Increasing internal demand uniformly across the zone, made difficult by the lack of centralised fiscal policy, is not likely. In particular, countries like Italy and Greece that have been less able to control costs and face higher fiscal and debt ratios, would be less able to expand domestic demand. Indeed, some have suggested that this euro-constraint might eventually create sufficient domestic pressure for an exit from the euro, the costs in terms of lost growth having become too onerous (Goodhart, 2006). Of course, the simple solution to this problem would be to consolidate the government debt of all euro-zone countries into a common European debt issued by a central fiscal policy authority.<sup>6</sup> There are some countries that would clearly prefer the exit solution for the marginal countries and to block access by the new accession countries.

The US will have difficulties of a different nature in sustaining internal demand. In the 1990s, the external capital inflows were financing increased consumer borrowing and especially increases in the ratio of investment in the high technology area, leading GDP to historic highs and allowing the fiscal deficit to go to surplus. Currently, the financing is going to fund the budget deficit that is financing war expenditure and tax reductions for the highest income levels. While the rate of productivity growth generated by the investment in the 1990s has remained sustained, in the absence of continued investment it is questionable that it can continue. The lack of investment may cause the decline in capital inflows required to fund the external deficit.

As mentioned above, the key to the present analysis is the continued resolve of China to complete its transformation to a centralised, regulated market economy and the increasing integration in the region. Although this process has been particularly rapid, it is likely to take another 10 to 20 years to complete. In the meantime, given continued rapid growth in

---

<sup>6</sup> I have long argued that the greatest impediment to the euro becoming a full-fledged alternative to the dollar as an international currency lies in the persistence of nationally segmented and regulated capital markets. See, for example, Kregel (1999) and (2003).

labour supplies,<sup>7</sup> internal political stability requires that growth continues at its present pace, implying that its need for increasing exports will not diminish substantially.

Of additional concern is the trend in a number of Latin American countries to adopt similar export-led policies. The global economy cannot support developing countries' attempt to integrate into the global trading system through export-led development and eliminate international imbalances if developed countries also use export-led growth. The real problem is how to transform developing countries that use exports to achieve successful development into developed countries that rely on internal demand to support their continued growth. This is a problem that Europe has to face and Japan is still trying to resolve. Having a single currency across a system with segmented fiscal policy and thus segmented capital markets certainly makes this adjustment more difficult.

Thus, the alternative view of the current global imbalances suggests that they will not be eliminated rapidly in the short term since they are the result of mutually compatible domestic policy preferences. Coordinated policies on exchange rates and domestic demand are unlikely to be effective given the peculiar features of the global trading system. It is more likely that medium-term forces linked to the distributional consequences of globalisation, and in particular the global segmentation and dispersion of production chains, will produce changes in domestic policies to reverse the current trend of rising income inequality. Such change of policies may help in a more effective way to resolve global imbalances.

---

<sup>7</sup> The Asian Development Bank (2005), pp. 121-22, notes, "As a result of fast growth in the labour supply and a decline in the amount of employment for every percentage point of GDP growth, urban unemployment and underemployment have become a serious concern for policy makers. According to the National Development and Reform Commission, urban areas will need to create around 25 million jobs in 2006 to soak up newcomers to the labour market. Of these 25 million people, about 9 million will be joining the labour market for the first time (including some 4 million new graduates), 3 million will be migrants who have recently moved to cities, and the remaining 13 million will be workers made redundant by their employers, mainly state enterprises. It is worrying that the Commission's estimates suggest that the economy will be able to create only about 11 million jobs for these workers. Fast growth will be needed to create jobs and to minimize the social risks that a growing number of unemployed and underemployed workers could present."

## References

- Asian Development Bank (2005), *Asian Development Outlook 2005*, Asian Development Bank, Hong Kong.
- Croke, Hilary, Steven B. Kamin and Sylvain Leduc (2005), “Financial Market Developments and Economic Activity during Current Account Adjustments in Industrial Economies”, International Finance Discussion Papers No. 827, Board of Governors of the Federal Reserve System, Washington D.C., February.
- Freeman, Richard B. (2006), “Labor Market Imbalances: Shortages, or Surpluses, or Fish Stories?”, paper presented at the Boston Federal Reserve Economic Conference on ‘Global Imbalances - As Giants Evolve’, Chatham MA, 14-16 June.
- Gaulier, Guillaume, Françoise Lemoine and Deniz Ünal-Kesenci (2006), “China’s Emergence and the Reorganisation of Trade Flows in Asia”, CEPII Working Paper 2006 – 05, CEPII, Paris, March.
- Genberg, H., R. McCauley, Y.C. Park and A. Persaud (2005), *Official Reserves and Currency Management in Asia: Myth, Reality and the Future*, Geneva Reports on the World Economy 7, Centre for Economic Policy Research, London.
- Goodhart, Charles A.E. (2006), “The Euro and the Reform of the Stability and Growth Pact”, paper presented to the Valence International Monetary Policy Conference, 12-14 January.
- Kregel, Jan A. (2003), “Nationally Segmented Capital Markets and Decentralized Central Banking: What Will Happen to Banks in the Eurosystem?”, In: Otto Steiger (ed.), *The Euro and the Eurosystem Are Getting Tangible: Prospects and Risks of a Unified Currency*, LIT-Verlag, Hamburg.
- (1999), “Can European Banks Survive a Unified Currency in a Nationally Segmented Capital Market?”, In: *The Financier*, Vol. 6, No. 4, Philadelphia.
- Schindler, John W., and Dustin H. Beckett (2005), “Adjusting Chinese Bilateral Trade Data: How Big is China’s Trade Surplus?”, International Finance Discussion Papers No. 831, Board of Governors of the Federal Reserve System, April.
- US Department of Commerce (2006), “An Ownership-Based Framework of the US Current Account, 1993–2004”, In: *Survey of Current Business*, Bureau of Economic Analysis, US Department of Commerce, Washington D.C., January.
- Wilkins, Mira and Harm Schroeter (eds.) (1998), *The Free-Standing*

*Company in the World Economy 1830-1996*, Oxford University Press, New York.

William J. Zeile (2005), "U.S. Affiliates of Foreign Companies Operations in 2003", In: *Survey of Current Business*, Bureau of Economic Analysis, US Department of Commerce, Washington D.C., August.

# 10

## Policy Recommendations for the US, Europe and Asia: By Way of Epilogue

*Jan Joost Teunissen*

The contributing authors to this book have discussed the US deficit and global imbalances problems by looking at the functioning of the world economic system as a whole and at three distinct regions that are considered to be the main actors in the global imbalances issue: the United States, Europe and Asia.

Let me say a few words about the two developing regions that are considered less important in resolving global imbalances, Latin America and Africa. Latin America, discussed briefly by Barry Eichengreen and Yung Chul Park, and more extensively by Barbara Stallings, comes out in this volume as a region that can contribute little to solving the problem but will suffer greatly from a dramatic unwinding of the US deficit. Africa is not discussed in this volume, but will be dealt with in the second volume that emerges from a conference held in The Hague on February 27-28, 2006.

I want to highlight policy recommendations made by the various authors for each of the three regions and add a few comments. I begin with the region that, in my view, bears the greatest responsibility for the imbalance problem, the United States. I then discuss the region which, as important economic actor, could do a lot to help resolve global imbalances but does little: Europe. And I conclude with Asia, the region that is becoming a major player in the world economy but can do less to solve global imbalances than many think – among other reasons, because large parts of it are still relatively poor.

## The Responsibility of the United States

Barry Eichengreen and Yung Chul Park (Chapter 2) hold the United States primarily responsible for its large deficits and contribution to global imbalances. The authors argue that the US deficit is untenable, and they urge the US to reduce its current account deficit, preferably by saving more. The US could save more, they suggest, by reducing government expenditures, raising taxes and reducing tax cuts. These measures sound reasonable and feasible, but the authors observe that there is no political will in the US to implement them. They stress that the US ought to address the domestic roots of its deficits, and warn emerging market countries that they cannot afford to wait for the US to act and should, instead, take their own measures.

Barbara Stallings (Chapter 3) agrees with the policy recommendations by Eichengreen and Park, but stresses that more discussion is needed about the lack of political will to carry them out. She observes that it is certain that the Bush Administration will not follow their advice and that the Democrats are unlikely to cut the deficit in a serious way either. “So what do we do? Just wait for a crisis, or is there perhaps an international bargain to be struck?”

Jane D’Arista and Stephany Griffith-Jones (Chapter 4) share the notion that the US is to blame for its deficits. However, they stress that the US deficits are not only the result of over-spending by the US, but also of an international monetary system that uses the dollar (and a few other national currencies) as an international store of value, thus generating debt in the key currency country – the US. Their analysis implies that the US could contribute to resolving its debt problem and global imbalances by supporting international initiatives aimed at making countries, particularly developing countries, less dependent on the dollar as payments and investment currency. The initiatives they suggest include the promotion of GDP-linked bonds and local currency bonds.

Fan Gang (Chapter 5) sees the international monetary system as the main cause of the US deficits and global imbalances. The fundamental problem is not in US policies, he stresses, but in the global currency system which allows the US to run high deficits and print as much money as it needs. US policymakers do not see it as “their problem” that they run high deficits and print more money when the bad consequences become the “others’ problem”, says Fan. He reminds that the international problems created by the “US dollar standard” currency system have been debated before. In the 1960s there was a debate with Europe,

in the 1970s and 1980s with Japan and now with China. “The repeated similarities in the history just show it is not the problem of policies, but the problem of institutional arrangements,” argues Fan. He favours a reform of the international monetary system that ends the hegemony of the dollar. “The US dollar is no longer a stable anchor in the global financial system, nor is it likely to become one: thus it is time to look for alternatives,” observes Fan. In his view, the ideal system should be one that is independent of self-interests of participating countries, and provides common benefits to all. “It should not be a currency of any particular country no matter how strong or dominant that country is in the world market.”

Jan Kregel (Chapter 9) presents an alternative explanation of global imbalances. In his view, they largely result from the fact that too many countries are using export-led growth strategies (including Europe) and that firms are investing and producing transnational while balances of payments are national. Both Europe and Asia (and other countries) continue to finance US deficits, says Kregel, because this allows the US economy to absorb a large part of their exports and, equally important, to remain an attractive economy for investments by European and Asian transnational corporations. Kregel’s implicit argument is that one can blame the United States for living beyond its means, but Europe and Asia are equally to blame for maintaining domestic policies that finance US deficits. As he stresses in his chapter, “as long as both Asia and Europe continue to use positive net exports to support their differing domestic policy goals, and to employ stable and flexible exchange rates respectively, achieving those goals requires that both regions continue to lend to the United States”.

I find Kregel’s analysis of how the global investment and production system contributes to global imbalances interesting, and I agree with him that Europe and Asia have an interest in maintaining US deficits. However, this does not absolve the US from its own responsibility for running large deficits. I also agree with D’Arista, Griffith-Jones and Fan, who say that the current world monetary (non)system facilitates and promotes US deficits and global imbalances. In fact, I think all of the authors are right. But maybe they do not place enough emphasis on the responsibility of the US. Since powerful countries determine the rules of the world’s monetary system and since the US is still the major power in the system, it has a major responsibility. Moreover, as I already related in my introduction (Chapter 1), the US has been the major force opposing the much-needed reform of the international monetary system.



## Is Europe Powerless?

In Chapter 1, I quoted Dutch central bank president Willem Duisenberg and UK central bank governor Mervyn King, who both said it was absurd that poor countries are financing the richest country of the world, the United States. I also quoted Robert Triffin, who related that European policymakers were choosing sides with the US in their opposition to international monetary reform in order to safeguard the Atlantic Alliance. Duisenberg added that the maintenance of the US dollar as the key currency allowed the US to fight a war in Vietnam that “was in fact not financed by the United States, but by other countries”.

These days the US is still fighting wars and those wars are still financed by other countries – including those of the European Union. Even though some European countries sometimes criticise US military interventions abroad, as a military ally of the US, Europe remains faithful to US leadership in international political and military affairs.

Kregel (Chapter 9) offers an additional reason why European governments and transnational corporations have an interest in continuing their lending to and investments in the US. Not only does their financing maintain the US as a major market for exports and investments, but a reduction of European lending would also likely produce a further appreciation of the euro, thus reducing the competitiveness of EU exports. Moreover, observes Kregel, euro appreciation would also reduce the domestic currency value of profits of US subsidiaries of European corporations in the US.

These “vested interests” of European firms and policymakers in maintaining the dollar as the key currency of the system and continuing the financing of US deficits indicate that Europe’s alliance with the US is not only political, but also economic. Does this mean that Europe cannot do anything by itself to help resolve global imbalances and the US deficit?

No, obviously not.

Of the contributing authors, Kregel is the only one who deals with the question of what Europe could do, both because he was asked to address this question and because his analysis led him to dwell on Europe’s role. According to Kregel, Europe’s policy, much like Japan’s, is a policy for developing countries, and needs to be changed to one of growth through internal demand. “Europe and Japan are ... the odd men out in the new international development pattern and are currently paying the cost in terms of low economic growth.” In his view, Europe should shift its policy from restricting inflation and promoting exports to promoting

domestic demand. Such a policy shift would be the best way for Europe to help resolve global imbalances, says Kregel.

### **Possibilities for Asia**

When the role of Asia in global imbalances is discussed, the focus (and blame) is often directed toward China. The authors in this book do not share that simplistic, China-bashing view. Given the increasingly important role China is playing in the world economy, we asked several authors to dwell on the “China question”. What policy recommendations do they suggest?

Barry Eichengreen and Yung Chul Park (Chapter 2) say that China’s annual surplus is now roughly a third the size of the US deficit, which in their view suggests that China should do something to reduce its surplus. The authors argue that the best way for China to reduce its current account surplus would be to reduce its savings. They observe that, in the long run, Chinese savings will go down in a natural way, but suggest that given the need for short-run measures, China’s government should increase spending on education, health care, social security, urban infrastructure, and modern housing. However, Eichengreen and Park stress that since the Chinese economy is only a fraction the size of the US economy, fiscal expansion in China can only offset a fraction of the fiscal contraction needed in the United States. Therefore, according to them, China is only a small part of the global adjustment story.

Fan Gang (Chapter 5) does not think China saves too much or invests too little. He stresses that China invests up to or even more than 40 percent of its GDP in industrial capacities, housing, and public infrastructures. He also stresses that China’s high saving rate has little to do with the global imbalance problem. He observes that during 2003-2004, China even over-invested and registered trade deficits for almost 11 months. Moreover, China did not have such large net national savings in recent years, says Fan, only about \$30-40 billion per year.

Zdeněk Drábek (Chapter 7) echoes repeated calls from US and Japanese authorities as well as academics for substantial appreciation of the Chinese renminbi, even though he softens this plea by talking about the need for “some” revaluation of the Chinese currency. In his view, this would not only help to resolve global imbalances, but also slow down the inflow of speculative capital and help reduce inflationary pressures in China.

Wing Thyee Woo (Chapter 6) disagrees with the recommendation by “foreign economists” that China should let its currency float. In his view,

it misses the basic point that free-market tools can work only in a free-market environment. Given China's capital controls, a freely floating currency regime could mean a value for the renminbi that would be greatly over-appreciated compared to what its value would be under free capital flows, and would therefore reduce economic growth significantly. Freeing capital flows is not an option, says Woo. The weakness of the balance sheets of China's state-owned banks, the considerable embezzlement of state assets that has occurred, and the experience with the Asian financial crisis of 1997-98 caution strongly against allowing the free movement of capital in the medium term. China can stem the inflow of speculative capital by imposing credit quotas on the banks, and by using existing capital controls. And the best way to let the renminbi appreciate would be to engineer a series of small revaluations, recommends Woo.

Fan Gang observes that China's currency may be considered undervalued by about 1 percent per year given that urban wages have risen slower than productivity growth, but that China, before anything else, has the task of reducing poverty and raising the living standards of its rural poor. "From this point of view, the 'managed floating' is a right exchange rate regime for a country like China", says Fan.

Jan Kregel (Chapter 9) finds it misleading that most attention in the international imbalance discussion has focused on the bilateral balance between China and the US. Since China has partially taken on the role of Asian export platform for multinational firms, it is running increasing surpluses relative to the US and Europe, while it has nearly offsetting deficits with its regional trading partners. Around 50 percent of China's total exports are accounted for by processed exports of firms with foreign capital participation, observes Kregel. But, most importantly, says Kregel, it is unfair and unwise to suggest that China should either let its currency revalue or increase domestic incomes and consumption. Allowing domestic incomes and domestic consumption to increase, warns Kregel, would further exacerbate the wage differential between urban and rural residents that has widened from 2.9 to 1 in 2001 to 3.2 to 1 in 2005. Given continued rapid growth in labour supplies, internal political stability requires that growth will have to continue at its present pace, implying that China's need for increasing exports will not diminish substantially.

What about Japan? Eichengreen and Park say that Japan is the other important Asian country that has been running large current account surpluses, reflecting the weakness of investment and consumption demand

associated with the country's decade-long slump. Eichengreen and Park suggest that the most important thing Japan can do to help resolve the problem of global imbalances – and contribute to a shift of Asian demand from extra-regional exports to exports to the region itself – is to sustain its recovery.

Yonghyup Oh (Chapter 8) also explicitly refers to Japan's role in the global imbalance issue. According to Oh, given Japan's important position in East Asia and the world and the high macroeconomic interdependency across the region, East Asian monetary cooperation should include Japan (Eichengreen and Park make this point as well). Oh sees such cooperation as an important step toward helping to resolve global imbalances since it would facilitate the creation of a regional capital market (implying that Asians would invest their capital in Asia rather than in the US). Moreover, it would facilitate coordinated exchange rate adjustments by each of the East Asian economies.

What about the other Asian countries? Eichengreen and Park say that there is little disagreement that an across-the-board appreciation of East Asian currencies would constitute an important component of the resolution of global imbalances. However, if China sticks to limited flexibility, other East Asian countries are not likely to let their currencies appreciate vis-à-vis the renminbi since China has emerged as their export competitor in regional as well as global markets. This creates a problem of collective action and an argument for policy coordination, say Eichengreen and Park.

East Asian monetary coordination is an issue addressed by Fan Gang and Yonghyup Oh.

Fan Gang reports on the possible establishment of an Asian currency unit (ACU), which would represent a weighted average of several of the key regional currencies. The ACU is not meant to be a real currency to replace the regional currencies, as is the case of the euro, explains Fan. It is meant to be a guide for the Asian countries to coordinate and manage their exchange rates. In other words, it might become a viable "currency" for Asian countries to denominate their export prices, cross-border loans, and cross-border bond issuance; thus weaning themselves away from their current total reliance on the US dollar.

"This is no ivory tower academic exercise," says Fan. "Both China and Japan are very serious about it." To illustrate their seriousness he points at a meeting in Hyderabad in May 2006, where the finance ministers of China, Japan, and South Korea met with their counterparts from ASEAN and announced that they would sponsor a research project

entitled “Towards greater financial stability in the Asian region: Exploring steps to create regional monetary units”.

Yonghyup Oh (Chapter 8) relates that around the time of the Asian crisis of 1997-98 East Asian countries became capital exporters. Instead of investing in more risky assets at home or in the region, East Asian capital went to safer US treasury bonds and foreign reserves. Oh observes that even though it is now less attractive to keep purchasing US government securities given the already high level of foreign reserves in most East Asian economies, investing in East Asian securities is not yet attractive enough because of underdeveloped Asian capital markets. East Asia needs to create regional financial markets for Asian capital, he stresses.

### **Concluding Remarks**

The contributing authors to this book have provided highly interesting analyses and policy recommendations. Their analyses are geared toward both the functioning of the world economic system as well as at the question of what individual countries and regions can do to resolve the US deficit and global imbalances problems. Several authors have reminded us of the need of more in-depth analysis of the causes of global imbalances.

Experience tells us that in order to incite policymakers to action good analyses are a necessary but not a sufficient condition. Moreover, democratic decisionmaking requires that more people are involved in designing and assessing economic strategies than just the academic and the policymaker.

I hope that, in addition to the experts, the non-experts will read this book as well. I also hope that the experts will help increase the understanding of the non-professionals and present the full range of policy choices that are available and thinkable to resolve the problems of US debt and global imbalances.

This book tells only a part of the US debt and global imbalances story. The story will be continued in the next volume and include additional policy suggestions.