



PACIFIC  
ECONOMIC  
COOPERATION  
COUNCIL

# PACIFIC ECONOMIC OUTLOOK



## Structure Project

*External Adjustments under Increasing Integration  
in the Pacific Region*

Japan Committee for Pacific Economic Outlook  
c/o Kansai Institute for Social and Economic Research (KISER)  
29th Floor Nakanoshima Center Bldg.  
6-2-27 Nakanoshima, Kita-ku  
Osaka 530-6691, Japan  
Tel: 81-6-6441-5750  
Fax: 81-6-6441-5760  
Email: [peo@kiser.or.jp](mailto:peo@kiser.or.jp)  
Website: <http://www.kiser.or.jp/>

Pacific Economic Cooperation Council  
29 Heng Mui Keng Terrace  
Singapore 119620  
Tel: 65-6737-9822  
Fax: 65-6737-9824  
Email: [info@pecc.org](mailto:info@pecc.org)

PACIFIC  
ECONOMIC  
OUTLOOK



Structure Project

*External Adjustments under Increasing Integration  
in the Pacific Region*

ISBN 978-4-87769-342-8

PECC, Pacific Economic Outlook Structure Project

*External Adjustments under Increasing Integration in the Pacific Region*

Copyright © 2009 by the Japan Committee for Pacific Economic Outlook.

All rights reserved.

Published by the Japan Committee for Pacific Economic Outlook in May 2009.

The views expressed herein are solely those of the authors and do not necessarily reflect the view of their affiliated organizations.

The abstract maps used herein are for illustration purposes only. They are not taken from official sources and do not necessarily represent territorial claims and boundaries.

They refer only to the economies associated with PECC Member Committees.

# PREFACE

This report on “*External Adjustments under Increasing Integration*” is the 12<sup>th</sup> report in a series of studies conducted by the Pacific Economic Outlook (PEO) Structure Task Force. PEO/Structure is one of the task forces under the Pacific Economic Cooperation Council (PECC) and deals with longer-term structural issues of macroeconomics in the Pacific region.

We have witnessed significant changes in current and capital accounts as well as prolonged external imbalances in the Pacific region. One may regard this as part of the global imbalance hotly debated in Washington, D.C. The debate on the global imbalance concentrates on the possible disastrous major currency re-alignments and their impact on the global economy. While we see this could be an acute policy concern, we rather look into the recent development in these external adjustments in the context of long-term structural changes in the region.

On one hand, increasing capital market integration would help detach the correlation between national saving and domestic investment, thereby allowing larger and more persistent external surplus or deficit across economies. On the other, increasing integration and resulting competition in global goods and services markets has enhanced stickiness of their prices despite exchange rate fluctuations, thereby reducing the role of real exchange rate changes in external adjustments.

We examine determinants of external balances to

discuss the sustainability of the current external imbalances. Then, we scrutinize the mechanism that drives adjustments of external imbalances in the region. Finally, we describe policy implication out of the analyses above.

As a most open region, the PECC region has experienced most significant changes in its external positions. A scrutiny into the determinants and prospects of these changes will contribute to the growth and welfare of the region as well as the global economy.

Historical experiences may not be of much help without considering these fundamental changes in the global market structure. As long as capital is invested in most productive opportunities anywhere, national saving can be said to be effectively used and to enhance national as well as global welfare. As other asset market prices, exchange rates will of course affect and are affected by developments in the global capital market, because they are relative prices of foreign currency denominated assets. Under the circumstances, we can discuss how external imbalances would proceed, but we may not have to discuss how to correct them anymore.

Globalized production networks have made external transactions far more complicated than before due to increasingly sophisticated international vertical division of labor and more prevalent intra-firm trade. We are not in the simple and clear age of the elasticity approach to external adjustments anymore. Current accounts consist not only of trade balance in

goods and services, but of income accounts based on outstanding stocks of cross-border assets.

This report is a summary of studies conducted by the PEO/Structure Task Force under the coordination of Dr. Akira Kohsaka<sup>1</sup>. The first section of the report provides an overview, prepared by Dr. Kohsaka, on external adjustments under increasing integration in the Pacific region. The second section consists of executive summaries of individual countries/regions that were submitted by specialists from each PECC member economy.

The PEO/Structure Project held two International Specialists Meetings in March and September 2008 in Osaka, Japan. These meetings were hosted by the Japan Committee for Pacific Economic Outlook which has been housed in and staffed by the Kansai Institute for Social and Economic Research (KISER).<sup>2</sup> The Committee has been sponsored by the Ministry of Foreign Affairs of Japan and by regional business communities, the relevant organizations of which are the Pacific Resource Exchange Center (PREX) and the Kansai Economic Federation (KEF).

Ambassador Yoshiji Nogami, Chairman of Japan National Committee for PECC (JANCOPECC), serves as Chairman of the Japan Committee for Pacific Economic Outlook. Mr. Hiroshi Isono, Deputy Executive Director, Ms. Machiko Fujita and Ms. Kayo Fukui, Directors coordinated the management of the PEO/Structure Project. Dr. Janis Y.F. Kea provided editorial support to the PEO/Structure Project.

The PEO/Structure Project presents its reports to the meetings of PECC and the Asia Pacific Economic Cooperation (APEC), forums of government officials and individuals in business, government and academic sectors who are interested in economic issues of the Asia-Pacific region.

For more information on the PEO/Structure Project, contact the secretariat at the Japan Committee for Pacific Economic Outlook.

### *Japan Committee for Pacific Economic Outlook*

Address : 29<sup>th</sup> Floor Nakanoshima Center Bldg.,  
6-2-27 Nakanoshima, Kita-ku,  
Osaka 530-6691, Japan

Email : [peo@kiser.or.jp](mailto:peo@kiser.or.jp)

Phone : 81-6-6441-5750

Fax : 81-6-6441-5760.

Website : <http://www.kiser.or.jp/peo>

---

<sup>1</sup> Akira Kohsaka, Ph.D., is Professor of Economics at the Osaka School of International Public Policy, Osaka University, Osaka, Japan.

<sup>2</sup> The Kansai Institute for Social and Economic Research (KISER) is a nonprofit organization in Kansai (the region centered in Osaka, Kobe and Kyoto) that has as its objectives contributing to the development of the national and regional economies through academic advances. KISER promotes research projects under the cooperation of academia and local business community with the aid of governmental support. For more detail, see the information provided.

# TABLE OF CONTENTS

I. PREFACE	
II. SPECIALISTS, PEO/STRUCTURE PROJECT	2
III. OVERVIEW	5
Recent Current Account Patterns in the Pacific Region	9
Historical Episodes of Current Account Adjustments	15
Factors of Recent Current Account Patterns	19
Financial Integration and Sustainability of Current Account Imbalances	22
References	25
IV. EXECUTIVE SUMMARIES ON INDIVIDUAL ECONOMIES	27
Australia	28
China	30
Hong Kong, China	32
Indonesia	34
Japan	36
Korea	38
Malaysia	39
The Philippines	41
Chinese Taipei	43
Thailand	45
The United States	47
V. PAST ISSUES OF PEO/STRUCTURE PROJECT	49
VI. PACIFIC ECONOMIC COOPERATION COUNCIL	51
VII. PACIFIC ECONOMIC COOPERATION COUNCIL MEMBER COMMITTEES	52
VIII. KANSAI INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH	56

# SPECIALISTS, PEO/STRUCTURE PROJECT

## COORDINATOR

Akira KOHSAKA  
Professor  
Osaka School of International Public Policy  
Osaka University

## AUSTRALIA

Tony MAKIN  
Professor of Economics  
Griffith Business School  
Griffith University

## HONG KONG, CHINA

Andrew Sik Hung, AU  
Principal Economist  
Economic Analysis and Business Facilitation Unit  
HKSAR Government

## INDONESIA

Miranda S. GOELTOM  
Senior Deputy Governor and Vice Governor  
Bank Indonesia

## SOLIKIN M. JUHRO

Senior Economist  
Bank Indonesia

## JAPAN

Eiji OGAWA  
Professor  
Graduate school of Commerce and Management  
Hitotsubashi University

Kentaro IWATSUBO  
Associate Professor  
Graduate School of Economics  
Kobe University

## KOREA

Inkoo LEE  
Research Fellow  
Department of International Macroeconomics and  
Finance  
Korea Institute for International Economic Policy  
(KIEP)

## MALAYSIA

Geok Mooi LOH  
Senior Fellow  
ISIS Malaysia

## THE PHILIPPINES

Cayetano W. PADERANGA, Jr.  
Chairman  
Institute of Development and Econometric Analysis,  
Inc.

Kristine Laura S. Canales  
Head, Department of Macroeconomic Research and  
Special Studies  
Institute of Development and Econometric Analysis,  
Inc.

## CHINESE TAIPEI

Miao CHEN  
Director  
Macroeconomic Forecasting Centre  
Taiwan Institute of Economic Research (TIER)

## THAILAND

Bhanupong NIDHIPRABHA  
Associate Professor  
Faculty of Economics  
Thammasat University

## THE UNITED STATES

Jeffrey B.NUGENT  
Professor of Economics  
University of Southern California

Robert DEKLE  
Professor of Economics  
University of Southern California

## SPECIAL CONTRIBUTOR (FOR CHINA PAPER)

Wing Thye WOO  
Professor of Economics  
University of California, Davis

## PEO/STRUCTURE SECRETARIAT

Hiroshi ISONO  
Deputy Executive Director  
Japan Committee for Pacific Economic Outlook

Machiko FUJITA  
Director  
Japan Committee for Pacific Economic Outlook

Kayo FUKUI  
Director  
Japan Committee for Pacific Economic Outlook

Janis KEA  
Editorial Consultant  
Japan Committee for Pacific Economic Outlook





# OVERVIEW



# OVERVIEW:

## EXTERNAL ADJUSTMENTS UNDER INCREASING INTEGRATION

BY AKIRA KOHSAKA

### Introduction and Summary

We have witnessed prolonged and unprecedentedly large external imbalances as well as significant changes in current and capital accounts in the global economy. The Pacific region is no exception to these trends. The issue of global imbalances, which has been hotly debated in Washington, D.C. since around 2005, centers on potential output slowdowns arising from disastrous major currency realignments and their impacts on the global economy. While we recognize this issue to be an acute policy concern, we focus our attention to recent developments in these external adjustments in the context of long-term structural changes in the region.

The current pace of economic integration in goods and services as well as in financial markets is inevitably creating structural changes across economies in the world. From a macroeconomic point of view, increasing financial market integration may help detach the correlation between national saving and investment, thereby allowing larger and more persistent external surpluses or deficits across economies. On the other hand, increasing integration and resulting global competition has enhanced the stickiness of prices in goods and services markets despite exchange rate fluctuations; this, in turn, hampers expenditure switching and reduces the role of real exchange rate changes in external adjustments.

As an open region, the Pacific region has experienced significant changes in its external position.

Further scrutiny into the determinants and prospects of these changes would contribute to policymaking, particularly since growth and welfare of the region is heavily dependent on the global economy. It should be noted that historical experiences may not be of much help due to the substantial and fundamental changes that have occurred in recent global market structures. As long as capital is invested in the most productive opportunities anywhere in the world, national saving is effectively being used to enhance national as well as global welfare. As another asset market price, exchange rates will affect and be affected by developments in the global financial market, because they reflect relative prices of foreign currency-denominated assets. Under these circumstances, we can examine how external imbalances would proceed, but it may no longer be necessary to discuss how to correct these imbalances.

Globalized production networks have made external transactions far more complicated than ever before due to increasingly sophisticated international vertical division of labor and increasing prevalence of intra-firm trade. We are no longer living in the simple and clear age of the elasticity approach to external adjustments. As a result of increasing financial assets trade, current accounts consist not only of trade accounts in goods and services, but also of income accounts based on outstanding stocks of cross-border assets and liabilities.

In this Overview, we first review the recent patterns of current account imbalances and their components

(Section 1). Second, we examine historical episodes of reversals and adjustments of sustained current account imbalances in pursuit of some potential macroeconomic regularities (Section 2). Third, we discuss factors that affect national saving and investment behavior, and thereby current account balances (Section 3). Finally, we evaluate some policy options to reallocate aggregate demand across economies to correct external imbalances, summarize the interaction between financial integration and sustainability of imbalances, and discuss some policy implications (Section 4).

We can summarize our findings as follows:

**Financial Market Integration and Sustainability of US Deficits:** The current unprecedented large imbalances should be corrected, only when they are not sustainable. The sustainability, however, depends on the impact of global financial integration. We have realized some features intrinsic to the global financial integration.

First, financial integration enhances the probability of asset market bubbles, allowing for more risk-taking. Accordingly, in order to minimize financial bubble bursts and their costs, we need not only to improve and restructure financial regulations to accord to new financial environments, but also to be most alert in strengthening macroeconomic policies to contain the risk of bubbles.

Second, financial integration has increased the importance of balance sheet effects in various layers of economies. Accordingly, since the crisis, emerging markets have tried to insure themselves through accumulating official foreign reserves instead of encouraging the private sector to invest abroad. The non-financial corporate sector across both advanced and emerging market economies has been busy rehabilitating its balance sheet than investing in physical assets. As a result, corporate saving has compensated household saving within the private sector in the recent period in these economies.

Third, financial integration has increased gross financial flows remarkably so that the income account has become more and more important in the current account, particularly in advanced and high-income emerging market economies. Also, increasing gross external assets and liabilities

should produce far from negligible external wealth effects through exchange rate changes, which is always asymmetric across currencies of denomination.

Fourth, financial integration has been led, at least so far, by the comparative advantage of the United States as a global fund manager. Under the post Bretton Woods system of generalized floating exchange rates, the United States has become a global fund manager, graduating from just being a global banker. If any major correction in external accounts be needed, major changes in the global picture of financial flows as well must take place.

**Exchange Rate Adjustments:** Lots of talks on necessary currency realignments have been told to wipe out the current imbalances. We must note, however, that, under the increasing integration, we find some significant changes in the role of exchange rates in external adjustments. Due to increasing vertical integration of product markets and smaller importance of the trade account in the current account, we see less scope than before for exchange rate changes to correct the current account balance.

Furthermore, financial account transactions have tended to overwhelm those of the current account in the foreign exchange markets. Namely, as far as international investors keep investing for expected higher returns in the United States than elsewhere, relatively strong US dollar and net financial inflows there will continue.

**Financial Openness:** Failing to explain the most recent developments in current accounts in the Asian emerging markets, some implicated relative financial closedness of their financial markets and even their currency undervaluation as possible reasons.

Given their institutional vulnerabilities, however, to what extent and in what pace they should open up financial markets and capital transactions is a very controversial issue. So much so that, for the time being, one may say that their accumulating foreign reserves could be justified as necessary costs to insure themselves against possible external financial turmoils and that unexplicable current account surpluses in emerging markets have simply reflected their conservative attitudes against structural

changes in global finance.

**Macroeconomic Policy Options:** As some standard global general-equilibrium models implicated, it appears that an increase in US saving is the most direct and feasible policy choice to significantly reduce the current account deficit in US as well as to reduce surpluses in Japan and Asia. Of course, stronger growth in Japan and/or a recovery of investment in emerging markets in Asia could also help reducing global imbalances, but for the moment, it would be neither feasible nor reasonable policy solutions.

An increase in saving in US would be most likely to be achieved by either fiscal consolidation or rehabilitation of household saving. Considering the current recession, the latter has become more and more feasible choice, because falling stock market and housing prices may raise household saving through their efforts to rebuild optimal wealth-income levels.

Under the current situation of persistent future recessions expected in the near future, however, an usual mix of enhanced output growth and real currency appreciation has become infeasible. In emerging markets, real appreciation seems out of question as a structural policy for long term productivity growth, while real exchange rates may be a strong tool for external adjustments there.

## 1. RECENT CURRENT ACCOUNT PATTERNS IN THE PACIFIC REGION

### Overall Current Account: Increasing Imbalances

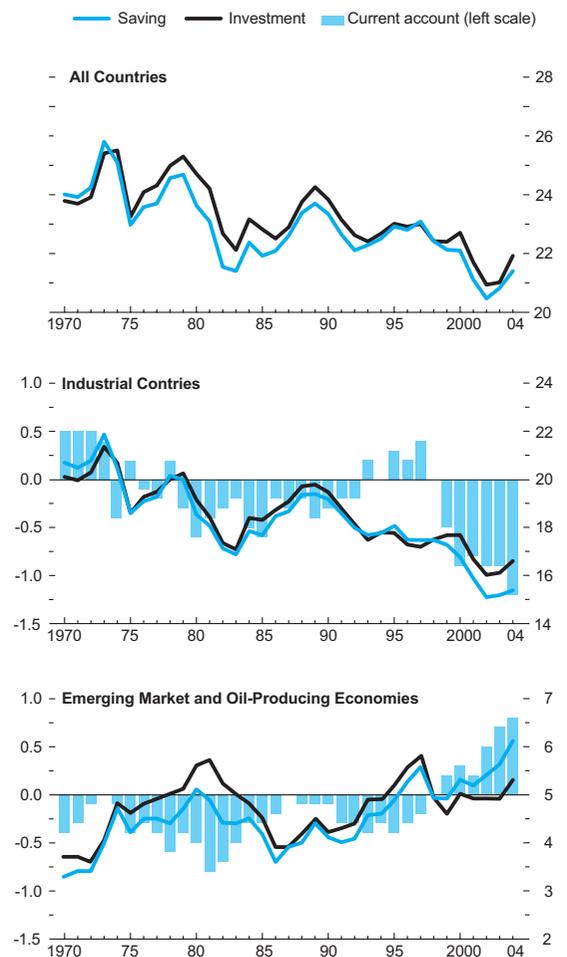
Current account imbalances reflect changes in both saving and investment behavior. Global saving and investment (as a percent of GDP) were relatively stable following the first oil shock and up until the late 1990s; however, more recently, these ratios have declined and hit historic lows in 2002 as shown in Figure 1. These global trends came largely from developed economies; in contrast, emerging markets showed trend increases in both saving and investment to various degrees.

When we look at the recent patterns of current accounts in the Pacific region (Figure 1), it is apparent that the global imbalance issue arises from global economic developments specific to the 2000s. During this decade, the United States as well

as Australia and New Zealand—all of which are known as persistent deficit countries—expanded their deficits even further (as compared to the 1990s). On the other hand, Japan, a known persistent surplus country, showed no sign of a decrease in surplus.

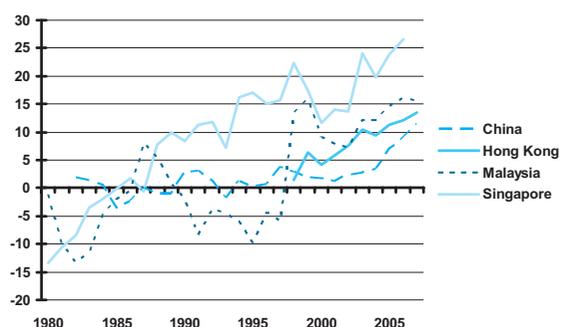
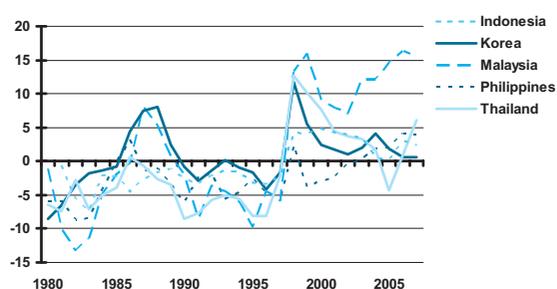
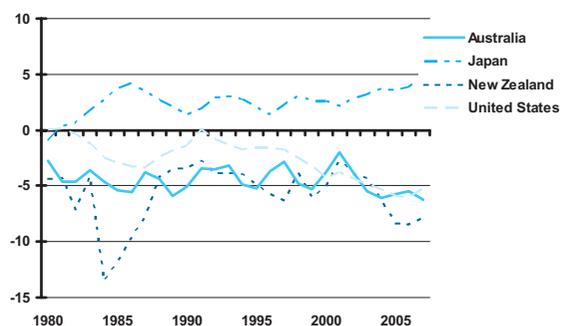
Along with these countries, since the outbreak of the Asian crisis in 1997, emerging markets in the region have also continued to generate current account surpluses more or less directly due to their stagnant investment. However, it is important to note that, among these emerging markets, the

**Figure 1. Global saving, investment and current accounts (percent of GDP)**



Source: International Monetary Fund, *World Economic Outlook*, Fig. 2.1, April 2005.

**Figure 2. Current account balances in the Pacific region (percent of GDP)**



Source: International Monetary Fund, *International Financial Statistics*, CD-ROM.

developments in the current account balances are diverse. Indeed, on one hand, four emerging market economies—i.e., Hong Kong, Malaysia, Singapore and Chinese Taipei—are distinct in terms of increasing their current account surplus, closely followed most recently by China. On the other hand, the other crisis-hit economies—i.e., Indonesia,

Korea, the Philippines and Thailand—have shown some decreases in current account surpluses to date.

While it is true that the main emerging regions ran moderate current account deficits in the mid-1990s, there is now an increasing divergence in current account balances across the region (IMF 2008, 199). For example, while it is sometimes claimed that emerging Asia is accumulating large and increasing current account surpluses, the aggregate surpluses in the region reflect persistent surpluses of only the above five countries, rather than the other four emerging markets in the 2000s.

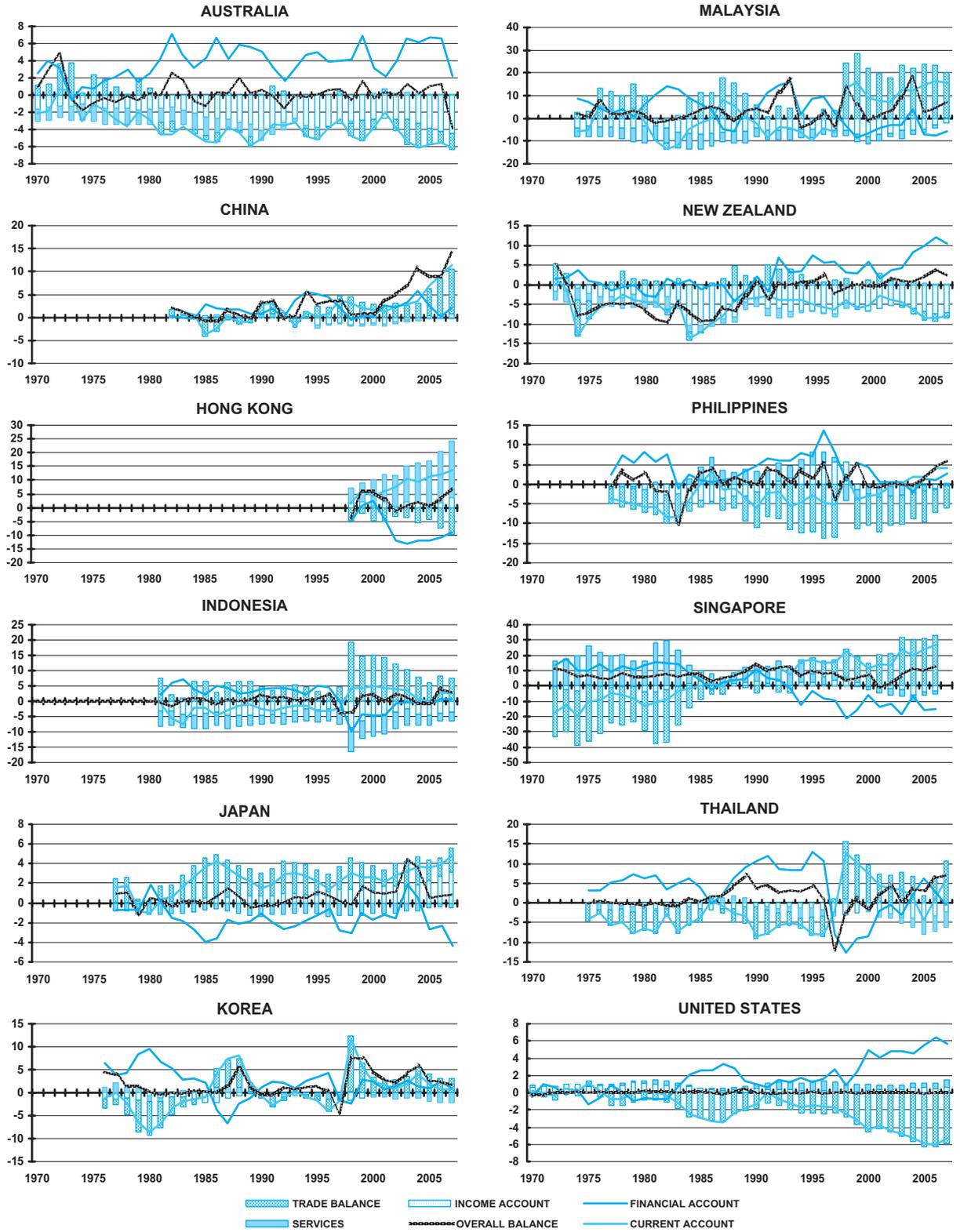
### Components of the Current Account: Increasing Importance of the Income Account

The current account is made up of three major components: trade in goods, trade in services and the income account. In this study, we focus on developments in the income accounts. This focus is based on the rationale that the increasing financial integration has magnified the size and role of these income flows based on accumulated gross external assets and liabilities of these economies, and this has resulted in the accounts becoming more closely knitted with the international capital market.

The trade balance has typically been the dominant component in developments of the current account in the Pacific region, including the United States (Figure 3). However, there are several exceptions. Because of their heavy net external debt positions, deficits in the income account have overwhelmed trade balance surpluses and in cases such as New Zealand, it has generated persistent current account deficits. Likewise, most of the current account deficits in Australia are the result of income account deficits.

As a mirror image of these debtor economies, a significant part of the persistent current account surpluses can be explained by income account surpluses in the case of Japan because of the country's net external creditor position. In this respect, the United States is unique in the sense that, while the country has become a net external debtor since the late 1980s onward, its income account has been in surplus (rather than in deficit) due to differences in ex post returns to inward and outward investments to and from the United States. One must note

**Figure 3. Components of current accounts (percent of GDP)**



Source: International Monetary Fund, *International Financial Statistics*, CD-ROM.

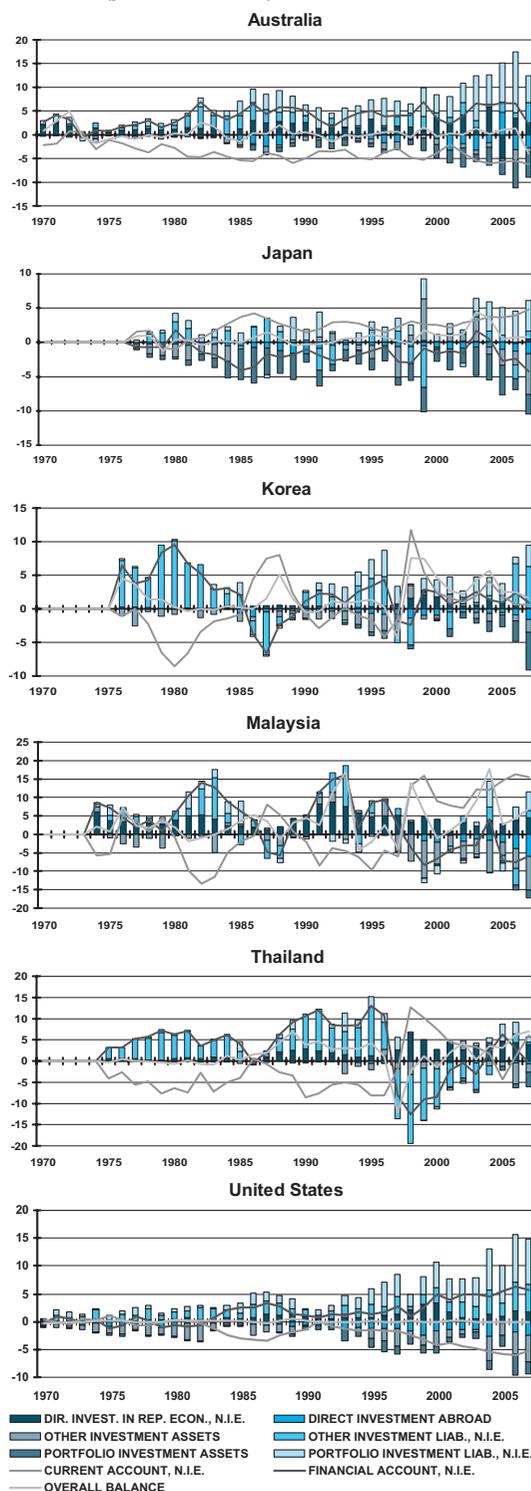
that, in the 2000s, both the trade and income accounts deteriorated and expanded current account deficits in Australia and New Zealand, while only income account surpluses (not trade account surpluses) increased and expanded the current account surpluses in Japan.

In the case of the emerging market economies in the region, developments in the current account are driven by the trade balance, although their gaps were sometimes very large due to huge income account deficits as in the case of Indonesia, Malaysia and Thailand (countries that have been heavily externally indebted). Except for Hong Kong and the Philippines, emerging markets in East Asia have generated significant trade account surpluses since the crisis, and these surpluses have overwhelmed service trade and income account deficits. The service trade surplus has been dominant among the components of the current account, overwhelming the merchandise trade deficit in Hong Kong, while exceptionally large current transfers from abroad have become larger than persistent trade deficits in the Philippines.

#### Financial Flows: Notable Increases in Gross Financial Flows

Turning to financial flows (Figure 4), Australia has received persistent net investments from abroad since the 1980s onward, mostly in the form of portfolio flows firstly and direct investment secondly. New Zealand has become a serious persistent receiver of net investments from abroad since the 1990s in terms of both foreign direct investment and portfolio flows, and the United States has tripled the size of its net investment from abroad almost exclusively in the form of portfolio investment in the 2000s. Moreover, if we examine both inward and outward investments, there has been a sea change in the early 2000s in terms of the volume of these flows. In particular, both foreigners' inward investment and home country's outward investment have increased significantly (in many cases, it doubled). Portfolio investment has played the major role, followed by direct investment. Japan has been a persistent gross as well as net external investor in both foreign direct and portfolio investments since the mid-1980s onward and the country strengthened its net external creditor position in the 2000s as reflected in its increasing income account surpluses.

**Figure 4. Components of the financial account (percent of GDP)**



Source: International Monetary Fund, *International Financial Statistics*, CD-ROM.

Current account surpluses in emerging market economies in the region have been generally associated with outflows of non-FDI capital flows and a huge accumulation of official foreign exchange reserves. Exceptions were China and Korea (though to a lesser degree for the latter), where both current and financial accounts have been in surplus and reserves have been accumulated. While Hong Kong, Singapore and Chinese Taipei have generated current account surpluses together with financial outflows and have been accumulating reserves, as persistent net external creditor economies, they should be differentiated from the other emerging market economies in the region. As opposed to non-FDI capital flows, emerging market economies in the region (with the exception of Indonesia) have continued to receive a significant amount of FDI flows despite the 1997 economic crisis.

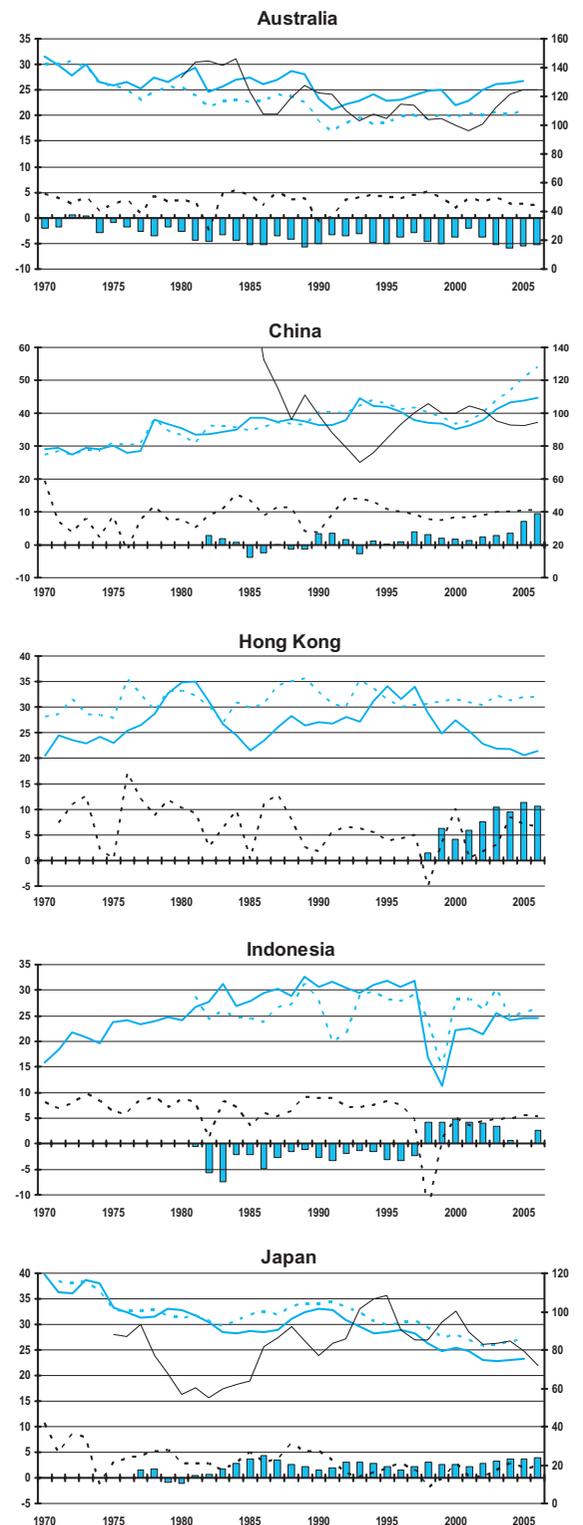
In contrast to advanced economies in the region, the crisis-hit emerging markets were not external investors despite their huge financial account deficits. Net financial outflows in Indonesia, Malaysia, the Philippines and Thailand, in particular, mainly reflected gross outflows or retrenchment of foreign investment flows (mainly portfolio and other investments) and not those of residents' outward investments. In this sense, the linkage of these economies to the international capital market has remained one-way in nature, as compared to not only the advanced economies but also the other emerging markets such as Hong Kong, Singapore and Chinese Taipei.

### Saving and Investment: Trend Declines

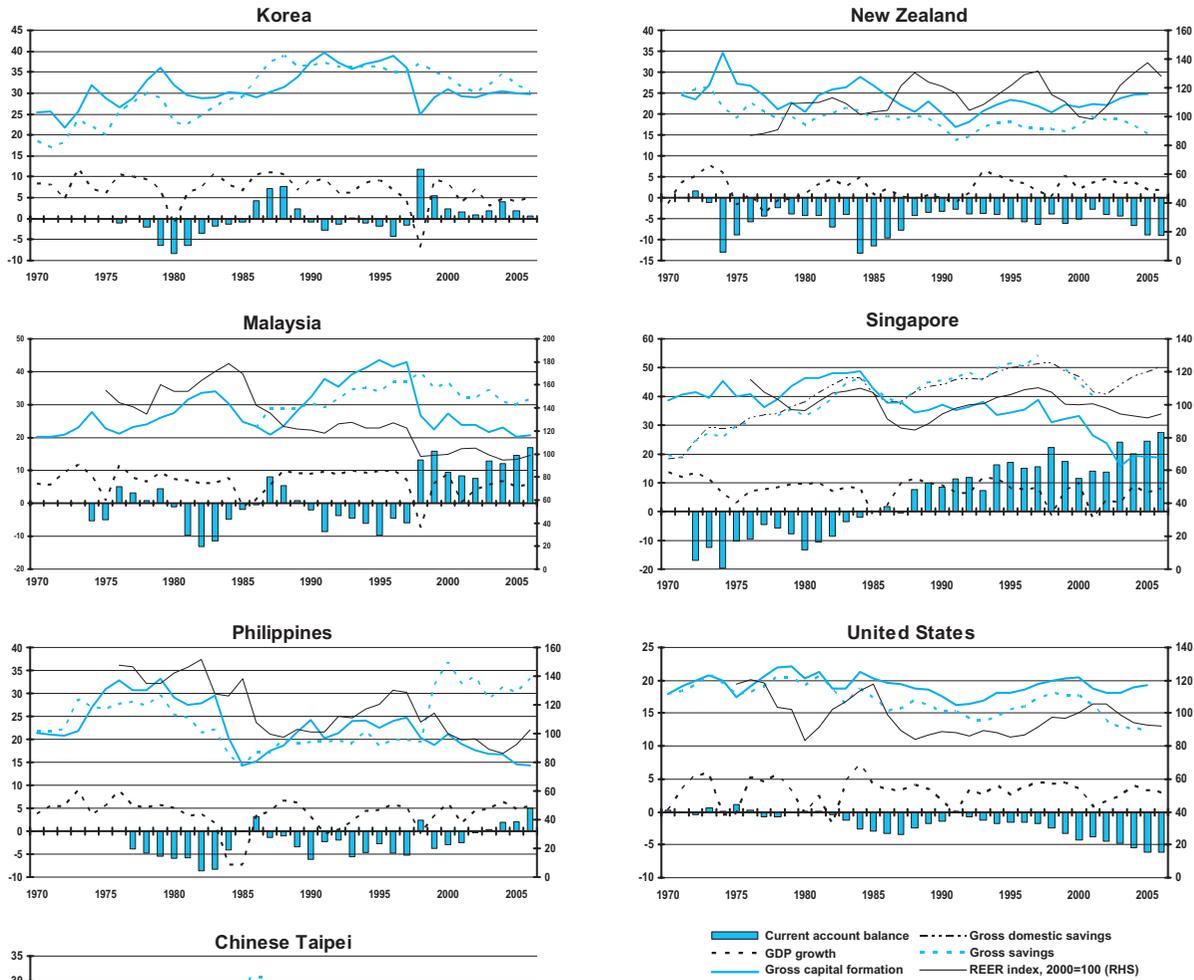
From a behavioral point of view, rather than using an accounting framework, developments in the current account can be grasped as reflecting the saving-investment gap. Ratios of global saving and investment (relative to GDP) were relatively stable during the 1970s and 1980s. While both saving and investment in industrial countries have been trending downward since the 1970s, these ratios in emerging market and oil-producing economies have risen (Figure 1).

In the United States, after seeming recoveries from medium-term declines in both saving and investment in the 1990s, we observe a significant decline in saving and a resulting divergence from investment in the 2000s. In particular, the decline in

**Figure 5. Saving, investment and current account in the Pacific region (percent of GDP)**



**Figure 5. Saving, investment and current account in the Pacific region, continued (percent of GDP)**



Source: World Bank, *World Development Indicators*, CD-ROM.

private saving resulted from a drop in household saving, and this decline has been even larger than the decline in public saving; together these declines have overwhelmed compensating increases in corporate saving. In Australia and New Zealand, after experiencing medium-term declines in saving and investment in the 1970s and 1980s, there were no sharp changes in saving, but some cyclical booms in investment in the 2000s.

Subsequent to the declining trend in both saving and investment in Japan in the 1970s, there was some recovery in the 1980s; however, since the 1990s onward, there has been a slow but steady decline in

both saving and investment. Nevertheless, in the most recent period, i.e., the 2000s, there has been a rebound in both saving and investment along with economic recovery from the so-called “Lost Decade” of the 1990s. In contrast to the United States, Japan has maintained higher saving than investment since the early 1980s onward.

Saving in emerging markets in the region has already surpassed those of advanced economies and has continued to remain high despite some decline in the 1990s. China has shown a remarkable increase in saving since the 1980s, and its investment has generally followed saving up until the Asian crisis.

In the crisis-hit economies, investment declined sharply and has not yet recovered to pre-crisis levels as has occurred in other emerging markets (except for China). Saving also showed some declines from the crisis; however, the drop was to a lesser degree, despite sharp deterioration of public saving due to a deterioration in fiscal balances. The sharp turnaround in the current accounts following the crisis reflects these movements in saving and investment in a very straightforward way. China experienced a strong rebound in both saving and investment in the 2000s, with saving, which mainly came from the corporate sector, being larger than investment. In Hong Kong and Singapore, investment has declined significantly since the crisis, while saving has more or less remained the same.

## 2. HISTORICAL EPISODES OF CURRENT ACCOUNT ADJUSTMENTS

Some argue that the adjustment of external imbalances is not achieved through autonomous rebalancing of demand between the United States and the surplus economies. Rather, it is argued that, because of still imperfect global integration, the redistribution of world demand requires as costs of adjustments both an output decline in the United States and a real U.S. dollar depreciation, which in turn could bring about non-benign impacts on the global economy. For example, the U.S. external deficit fell by 3.5 percent of GDP over three years in the late 1980s with significant declines in output growth and a 40 percent real depreciation of the U.S. dollar. In search of possible regularities involved with external adjustments in the past, the IMF (2007) identified historical episodes of large external imbalances and examined how long these episodes lasted, as well as how changes in output and real

exchange rates contributed to their adjustments. Large and sustained reversals are defined as swings in the current account balance of at least 2.5 percent of GDP and at least 50 percent of the initial current account imbalance that are sustained for at least five years.

### Deficit Reversals/Adjustments: Tradeoff between Growth Slowdown and Real Depreciation?

Based on their criteria,<sup>1</sup> the IMF identified 42 episodes of large and sustained external deficit reversals over the past 40 years in advanced countries which include Japan (1974, 1980), New Zealand (1984) and the United States (1987) in the Pacific region (Table 1). Note that the IMF also found 13 cases of large and persistent deficits<sup>2</sup> including Australia (1980–), New Zealand (1978–84 and 1989–2006) and the United States (1998–). Table 1 lists these episodes of large and sustained external deficit/surplus reversals that were identified by the IMF, as well as the adjustments that took place in advanced and emerging markets in the Pacific region for the period 1970–2006.

By looking at the median of certain macroeconomic variables across these episodes (Figure 6), the IMF argued that the current account adjustment was generally accompanied by both a general slowdown in output growth and a temporary depreciation in real effective exchange rates (immediately in advance of the adjustment). While admitting that the magnitude of the exchange rate correction and of the GDP growth slowdown varies considerably across episodes, by distinguishing “contractionary” deficit reversals with a significant growth decline from “expansionary” reversals without a growth decline, they argued that the former goes together with stronger growth declines and less real currency depreciation than the latter. In other words, presumably, there seems to be a trade-off between growth slowdown after the reversal and total real exchange rate depreciation.

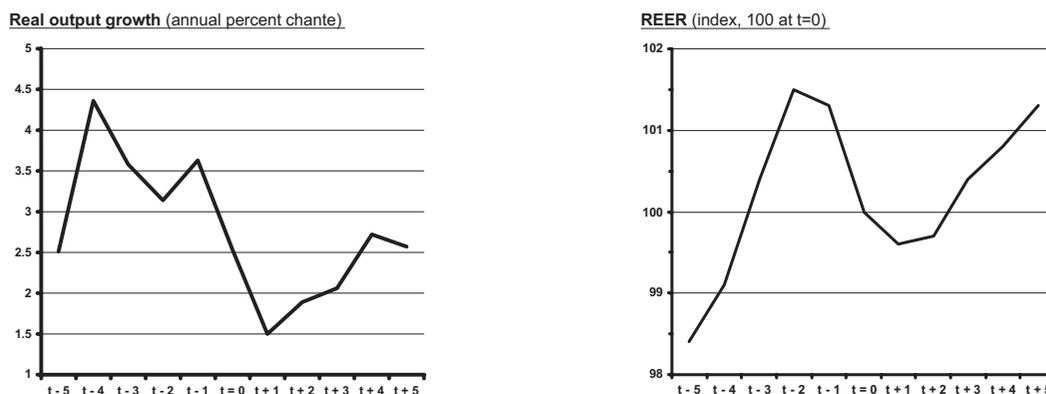
As for the recent episodes of large and sustained current deficit reversals in advanced countries in the Pacific region, however, we have only three episodes in New Zealand (1974–78, 1984–91) and the United States (1987–91). In fact, the alleged deficit reversal episode in Japan (1981–85) was better regarded as not a reversal of large and sustained deficits, but part of the process of accu-

**Table 1. List of current account reversals/adjustments and persistent current account deficits/surpluses in the Pacific region (as a percent of GDP)**

Country	Year	Deficit	Size of adjustment	Country	Year	Surplus	Size of adjustment
<b>Advanced economies</b>							
Japan	1974	-1.0	2.7	Japan	1986	4.3	2.8
Japan	1980	-1.0	5.3	New Zealand	1973	1.7	12.8
New Zealand	1974	-11.1	8.2	United States	1981	0.2	3.6
New Zealand	1984	-8.2	7.2				
United States	1987	-3.4	3.5				
<b>Emerging markets</b>							
China	1985	-3.7	7.2	China	1982	2.8	6.5
China	1993	-2.6	6.5	China	1997	3.9	2.6
Hong Kong, China	1980	-5.0	12.4	Hong Kong, China	1975	17.5	22.5
Hong Kong, China	1995	-6.3	17.7	Hong Kong, China	1989	8.2	15.5
Indonesia	1986	-4.9	3.8	Indonesia	2000	4.8	4.7
Korea	1974	-19.7	19.7	Korea	1977	0.0	8.4
Korea	1980	-8.3	16.0	Korea	1988	7.7	10.4
Korea	1996	-4.2	15.8	Korea	1993	0.2	4.4
Malaysia	1974	-5.3	10.3	Korea	1998	11.7	10.7
Malaysia	1982	-13.1	21.1	Malaysia	1979	4.4	17.5
Malaysia	1995	-9.7	25.6	Malaysia	1987	8.0	16.5
Singapore	1974	-19.7	15.2	Malaysia	1993	15.9	8.4
Singapore	1980	-13.3	35.6	Malaysia	1999	15.9	8.4
Chinese Taipei	1980	-1.9	23.1	Chinese Taipei	1986	21.2	20.0
Thailand	1983	-7.2	7.8	Chinese Taipei	1991	6.8	4.8
Thailand	1990	-8.5	3.5	Thailand	1986	0.6	9.1
Thailand	1996	-8.1	20.8	Thailand	1998	12.7	17.2

Source: International Monetary Fund, *International Financial Statistics*, CD-ROM.

**Figure 6. Output growth and REER during deficit reversals: advanced countries**



Note: Medians across episodes; t = 0 is the trough year of the ratio of current account deficit to GDP; x-axis in years before and after = 0.

Source: International Monetary Fund, *World Economic Outlook*, Figure 3.2, April 2007.

mutating surpluses from small and temporary deficits. Among the three, while we found the output growth decline to be common, we cannot trace any hint of real depreciation; rather it appears that there has been more or less an appreciation during adjustments in both economies. Therefore, at least after the adjustment began, we see no trade-off between growth slowdown and real depreciation at the deficit reversal.

Even if we concentrate on reversals as well as adjustments of large and sustained deficits, however, we note that Japan has never had them and that reversals/adjustments in New Zealand (1986–91) and the United States (1987–92) were accompanied not by real depreciation but by appreciation in New Zealand.

In emerging markets in the Pacific region, 12 episodes of deficit reversals were identified, namely, China (1985, 1993), Hong Kong (1980, 1995), Korea (1980, 1996), Malaysia (1985, 1991), Singapore (1980), Chinese Taipei (1980) and Thailand (1983, 1996). If we also include large deficit reductions with a shorter sustained period of four years (instead of five), we can add to this list episodes in Indonesia (1986), the Philippines (1982, 1999), Singapore (1974) and Thailand (1990). These deficit reversals/reductions do not appear to be generally associated with real appreciation nor output growth declines. In fact, we observe a pickup in growth in Indonesia (1986–89) and Korea (1980–88), and real appreciation in Singapore, while the usual combination of growth slowdown and real depreciation can be found in the Philippines (1982–85) and Malaysia (1982–87).

The current account reversals in the crisis-hit economies in the region were unprecedented, and in fact, were too abrupt to be included in this definition of large and sustained deficit reversals. In the episodes of external adjustments in the 1980s, prior current account deficits were reduced gradually enough to accommodate negative shocks, so that investments fell to some extent, but not much. In contrast, the current account turned from being very negative to very positive in the 1997 crisis period especially in the crisis-hit economies. The degree of reversal reached 13–19 percent of GDP in Korea, Malaysia and Thailand in two years, which without doubt aggravated the tremendous negative shocks along

with the sharp falls in investment.

### Surplus Reversals/Adjustments: Structural Changes after the Asian Crisis

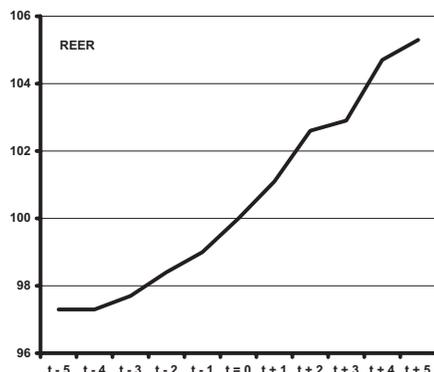
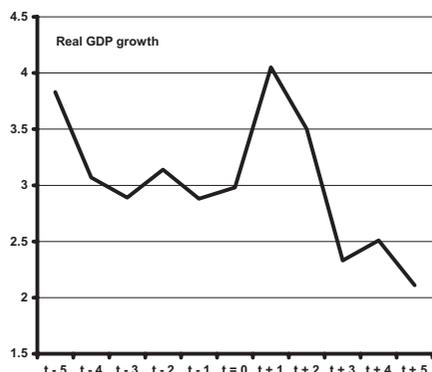
Turning to surplus reversals, the IMF (2007) identified 36 (49) episodes of large and sustained reversals of external surpluses in advanced (emerging market) economies, including Japan (1986), the United States (1981), China (1982, 1997), Hong Kong (1989), Korea (1988, 1998), Malaysia (1987, 1999), Chinese Taipei (1986) and Thailand (1998) in the Pacific region. If we again include large surplus reductions with shorter sustained period of four years (instead of five), we can add the cases of Indonesia (1999), Korea (1977, 1993) and Malaysia (1979) in emerging markets.

Again, by looking at the median of certain macroeconomic variables across episodes (Figure 7), the IMF (2005) found that the surplus reversals have been associated with both more-or-less immediate growth acceleration and a real currency appreciation at the adjustment in both advanced and emerging market economies. Note that we can find real appreciation before the adjustment in advanced economies, while, in contrast, we find real depreciation in emerging market economies. By distinguishing between expansionary surplus reversals with strong output growth and contractionary reversals with a substantial fall in growth, they argue that the expansionary cases go together with strong demand growth, while the contractionary cases go with real depreciation prior to the adjustment and strong growth in domestic demand backed by expansionary macroeconomic policies.

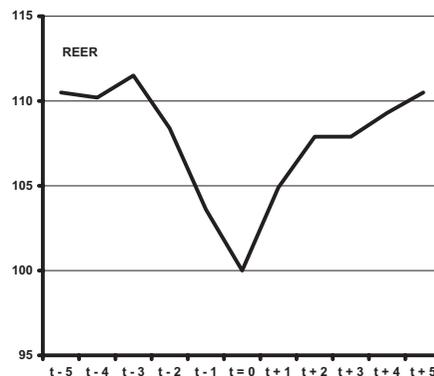
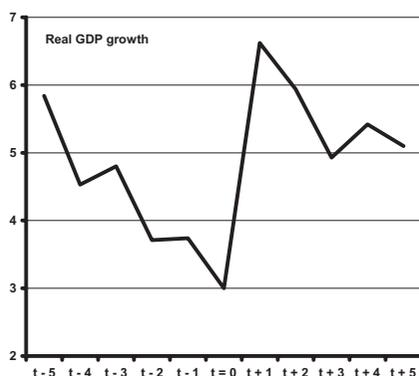
In the Pacific region, a large and sustained surplus reversal/reduction episode in advanced countries can be found only in Japan (1986) which was associated with real appreciation and an increase in output growth.<sup>3</sup> Among the emerging markets, China (1982–85), Hong Kong (1989–92), Korea (1988–91) and Malaysia (1987–91) had surplus reversals/reductions in the 1980s associated with increases in output growth, while Korea (1998), Malaysia (1999) and Thailand (1998) witnessed positive, but relatively weak output growth (the latter of which is of course related to the recovery process after the Asian crisis). In addition, their surplus reversals/reductions were not specifically associated with either real exchange rate apprecia-

**Figure 7. Output growth and REER during surplus reversals**

**Advanced economies**



**Emerging markets**



Note: Medians across episodes; t = 0 is the peak year of the ratio of current account surplus to GDP; x-axis in years before and after = 0.

Source: International Monetary Fund, *World Economic Outlook*, Figure 3.2, April 2007.

tion or depreciation.

**Overall Assessments: Historical Experiences Tell Us Little**

Overall, *if* we will follow the median global historical pattern of sustained deficit reversals, the United States may be able to make a soft-landing scenario with a mild decline in output growth on the condition of significant prior real depreciation. This would also be applicable to Australia and New Zealand, while Japan will need higher output growth and real appreciation. However, *if* we restrain ourselves to the recent historical experiences in the Pacific region, we cannot tell much about the due course of real exchange rate changes; that is, we are

not confident whether real depreciation will moderate output growth slowdown in the U.S. external deficit reversal/adjustment where the former is expected to moderate the latter. As to emerging markets, unfortunately, the historical patterns of sustained adjustments reveal even less about likely external adjustments because of their mixed experiences. This is also the case in the Pacific region, particularly due to the recent Asian crisis. In the 1980s, sustained surpluses were adjusted through increases in output growth and real currency appreciation, but we are not sure what would occur in their external adjustments, without mentioning possible output growth increases in the

near future.

Looking into the recent past, we must reiterate two concerns here. One, we do not know if we can repeat the historical pattern under this fast-changing environment, particularly the acceleration in economic integration. The historical regularities observed come from cross-country experiences mostly before the 1990s. There is simply no guarantee that the pattern is applicable to individual countries in a different time and space. For example, is it really true that real depreciation either offsets an expenditure-reducing shock or corrects a competitiveness problem? First, circumstantial evidence cannot provide us with much information about causality between the macroeconomic variables of interest. Second, they ignore cross-country differences and because we are looking only at the median, wide margins of variations in relevant variables occur. Third, historical episodes cannot predict recent possible structural changes driven by increased integration in product and financial markets.

The second concern is that we have no consensus on how we can realize these scenarios. That is, both output growth and real exchange rates are highly endogenous macroeconomic variables; as such,

there is no straightforward way and there are no easily available tools to realize the target levels and paths. Rather, while output growth is one policy target, both real exchange rates and current accounts are intermediate policy vehicles that are used to achieve ultimate policy goals. Having in mind possible alternative scenarios of external adjustments exemplified by the historical patterns as above, we will next consider how we can affect current account imbalances with the policy tools that are available and assess the effectiveness of these tools.

### 3. FACTORS OF RECENT CURRENT ACCOUNT PATTERNS

As has already been noted, current account imbalances reflect changes in saving and investment behavior. The next question, then, is what determines the development of saving and investment behavior across economies? Based on a substantial number of studies on this topic,<sup>4</sup> the IMF (2005) estimated dynamic panel models for saving and investment using data for 46 industrial, emerging markets and oil-producing countries over the period 1972–2004 (Table 2).

**Table 2. Global saving and investment: a panel regression**

	Saving (% of GDP)			Investment (% of GDP)		
	All	Industrial countries	Emerging market economies	All	Industrial countries	Emerging market economies
<b>Lag-dependent variable</b>						
Percent of GDP saving	<b>0.62</b>	<b>0.70</b>	<b>0.71</b>	—	—	—
Investment	—	—	—	<b>0.76</b>	<b>0.80</b>	<b>0.80</b>
<b>Main determinants</b>						
Real per capital GDP growth	<b>0.17</b>	<b>0.28</b>	<b>0.13</b>	<b>0.26</b>	<b>0.33</b>	<b>0.23</b>
Real interest rate	0.01	-0.07	0.01	—	<b>-0.08</b>	—
Credit (% of GDP)	<b>-3.47</b>	<b>-1.53</b>	<b>-2.51</b>	<b>-1.36</b>	<b>0.81</b>	<b>-1.64</b>
Change in credit (annual % of GDP)	-2.17	-0.94	<b>-7.39</b>	<b>0.08</b>	<b>0.02</b>	<b>0.12</b>
Elderly dependency ratio	<b>-0.44</b>	<b>-0.43</b>	-0.66	-0.09	-0.04	<b>-0.19</b>
Public saving (% of GDP)	<b>0.27</b>	<b>0.15</b>	<b>0.24</b>	—	—	—
Terms-of-trade growth	<b>0.08</b>	<b>0.06</b>	<b>0.08</b>	—	—	—

Note: Bold-faced values are statistically significant at the 5 percent level. Values in italics are statistically significant at the 10 percent level.

Source: International Monetary Fund, *World Economic Outlook*, Table 2.2, Sept. 2005.

The key results of the analysis for saving are as follows:

- 1) Higher output growth boosts saving;
- 2) Fiscal consolidation (decrease in fiscal deficit) is associated with increased saving (i.e., Ricardian equivalence does not fully hold);
- 3) Increases in private sector credit are associated with a reduction in saving;
- 4) Saving behavior does not appear to be affected by rate of return considerations.

Result number (3) implies that financial deregulation and innovation relaxed households from borrowing constraints and that wealth effects (through the sharp increase in asset prices such as housing prices) drove households to reduce saving, particularly in industrial countries over the last decade.

In turn, the results for investment are as follows:

- 1) Stronger output growth leads to higher investment rates;
- 2) Increased availability of credit is associated with higher investment;
- 3) An increase in the cost of capital is associated with lower investment.

Based on the estimated results, two important factors were identified in explaining the decline in saving in industrial countries over the recent period: (i) the increase in private sector credit, and (ii) the drop in public saving.

### Saving Behavior

In the Pacific region, the trend increase in private sector credit in Australia, New Zealand and the United States were associated with a trend decline in household saving (a reflection of the relaxation in credit constraints through financial deregulation since the 1990s). In extreme contrast, Japan experienced a large, abrupt decline in private sector credit during the 1990s, while it also shared a similar structural decline in household saving (but due to other reasons).

A significant declining trend in household saving is observed across advanced economies (Figure 8). Trend increases in corporate saving, however, countered household saving in Japan (as well as in the Euro area, but to a lesser degree), resulting in relatively stable private saving, as opposed to trend declines in private saving in the United States.

The data also show several medium-term swings in public saving in the industrial countries. Australia, New Zealand and the United States share a similar trend with other industrial countries, where fiscal consolidation improved public saving in the 1990s, but there have been some setbacks in the 2000s. Japan again has been exceptional in that it has experienced secular decline in public saving since the beginning of the 1990s.

For emerging markets, two key drivers of the recent increase in saving can be identified: (i) the sharp increase in public sector saving and (ii) stronger output growth. Thanks to fiscal consolidation in the 1980s, emerging markets in the Pacific region have maintained relatively high levels of public saving since the 1990s (despite the crisis in 1997), while China has significantly improved its fiscal balances since the mid-1990s; these factors have provided strong support to aggregate savings in emerging markets as a whole. Private saving recovered to exceed pre-crisis levels; however, this is not due to recovery in household saving, but is due to increased corporate saving, particularly in China and Korea.

### Investment Behavior

Among the advanced economies in the region, only Japan has shown a downward trend in the investment rate. Some say that this is common with the Euro area countries, suggesting a convergence of investment rates across industrial countries. Investment rates have remained stable since the 1990s in Australia, New Zealand and the United States. Except for China, investment rates have fallen drastically in emerging markets in the region since the Asian crisis and have not yet recovered to pre-crisis levels. There seems to be no commonality or regularity in the long-term investment behavior across emerging markets.

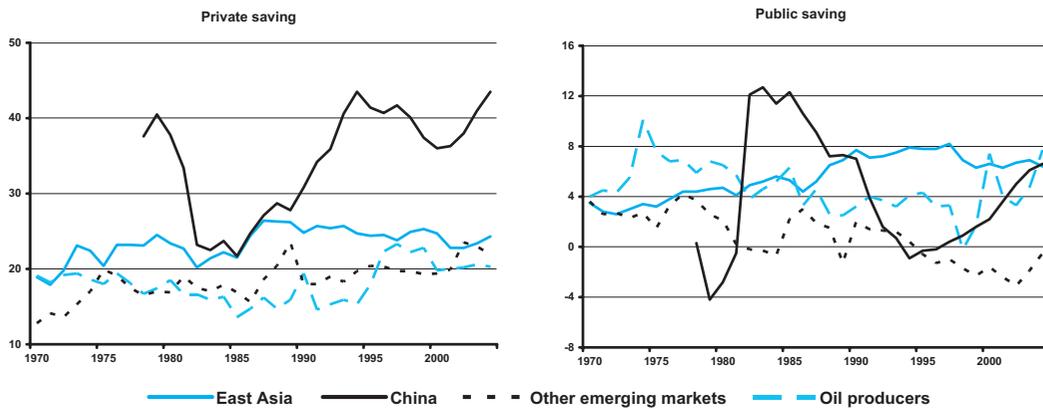
As a matter of fact, the tracking of recent developments in investment based on the panel estimation model above was not very successful. Similar to

**Figure 8. Saving trends across regions (percent of GDP)**

**Industrial countries**



**Emerging market and oil-producing economies**



Sources: International Monetary Fund, *World Economic Outlook*, Figure 2.3, April 2005, Figure 2.3, September 2005.

other recent studies, the results incorrectly predicted increases in investment both in industrial countries and emerging markets. This, however, suggests that the recent lower-than-it-should-be investment is a key factor behind the recent global imbalances and low world real interest rates. It also suggests that the corporate sector has been busy restructuring its balance sheets rather than investing in capital, particularly in Japan and the emerging market economies in the Pacific region.

### Overall Assessment

From the above analysis, facing the current global financial crisis, we see only negative factors for both saving and investment in both the advanced and emerging market economies. Both output and credit growth are expected to slow down and public saving is expected to decline further. According to the estimates presented in Table 2, the slowdown in output growth is likely to reduce investment more than saving, thereby reducing external deficits and increasing surpluses. The credit growth slowdown may increase private saving and decrease investment, and thereby reduce external deficits but increase surpluses. Declines in public saving will counteract narrowing deficits and expanding surpluses.

Current accounts are simply net of aggregate saving over aggregate investment and the total of current accounts across economies in the global economy must be balanced. Thus, in order to discuss what we should or should not do to cope with the current external imbalances, we need to know not only how saving and investment changes relative to one another within economies, but also how their differences interact with each other across countries through the adjustment of interest rates and exchange rates in the global economy.

## 4. FINANCIAL INTEGRATION AND SUSTAINABILITY OF CURRENT ACCOUNT IMBALANCES

### Policy Simulation: Is International Coordination Necessary?

In addition to the failure of tracking investment behavior of both advanced and emerging market economies, we should note that relevant macroeconomic variables are not separate from but are more or less closely correlated to each other as part of an integrated global economic system. Indeed, not only is it true that saving and investment are correlated

within economies as well as among economies and regions, but total saving must also be equal to total investment in a global economy. This suggests that in order to grasp the essence of global imbalances, we need to capture the interactions between variables and across countries within an integrated and consistent framework (IMF 2005, 106).

We realize that common factors such as asset price increases and/or credit growth as well as regional/individual factors affect saving, investment and current account balances. To see how global imbalances could be reduced, the IMF (2005) estimated a factor-augmented vector autoregressive model that attempts to grasp global linkages and spillovers among macroeconomic variables of interest in several countries.

Simulations for an increase in U.S. saving, an increase in investment in Asia, stronger economic growth in Japan and an increase in real interest rates in the United States were conducted. The results of the simulation are as follows:

- 1) An increase in U.S. saving rates would have a significant positive effect on the U.S. current account deficit. More specifically, a permanent 1 percent increase in the U.S. gross national saving rate would reduce the U.S. current account deficit by 1/2 percent of GDP after three years. This would also reduce the current account surpluses in Japan by 3/4 percent of GDP, but in Hong Kong, Singapore and Chinese Taipei, by as large as 3 percent of GDP (with some variations).
- 2) An investment recovery in Asia (excluding China) could also contribute to a reduction in global imbalances. More specifically, a 5 percent permanent increase in the investment rate (as a percent of GDP) in Indonesia, Korea, Malaysia, the Philippines and Thailand is needed in order to reduce the U.S. current account deficit by 3/4 percent of GDP after three years. This would reduce the current account surplus in Japan by 1/2 percent of GDP.
- 3) An increase in Japan's real GDP growth would help to reduce the U.S. current account deficit. Japan needs an increase in GDP of 1/2 percent

a year in order to reduce the U.S. current account deficit by 0.2 percent of GDP after three years, while reducing the current account by 0.3 percent of GDP. The impact on the current account balances of Indonesia, Korea, Malaysia, the Philippines and Thailand is not clear.

- 4) An increase in real short-term interest rates in the United States would have a limited impact on the current account. A cumulative 2 percent increase over the next three years would reduce the current account deficit in the United States or other countries by less than 0.1 percent of GDP. This is partly because of the high co-movement in interest rates, saving and investment across industrial countries, resulting in little impact on global imbalances.

Although the IMF (2005) emphasizes that the policy response needs to involve many countries and that coordinating this response requires the efforts of international policymakers, the above simulation results appear to show that an increase in U.S. saving is the most direct and feasible policy choice to significantly reduce the current account deficit in the United States as well as reduce surpluses in Japan and Asia. Of course, stronger growth in Japan and/or a recovery of investment in emerging markets in Asia could also help reduce global imbalances; nevertheless, at the moment, this is easier said than done. An increase in real interest rates in the United States would not help alleviate global imbalances mainly because of increasing macro-financial linkages under globalization.

An increase in U.S. saving could be achieved by either fiscal consolidation or rehabilitation of household saving. Considering the current recession, the latter has become the more feasible choice, as falling stock market and housing prices may raise household saving through their efforts to rebuild optimal wealth-income levels. Dekle and Nugent (2009) remind us, however, that “negative capital gains have been realized in the past without benefiting the personal savings rate appreciably.”

Under the current situation of persistent recessions expected in the near future, however, the usual mix of enhanced output growth and real currency appreciation has become infeasible. In emerging

markets, real appreciation seems to be out of the question as a structural policy for long-term productivity growth (Goeltom and Juhro (2009) for Indonesia and Loh (2009) for Malaysia), while real exchange rates may be a strong tool for external adjustments there.

### Financial Market Integration and Sustainability of US Deficits

As was discussed at the outset, it is not necessarily the case that unprecedented large imbalances should always be corrected. Rather, we care about these imbalances only when they are not sustainable. Sustainability, however, depends on the impact of global financial integration, and in the preceding discussion, we analyzed certain features that are intrinsic to the global financial integration.

First, financial integration, by allowing for more risk-taking, may enhance the probability of asset market bubbles. In fact, along with the global trend of financial liberalization as well as financial integration, the occurrence of financial crises has increased. Accordingly, in order to minimize financial bubble bursts and their costs, we need to not only improve and restructure financial regulations to accord to the new financial environments, but we also need to resort to macroeconomic policies to contain the risk of bubbles.

Second, financial integration has increased the importance of balance sheet effects in economies. For the emerging market economies, particularly the net external debtor economies in the Pacific region, the Asian economic crisis taught them the critical importance of currency composition and term structure of external liabilities, which could produce abrupt reversals of financial flows due to their intrinsic pro-cyclicality. Accordingly, since the crisis, these economies have tried to insure themselves by accumulating official foreign reserves instead of encouraging the private sector to invest abroad. In the process of recovery from financial crises, the nonfinancial corporate sector in both advanced and emerging market economies has been busy rehabilitating its balance sheet rather than investing in physical assets, and have been using recovered profits and less costly borrowed funds. This is exactly how the Japanese firms rehabilitated themselves in the 1990s and continue to do so even now. As a result, corporate saving has compensated

for household saving within the private sector in recent periods in these economies.

Third, financial integration has increased gross financial flows remarkably so that the income account has become increasingly important in the current account, particularly in the advanced and high-income emerging market economies. For example, persistent current account deficits in Australia and New Zealand on the one hand and persistent surpluses in Japan on the other are well explained by their significant income account deficits and surpluses. In addition, increasing gross external assets and liabilities should produce far from negligible external wealth effects through exchange rate changes, which is always asymmetric across currencies of denomination. The wealth effects from a U.S. dollar depreciation would alleviate negative shocks in the United States, but it would negatively affect creditor economies such as China, Japan, Singapore and Chinese Taipei.

Fourth, we should note that, thus far, financial integration has been led by the comparative advantage of the United States as a global fund manager. Financial capital—mainly in the form of foreign direct investment and portfolio flows—has flowed into the United States, which is the other side of the same coin as the U.S. current account deficit. Under financial globalization, global capital moves freely in search of higher expected returns. Under the post-Bretton Woods system of generalized floating exchange rates, the United States has become a global fund manager or a venture capitalist, graduating from just being a global banker (Gourinchas and Rey 2005, Lane and Milesi-Ferretti 2007). It is well known that the United States has enjoyed higher returns from its external investment as compared to the returns earned by foreigners on U.S. inward investment. The composition of U.S. external assets and liabilities shows that not only the former, but the latter too have consisted more of risk assets such as foreign direct investment and equity flows. If any major correction in external accounts is needed, changes in the global picture of financial flows must take place.

#### External Adjustment through Exchange Rates Changes

There has been a great deal of discussion and debate on currency realignments that are needed to wipe out the current imbalances. We must note, however,

that under the increasing global economic integration, it is natural for us to find that the role of exchange rates in external adjustments has changed. First, increasing vertical integration of product markets or production networking has complicated the correlation between the trade account and exchange rate changes. Some argue that exchange rate elasticities of trade account balances have become weakened. Moreover, the importance of the trade account in the current account has become relatively smaller in some economies because the income account has become more significant. To sum, we see less scope than before for exchange rate changes in correcting the current account balances.

Furthermore and second, thanks to financial integration, financial account transactions have tended to overwhelm those of the current account in the foreign exchange markets. This means that financial flows have tended to determine nominal exchange rates. Since financial flows are based on expected rates of returns on assets, exchange rates are ultimately dependent on international investors' expectations. That is, if investors do not believe in necessary corrections of current account imbalances in the United States or if investors continue to invest for expected higher returns there than elsewhere, dollar appreciation and net financial inflows will remain.

#### Financial Openness in Emerging Markets

The IMF (2008) focused on the determinants of medium-term current account balances and estimated a model of current account covering a panel of 58 advanced and non-oil emerging market economies during the period 1983–2006. In addition to the usual determinants such as income levels, output growth, fiscal deficits, etc., the IMF found that the degree of financial openness and financial depth are significant in explaining the current account. The IMF even went so far as to imply that part of the current account surpluses in emerging markets in East Asia can be explained by their relative closeness of their financial markets. However, they also found that these factors almost totally failed to explain the most recent developments in current accounts in the Asian emerging markets. As a result, the IMF ultimately suggested currency undervaluation as a possible additional reason.

Given their institutional vulnerabilities, particularly

with respect to prudential regulations on the financial sector and the intrinsic imperfect and asymmetric information problems with respect to international investment inflows to emerging markets, to what extent and at what pace should these economies open up their financial markets and capital transactions is a very touchy, difficult and controversial issue. This is so true that, for the time being, one may say that their accumulation of foreign reserves could be justified as a necessary cost to insure themselves against possible external financial turmoil. In addition, as shown by the case of talking down the RMB of China, whether their currencies are undervalued or not would not be easy to prove, but would be easy to politicize. Rather, we should note that too large or inexplicable current account surpluses in emerging markets in the region have simply reflected structural changes in global finance as well as the conservative attitudes of these economies toward them.

## Endnotes

<sup>1</sup> Large and sustained reversals are defined as swings in the current account balance of at least 2.5 percent of GDP and at least 50 percent of the initial current account imbalance that are sustained for at least five years. (IMF 2007, Chapter 3, 83)

<sup>2</sup> Large and persistent imbalances are defined as episodes where the current account balance remained above 2 percent of GDP for at least five years. (IMF 2007, Chapter 3, 83)

<sup>3</sup> Although there was a large swing in the U.S. current account (1981–87), we do not see this as a sustained surplus reversal, because it was not a correction of surplus but deterioration.

<sup>4</sup> For example, see Loayza et al. (2000).

## References

Dekle, Robert and Jeffrey Nugent. 2009. “External adjustment problems of the United States in an increasingly integrated world, 1980–present.” Paper submitted to the Pacific Economic Outlook Project, January.

Goeltom, Miranda S. and Solikin M. Juhro. 2009. “External adjustments under increasing integration: the case of Indonesia.” Paper submitted to the Pacific Economic Outlook Project, January.

Gourinchas, Pierre-Olivier and H’el’ene Rey. 2005. “From world banker to world venture capitalist: U.S. external adjustment and the exorbitant privilege.” Revised version of paper presented at NBER Conference on G7 Current Account Imbalances: Sustainability and Adjustment, August.

IMF 2008. *World Economic Outlook*, October. Washington, D.C.: IMF.

IMF. 2007. *World Economic Outlook*, April. Washington, D.C.: IMF.

IMF. 2005. *World Economic Outlook*, September. Washington, D.C.: IMF.

Lane, Philip R. and Gian Maria Milesi-Ferretti. 2007. “The external wealth of nations mark II: revised and extended estimates of foreign assets and liabilities, 1970–2004.” *Journal of International Economics*.

Loayza, Norman, Klaus Schmidt-Hebbel and Luis Servén. 2000. “Saving in developing countries: an overview.” *World Bank Economic Review* 14 (Sept.).

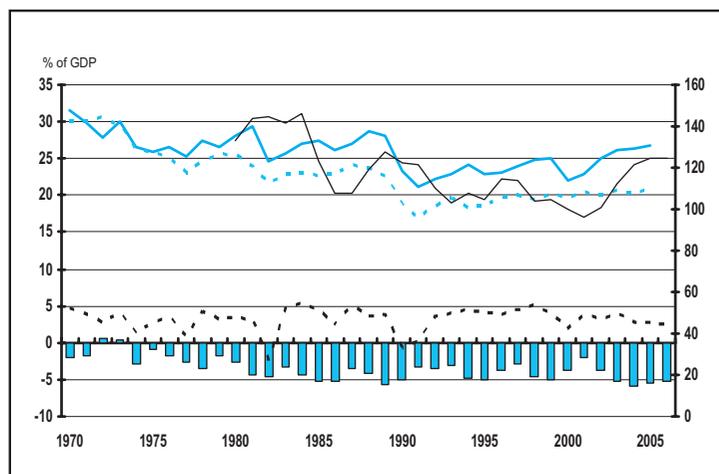
Loh Geok Mooi. 2009. “External adjustments under increasing integration: the Malaysian case.” Paper submitted to the Pacific Economic Outlook Project, January.

Makin, Anthony J. 2009. “International integration and external adjustment: the Australian experience.” Paper submitted to the Pacific Economic Outlook Project, January.





**EXECUTIVE SUMMARIES  
ON INDIVIDUAL ECONOMIES**



■ Current account balance    - - - Gross savings  
- - - GDP growth    — REER index, 2000=100 (RHS)  
— Gross capital formation

Australia's current account deficit ranks as one of the most longest-running external imbalances in the world and remains central to any analysis of the nation's international economic performance. The external deficit, at times exceeding six percent of GDP since the floating of the exchange rate and capital account liberalization of the early 1980s, has been matched by equivalent net capital inflow or capital account surplus.

The persistently high current account deficit matched by foreign capital inflow can be interpreted as a divergence between Australia's aggregate saving and investment. Historically, Australia has been a relatively low-saving economy, yet one that persistently invests more than comparable economies.

Australia is also one of the largest international debtors for its size, with a level of net foreign liabilities now over 60 percent of GDP due to current account deficits that have persisted for decades. Over this time, the economic significance of Australia's current account deficit and its foreign indebtedness has been strongly debated in policy circles due to concerns about the economy's external vulnerability. It has also prompted serious macroeconomic policy mistakes. In the early 1990s, for instance, external deficits contributed to very high official interest rates and a significant policy-induced recession. The lesson arising from this recession was that dampening economic activity to reduce the external deficit serves no lasting purpose because the imbalance only expands again with

economic recovery.

Influenced by financial liberalization and greater international capital mobility, the size of Australia's current account deficit has risen to an average of around 4.5 percent of GDP since the early 1980s, compared to an average level of around 2.25 percent during the 1960s and 1970s. As a result, the level of net foreign debt now exceeds half a trillion dollars or over 60 percent of GDP, making Australia one of the largest international debtors for its size, with external account imbalances that are unusually large by OECD standards.

The private sector owns nearly all of this debt and around 80 percent of external borrowing is intermediated through financial institutions, mainly the major commercial banks. Although Australia currently has a high level of external liabilities to the rest of the world, a greater rise in private wealth due to capital accumulation and valuation gains have ensured that net external liabilities are still low as a proportion of the total value of residents' assets.

External imbalances have been the measured equivalent of the excess of domestic investment (i.e., expenditure by the private and public sectors on fixed assets including machinery and equipment, dwellings, nondwellings, roadworks and livestock) over relatively more stable domestic saving. Since saving has been relatively stable, the bulk of variation in the external imbalance has been due to fluctu-

tuations in domestic investment.

The Australian dollar exchange rate has been comparatively free-floating since 1983 and has exhibited considerable variation over this time against the U.S. dollar and in nominal effective terms, as measured by the trade weighted index.

In the short run, the nominal exchange rate is highly responsive to monetary policy settings, in particular, short-run interest differentials set by the central bank, the Reserve Bank of Australia. Over the very long run, mean reverting behavior of the real effective exchange rate is broadly consistent with long-run purchasing power parity.

Medium-term movements in Australia's real exchange rate have been associated empirically with an external and real source of disturbance, the economy's terms of trade, defined as the relative price of exports to imports of goods and services. Empirical observation of the Australian dollar (\$) suggests that the currency has historically behaved as a "commodity currency." Hence, the \$A has tended to appreciate (depreciate) following a rise (fall) in world commodity prices as the supply of foreign exchange increases (falls).

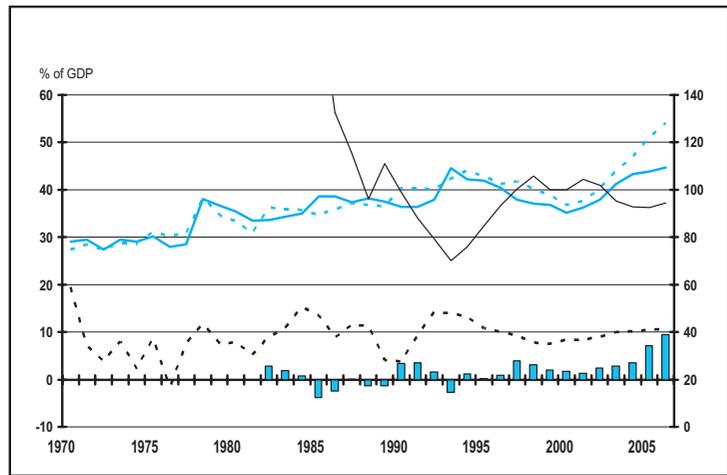
As a relatively small economy in the world trading system, Australian producers and consumers are largely dependent on prices determined in global markets and hence are "price takers" for the bulk of goods and services bought and sold internationally. The heavy weighting of agricultural and mineral commodities in Australia's merchandise exports largely accounts for the economy's terms-of-trade movements, which have been more volatile than those of other advanced economies (though it exhibits similar variability with New Zealand).

From the mid-1980s, Australia experienced a steep increase in the relative size of its current account imbalance, matched by higher capital inflow, attributed usually to factors that influence domestic saving and investment behavior. Accordingly, domestic saving and investment rates have become more independent, or less correlated, so that capital mobility has increased. At the same time, real interest rate movements can no longer be properly understood without reference to international borrowing and lending patterns.

Prior to the late 1990s, there was a high degree of co-movement between real long-term interest rates and net capital inflow, suggesting that domestic factors were predominantly driving the external imbalance. Since then international factors have been the main drivers.

Anxieties about Australia's current account deficit and foreign debt have been expressed in the past and the size of the external account imbalance has been a predominant focus of macroeconomic policy since the Australian dollar exchange rate was floated in the early 1980s.

Yet, Australia's persistent current account deficits are best perceived as being symptomatic of a growth process in which the rate of capital accumulation exceeds the economy's overall saving rate. Nonetheless, the risk remains that national income gains attributable to foreign capital inflow will diminish in the future if long-term world interest rates rise or if a higher foreign debt-related interest risk premium emerges.



■ Current account balance    - - - Gross savings  
- - - GDP growth    — REER index, 2000=100 (RHS)  
— Gross capital formation

China has been accused of exchange rate manipulation that caused large U.S. trade deficits, which in turn have reduced U.S. welfare by increasing unemployment and reducing wages. Several U.S. economists declared in 2007 that it was necessary for the renminbi (RMB) to appreciate 40 percent in order to eliminate the global trade imbalances. In addition, according to some observers, the trade imbalance is also deeply deleterious to China's welfare because it has led the People's Bank of China to lose control over the money supply and, hence, caused an overheating of China's economy. It therefore appears that it would almost be a moral imperative for the United States to use tariffs to force an RMB appreciation for China's own good.

However, these claims are questionable and may, in fact, be untrue. First, the claim that a 40 percent appreciation of the RMB against the U.S. dollar (US\$) would reduce the U.S. global trade deficit represents the triumph of hope over experience. When the average yen-US\$ exchange rate fell from 239 in 1985 to 128 in 1988, the U.S. global current account deficit only fell from 2.1 percent to 1.7 percent of GDP; this is so, because Japanese companies began investing abroad and exported the goods to the U.S. from there overseas entities. For similar reasons, a large RMB appreciation would not significantly reduce U.S. trade deficits.

The second claim that China's swelling balance of payments surplus caused the People's Bank of China (PBC) to lose some control of credit growth

is wrong. Chinese banks face credit quotas, and credit growth could not have stayed high in 2003–07 without continual upward adjustments of the credit quotas by the PBC. The reason for the PBC action is not technical inability to control money growth but the political reality of factional politics. The new Communist Party chief (Hu Jintao) installed in late 2003 was not the choice of predecessor (Jiang Zemin) and he faced a Standing Committee whose majority were beholden to Jiang. Easy credit was part of Hu's way to ensure the consolidation of his power in the next Party election in 2008. This was why GDP growth was 13 percent in 2008, and tight monetary control was imposed only after the conclusion of the Party elections, which saw substantial gain for the Hu faction.

Third, the alleged negative effects of the trade imbalance on U.S. labor are greatly exaggerated. The average unemployment rate in 1999–2006 was 5 percent compared to 6 percent in 1991–98, and the total compensation (including benefits) for blue-collar workers rose in the 1991–2006 period. Since economic globalization accelerated in 1990–92, the integration of the labor force in the former Soviet Union, India and China into the international division of labor led to a doubling in the amount of labor producing goods for the world markets. Under these conditions, the standard Heckscher-Ohlin model would have predicted a rising unemployment rate and a falling wage rate in the United States. The reason why both the unemployment and wage rates improved was because accelerated technological

innovation was a more important trend in this period. The latter produced large productivity gains that enabled labor income to rise despite the greater competition from imports. However, these two trends of accelerated globalization and accelerated technological innovation caused more frequent job turnovers, which increased worker anxiety, and hence raised social demand for trade protectionism.

the present global economic recession.

China's current account surplus exists because its dysfunctional financial system cannot intermedicate the growing amount of saving into investment. The private saving rate is high because China does not have the variety of financial institutions that would allow for (i) pooling of risks by providing medical insurance, pension insurance and unemployment insurance; and, (ii) transformation of savings into education loans, housing loans and other types of investment loans. The backward financial system in China has made the private saving rate in China 7.0-12.2 percentage points higher than in the United States.

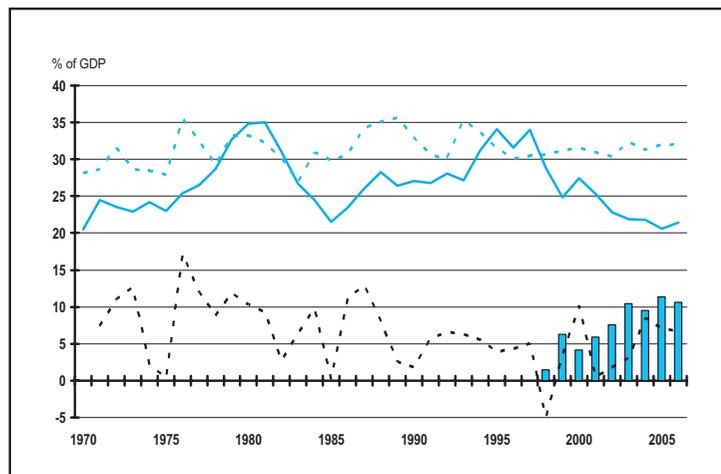
The optimum solution to the present trade tensions is a policy package that emphasizes multilateral actions. It is bad economics and bad politics to focus on only one party (i.e., that China alone must change), on only one instrument (i.e., RMB appreciation alone), and on only one policy objective (i.e., the current account balance). Coordination of national adjustment measures (outlined below) by China and the United States would result in a win-win method of reducing the global trade imbalances.

First, China should focus on import-intensive investment as the short-run objective and on the development of its financial sector as the long-run objective. Second, the United States should implement measures to increase public and private saving rates once the current recession is over. The United States should also work to improve the coverage of its social safety nets in order to reduce the pains of structural adjustment. Third, China and the United States should assert more leadership in the WTO Doha negotiations to achieve significant multilateral liberalization of global trade. This last achievement would help contain both the present populist backlash against economic globalization in developed countries and the proliferation of (self-defeating) beggar-thy-neighbor policies undertaken to combat



# HONG KONG, CHINA

BY ANDREW SIK HUNG AU



■ Current account balance    — Gross capital formation  
- - - GDP growth                      - - - Gross savings

This chapter presents key observations about the movements in the external balances of Hong Kong, China (HKC) over the years and related developments in the HKC economy. The chapter begins with a discussion of the structural transformation of the HKC economy. This transformation, which occurred amidst the rapid integration with Mainland China over the past decades, could have an important bearing on the movements of HKC's external balances, particularly in the recent past. Equally worth noting are related developments in the domestic economy as revealed by movements in gross domestic saving and investment rates, the internal cost/price structure, the demographics and the status of HKC as an international financial center.

HKC is a highly open, service-oriented economy. The ratio of trade in goods and services to GDP stood at 404 percent in 2007. The city has also successfully transformed itself from a manufacturing center to a regional hub for finance, trade, business and travel over the past decades. As a result, the share of services sector in HKC's GDP amounted to 92 percent in 2007.

HKC is one of the few economies in the world that has adopted a currency board or a linked exchange rate system (LERS). Since its inception in October 1983, the LERS has been functioning smoothly despite volatilities in the market, including the stock market crash in 1987 and the Asian financial crisis of 1997–98. The LERS suits the needs of a highly

open economy such as HKC's. It is simple, consistent and well-understood. It enables HKC to adjust to external shocks without the damage and volatility of a sudden currency collapse. It should also be noted that the effectiveness of the LERS is helped by a number of economic attributes enjoyed by HKC including: (i) the flexible and responsive structure of the HKC economy; (ii) the strong and robust banking system; (iii) the government's prudent fiscal policy stance; and (iv) the large official reserves held by HKC's Exchange Fund. The system rules out the use of nominal exchange rate movements as a mechanism of adjustment. Thus, shocks to the economy that are triggered by external or domestic shocks may necessitate more extensive adjustments of the internal cost/price structure than would be needed if the exchange rate were free to adjust. While such internal adjustment is slower than rapid adjustment by the exchange rate, the process may be accompanied by more durable and necessary structural adjustments within the real economy.

The merchandise trade account was in deficit in 1980–83 and has been in persistent deficit since 1992. This persistent deficit since the early 1990s reflects the significant structural change that has taken place within the HKC economy. Since the opening of Mainland China in 1978, manufacturers in HKC have been relocating the production facilities to the Mainland, particularly to the Pearl River Delta region. The pace and scale of relocation picked up in the latter half of the 1980s and early

1990s, resulting in a notable shrinkage in manufacturing activities in HKC. Reflecting this development, the share of the manufacturing sector in HKC's GDP declined distinctly from 22.8 percent in 1980 to only 3.2 percent in 2006.

In contrast, the service trade account had been in surplus over the period 1980–2007, and in particular, the service trade surplus rose distinctly after 2000. Several major structural changes within the economy have contributed to this trend. The first is related to the rapid increase in offshore trade conducted by HKC companies. Because the goods involved do not enter or leave HKC, they are not included in the external merchandise trade statistics of HKC. The second factor is related to the role of HKC as an international financial center, which has become increasingly important in supporting the economic and financial development of Mainland China. In addition, the vibrant performance of HKC's inbound tourism has been an important development leading to a larger service trade surplus in recent years. In fact, recently, the number of Mainland visitors coming to HKC has increased drastically, mainly due to the relaxation measures pursued by the Mainland authorities as well as to the rising living standards in the Mainland.

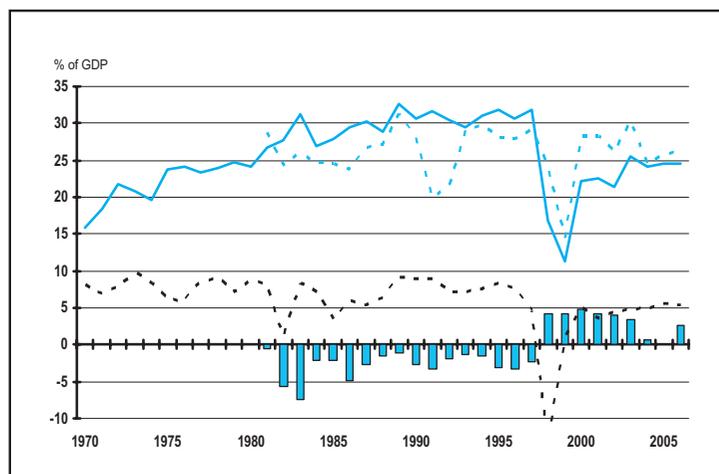
From a macroeconomic perspective, the movements in the external balance should also be related to the changes in domestic demand and the exchange rate of an economy. The trade balance of an economy is essentially the difference between its gross domestic saving and gross domestic investment, which reflect the domestic demand of the economy concerned. In HKC, the gross domestic saving rate has been rather stable over the period 1980–2007, while gross domestic investment has exhibited wider fluctuations. Moreover, movements in gross domestic investment tended to move closely with HKC's trade balance. Thus domestic economic developments, such as infrastructure cycles and property market booms and busts, could have impacts on HKC's trade balance and hence its current account balance.

To a certain extent, the domestic saving rate reflects the age structure of an economy. HKC, like many other economies, is facing an aging population, with the median age of the workforce at about 40. This suggests that the saving rate of the economy will

tend to be relatively high at this stage. Moreover, in the case of financial centers like HKC, professionals come and accumulate savings; however, these professionals then leave and are replaced by other professionals before reaching retirement, thereby contributing to a higher saving rate in financial centers.

The experience of the Asian financial crisis is a testimony of HKC's flexible product, labor and financial markets. Unlike other Asian economies, the HKC economy responded to the shocks mainly by changing its internal cost/price structure through market forces or its real exchange rates, rather than its nominal exchange rates, to restore its external competitiveness.

Economic policies in HKC are guided by the long-standing philosophy of "big market, small government." The government is committed to a free-trade policy and, in fact, HKC is regularly ranked by research organizations as being the freest economy in the world. Resource allocations in both the tradable and nontradable goods sectors are determined by market forces. The government has taken no policy initiatives to adjust or alter the external balances of the economy over the years.



■ Current account balance    — Gross capital formation  
- - - GDP growth    - - - Gross savings

Since the 1990s, amidst a gradual process of increasing global financial integration, Indonesia has experienced prolonged episodes of strong capital inflows along with an episode of capital outflow in 1998–99 due to the 1997 Asian financial crisis. It is worth noting that increasing financial integration between the Indonesian economy as an emerging market on the one hand and mature market economies on the other, has affected the Indonesian economic cycle over the past decade. Despite recognition of workable adjustments to adverse external conditions, the Indonesian economy remains vulnerable to overdependence on nonrenewable primary exports and foreign capital to catalyze its development potential.

Policy challenges in this area have thus become a critical issue along with the recent surge in private capital flows. Unlike many other developing countries, Indonesia has coped with the external shocks remarkably well. In this regard, Indonesia responded to external shocks with a broader range of policy packages, which included a more focused monetary policy strategy to maintain rupiah stability as well as downward adjustments in the exchange rate. In the short run, the rupiah depreciation improved competitiveness. However, while these short-run adjustments improved the current account, long-run adjustments were crucial in sustaining such improvements and eventually producing a current account surplus. It should be noted that after less than two decades, in the post-1997 financial crisis period, Indonesia has turned its current account deficit into

a surplus. This corresponds closely to a reversal in potential economic performance, namely, the saving-investment gap, from a deficit to a surplus.

This chapter explores some justification of the role of the exchange rate and other macroeconomic variables in preserving external balance. In this regard, the empirical facts and econometric exercises both show that the process towards balance is conditional upon significant changes in a number of variables including the domestic economic structure and the policy regime adopted during the financial crisis period, as well the functional relationships among economic variables that potentially affect the transmission mechanism. The chapter also provides empirical evidence that the process of economic integration has persisted with greater intensity. However, the results show that economic integration does not necessarily decouple the saving and investment nexus; rather, despite economic integration, there remains a certain degree of saving and investment correlation.

A critical issue needs to be addressed, however, relating to the persistence of external balances. This can be drawn from at least two presumptions. First, as the 1997 financial crisis began, exchange rate depreciation did not help to improve Indonesia's export competitiveness, but only exacerbated the country's external indebtedness. Therefore, external adjustments were attained via a severe decline in imports, and not through a significant expansion in exports. Furthermore, Indonesia was considered to

be a harsh example of how to cope with a sudden unexpected capital flow reversal. In this regard, in the face of the 1997 financial crisis, capital flight occurred in Indonesia. Although the capital that ebbed away at this time gradually flowed back to Indonesia, it was not a case of policy adjustment. This basic concern is congruous to another feature of the Indonesian economy that while saving and investment steadily increased, the net borrowing (S-I) gap has fluctuated over the last five years. This not only confirms that the economic recovery process stuttered and was relatively vulnerable to subsequent shocks, but it also contests the saving and investment nexus, which appeared in the early 1990s.

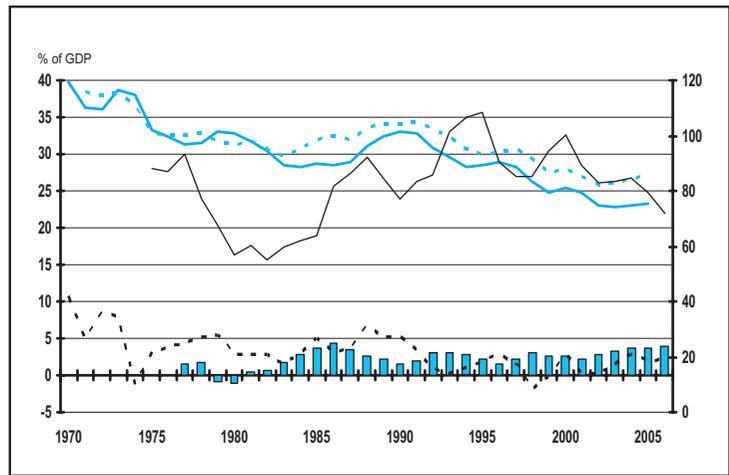
It is clear that the first presumption is not entirely correct. That is, it applies only in the early period of the 1997 financial crisis (from the end of 1997 to 1999) and not thereafter. Nevertheless, during the recovery period since 2000, when economic development began to regain positive momentum (this was due to significant improvements in market confidence, accompanied by a decreasing interest rate trend, from 32.7 percent to 11.5 percent), comprehensive trade policies along with a more competitive exchange rate have bolstered economic performance. These factors have preserved export and import growth at around 11.8 percent and 15 percent, respectively. Meanwhile, net service growth could be maintained at the moderate level of 4.5 percent, which increased the possibility for the current account to eventually run a surplus.

With regard to the second presumption relating to capital inflow behavior in the post-1997 financial crisis period, there is justification for the impact of policy adjustments on the behavior of capital inflows in Indonesia. The primary contributor to the substantial capital inflows to the country was that, amidst the phenomenon of global excess liquidity especially in emerging countries, interest rates (differential) in Indonesia were considered relatively more attractive compared to other countries in East Asia. This was not autonomous. As the government and Bank Indonesia instituted higher priority measures, such as fiscal consolidation in terms of deficit reduction, combined with more conducive monetary policy to stimulate the domestic economy, further unnecessary rupiah depreciation was avoided. This condition consequently restored market confi-

dence and gradually attracted capital back to Indonesia.

It is worth noting that, amidst the adjustment process to external balances and the success of several economic recovery programs implemented by the government, in the last three years there has been a tendency for imports to outpace exports. In this regard, stronger import growth can also be reflected by the potential role of FDI, which has increased significantly in recent years. If this is the case and if one may adopt an optimistic scenario, then in the years to come, the Indonesian current account surplus is predicted to decrease. Furthermore, with the prolonged devastating impacts of the 1997 financial crisis and the potential additional loss due to the inauspicious impacts of the recent global financial turmoil, there is a higher probability that Indonesian external balances will not persist and that its current account will run a deficit in the near future.

A number of key policy implications can be drawn from the perspective of macroeconomic stabilization policy and structural reforms. As the country has moved to a flexible exchange rate system, exchange rate policy should be firmly directed towards strengthening real rupiah competitiveness against real exchange rate movements of major trading partner currencies. Furthermore, anchoring to “the impossible trilemma,” exchange rate policy should be supported by measurable interest rate policy to ensure macroeconomic stability, while promoting the country’s external position and protecting market liquidity from fluctuations in capital flows. Furthermore, to effectively boost economic competitiveness, broader integrated structural economic reforms that focus on infrastructure and the labor and legal sectors are necessary. These are reasonable measures, given that poor competitiveness is principally due to sluggish investment, labor market vulnerabilities and legal uncertainty. Such structural reforms, supported by an enhanced institutional framework, will provide the underpinning for a more advanced stage of economic recovery and improve external sector performance, which will consequently buoy international reserves and stabilize the domestic currency.



■ Current account balance    - - - Gross savings  
- - - GDP growth    — REER index, 2000=100 (RHS)  
— Gross capital formation

Global imbalances, which include current account surpluses of Japan and other East Asian countries as well as the current account deficit of the United States, have been increasing in recent years. In 2007, the Japanese current account surplus was US\$ 210 billion, and the sum of current account surpluses for Japan and China (US\$ 372 billion) corresponds to most of the U.S. current account deficit (US\$ 731 billion).

On one hand, economic integration is further developing globally in terms of widening and deepening international trade, capital and financial transactions. In East Asia, further widening and deepening of international trade induce intra-regional capital flows, which include foreign direct investments (FDI), to establish production networks in manufacture goods, such as automobile manufactures. Not only FDI but also international portfolio investments and international bank loans are increasing in the globalization trend. The increases in capital flows accumulate external assets in investor countries, and this accumulation of external assets, in turn, increases dividends and interest receipts from foreign countries as a part of the income account in the current account balance. The share of the income account in the current account has a tendency to increase with the accumulation of external assets, and this in turn, may reduce the exchange rate effect on the current account.

The establishment of production networks due to FDI increases the volume of international trade,

particularly of manufactured goods such as parts and semi-final goods as well as final goods. In addition, these networks make international trade complex in the region. Thus, economic integration seems to have changed the responses of current account imbalances to exchange rates. The establishment of these production networks may change the response of current account imbalances to exchange rates not only for Japan, but also for East Asia as a whole.

This chapter investigates how much of a realignment of currencies is needed for adjustment to the current account imbalances to take place, assuming that only exchange rates play the role of adjustment and leaving external economic factors such as the economic variables of the United States unaltered. Four-variable VAR models are used to compare exchange rate adjustments to current account imbalances among Japan, East Asia excluding Japan and East Asia including Japan. Moreover, we focus on economic integration in East Asia through increases in FDI and the accompanying increase in the income account to investigate the exchange rate adjustments of Japanese and East Asian current account surpluses. By doing so, we considered the effects of the production networks in East Asia by Japanese FDI to other East Asian countries and increasing intra-regional trade in East Asia under globalization.

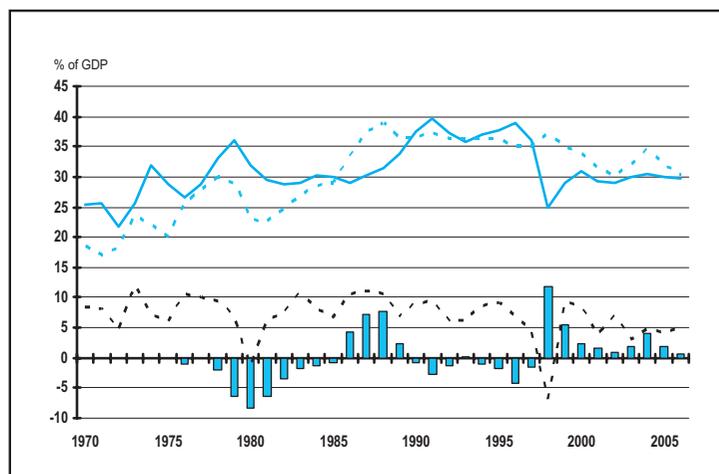
The analytical results show that a large appreciation of the Japanese yen is necessary to significantly decrease the current account surplus of Japan,

assuming that governments do not use policies to adjust their current account imbalances. The recent increases in the Japanese current account surplus have been caused by increases in its income account surplus rather than its trade account surplus. We show that the Japanese economy has a mechanism whereby increases in the Japanese outward FDI/domestic investment increase the Japanese current account surplus through increases in the income account surplus. Especially since the 1990s, FDI has a tendency to increase independently of exchange rate movements in the Japanese yen. Moreover, the findings of both the insignificant effect of the exchange rate on the income account and its significant effect on the current account indicate that the exchange rate has an influence not on the income account but on the trade account. As a result, the Japanese economy has an increasing structural part of the current account which does not respond to exchange rate movements. This implies there may be less room for the exchange rate to adjust the current account imbalances.

This chapter also shows evidence that a smaller appreciation of East Asian currencies as a whole is needed for the same percentage point reduction in the current account in terms of GDP as compared to an appreciation of the Japanese yen only and that of the other East Asian currencies only. If East Asian currencies as a whole adjusted to the current account imbalances, the required appreciation of the currencies would be smaller than the case where only the Japanese yen is responsible for adjusting the imbalances. The findings imply that it is necessary for the East Asian countries to coordinate exchange rate policies in order to enhance the effectiveness of East Asian exchange rate adjustments in correcting global current account imbalances.

Moreover, comparison of the effects of the GDP growth rate on the current account between the first and second periods shows that the effects have changed from no effects during the first period to insignificantly negative effects in the first year during the second period. This indicates that macroeconomic policies may have some effect on the current account via increasing Japanese aggregate demand, although it is not statistically significant. It is true that an increase in aggregate demand, such as in consumption and investment, can contribute to decreasing the Japanese current account surplus.

However, it is not certain that macroeconomic policy can stimulate aggregate demand given the current situation of the Japanese economy.



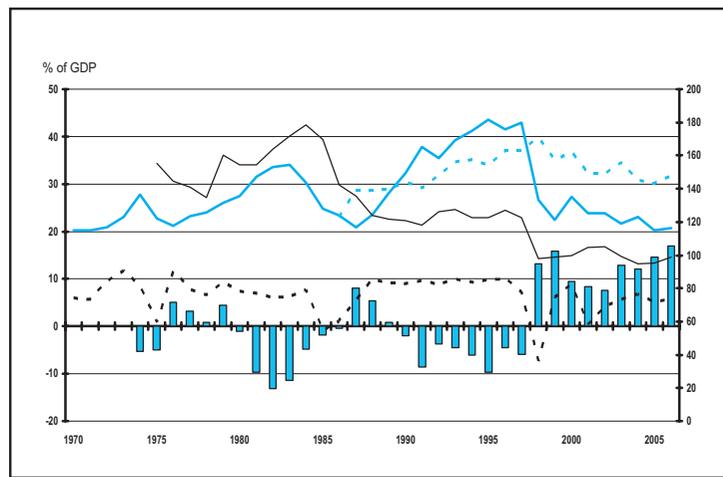
■ Current account balance    — Gross capital formation  
- - - GDP growth    - - - Gross savings

The dynamics of external adjustment mainly rely on the following key variables: net exports, foreign asset and liability positions, and rates of return on foreign assets and liabilities. Before 1995, gross external assets of Korea accounted for about 45 percent of gross national income with liabilities accounting for about 60 percent. Both external assets and liabilities increased sharply after 1995, reaching roughly 220 percent and 300 percent, respectively, by the end of 2007. The rise in the external accounts was largely associated with the upward tendency of asset cross-holdings in recent years. At the end of 2007, the net foreign debt hovered around 80 percent. This external imbalance, however, was alleviated through the channel of international trade. For example, Korea's net export ratio dramatically rebounded from 1998 and has remained relatively stable at around 3 percent. This is a very different situation compared with the United States, where its net foreign asset position supplements the trade imbalance. The valuation adjustment channel is not as effective as expected in Korea because valuation effects of exchange rate fluctuations on assets and liabilities tend to cancel each other out. According to a recent study, the trade channel and valuation channel account for about 73–92 percent and 4.7–5.9 percent of the variance of the actual external imbalances in Korea.

Ongoing international product and financial integration is expected to affect external adjustment through changes in foreign asset holdings, saving-investment decision behavior, risk-sharing behavior

and international arbitrage costs. This chapter examines this prospect of adjustment using several representative measures of market integration. The results show that Korea exhibits more risk-sharing behavior under increasing economic integration, while home bias in the equity market remains a puzzling phenomenon.

Although Korea has experienced modest economic growth since its rapid recovery from the crisis, there is mounting concern about the country's growth potential, which has been reflected in reduced growth rates in recent years. A crucial factor contributing to this phenomenon is the slowdown of domestic demand caused by external terms-of-trade losses. To cope with this challenge, we propose that Korea move forward towards a more market-oriented economic system with greater integration into the world economy, structural reforms for enhancing the productivity of the service sector, and an improvement in market conditions for attracting domestic and foreign investments.



■ Current account balance    - - - Gross savings  
- - - GDP growth                      — REER index, 2000=100 (RHS)  
— Gross capital formation

For most of the years following the Asian financial crisis in 1997–98, Malaysia’s balance of payments has been positive and rising. This is reflected in the increase in its foreign reserves from US\$4.6 billion in 1980 to US\$101.3 billion in 2007. To a large extent, the positive balance of payments was due to increasing trade surpluses and declining service deficits. These trade surpluses, however, may not continue in the future if prices of commodities fall precipitously due to the impending global recession. Moreover, Malaysia’s low-to medium-technology manufactured exports have begun to stagnate since 2007.

Despite being a major recipient of oil revenues, Malaysia has not invested heavily in research and development (R&D) to push itself out of the low-technology trap. R&D in the science and technology sector currently receives less than 1 percent of GDP. With fiscal deficits rising from 3.2 percent of GDP in 2007 to 4.8 percent of GDP in 2008, budgetary restraints make it difficult to further increase expenditures on R&D. As the country proceeds towards 2013, the government may have difficulty raising revenues to cover the shortfall in operating and development expenditure when oil revenues dwindle and Malaysia becomes a net importer of oil. Given the circumstances, climbing out of the low-technology trap appears feasible only if the private sector reinvests in R&D since the bulk of national saving is in corporate hands.

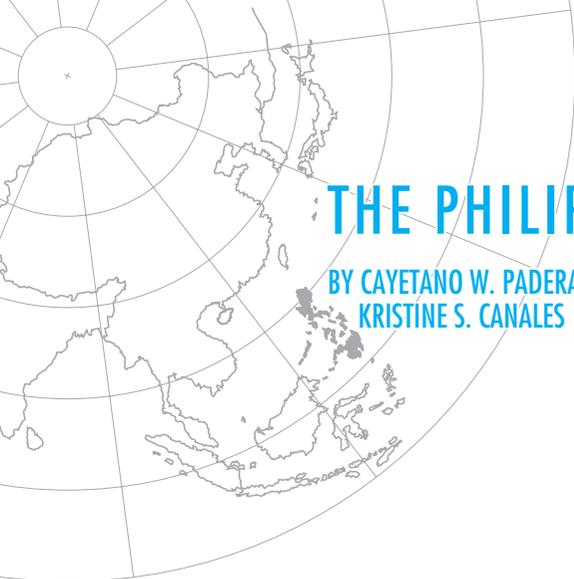
As Malaysia has a relatively small capital market

vis-à-vis developed nations, capital market integration has not reached a stage where national saving has completely decoupled from investment. For developing economies, inflows of direct investment supplement a segment of the economy (namely, technology) that it is sorely lacking in market intelligence as well as global supply and marketing networks. Local firms of developing economies may simply be too small to compete effectively in global markets and are constrained by the size of their domestic markets. Foreign direct investment helps to provide higher value-added jobs to graduates, train workers and raise the standard of living. The local population still needs to save and make domestic investments in the local economy.

More recently, the situation has begun to change as Asian countries with surplus saving now encourage the outflow of funds, as opposed to raising interest rates. The link between domestic saving and investment has weakened considerably in this new scenario. However, Asian central banks remain highly vigilant on the movement of capital flows and are anxious to prevent any disruption in financial stability. These capital outflows appear to be tolerated to the extent that they help to prevent a sharp appreciation in the exchange rate. In Malaysia’s case, the removal of exchange controls in 2001 and subsequent movements in short-term capital have further helped to detach the correlation between national saving and domestic investment. There are competing interests for the use of private sector saving now that the government has allowed

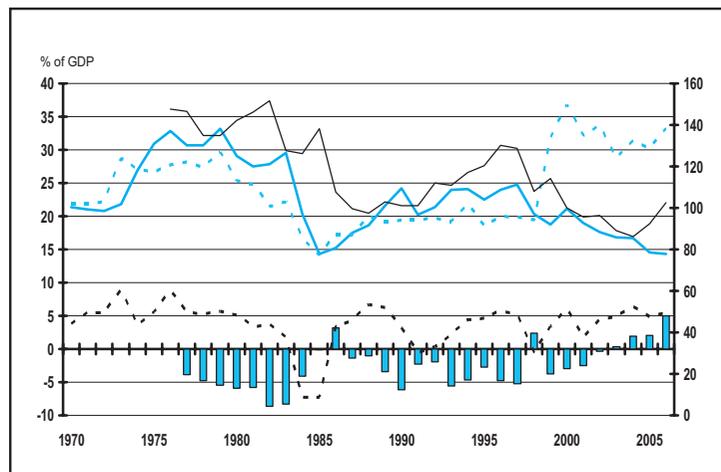
freer movement of capital outflow. The private sector is likely to mobilize its savings outside the country as opposed to investments within the country in order to obtain a better return on its investments.

In theory, as the bulk of Malaysian exports are comprised of commodities and low-value added manufactured goods (which are homogenous goods), the country's exchange rate should be sensitive to rising or falling exports. However in the case of Malaysia, when the ringgit was pegged to the U.S. dollar in the 1998–2005 period, we find that some of the internal adjustments took place in the form of rising wages. Over that period, real wages rose faster than productivity, thereby reducing the nation's competitiveness to lower-wage countries like China. External adjustments to the current account surpluses could have taken place in the form of relocation of MNCs out of Malaysia in search of competitive wages. Even after the ringgit was de-pegged, the adjustments to the surplus have continued to take place in wages rather than through consumption goods. This is because many essential items come under the government's control to keep inflation at low levels. Another external adjustment came in the form of immigrant labor into the country as Malaysia allowed the employment of immigrant workers to fill the shortage of unskilled workers for the plantation and manufacturing export sectors, as well as the supporting construction sector.



# THE PHILIPPINES

BY CAYETANO W. PADERANGA, JR.  
KRISTINE S. CANALES



Policies towards increased integration in the Philippines started in earnest in the 1970s. The loosening of controls for trade and outward capital flows induced inflows of foreign funds. In 1985, however, relaxation of trade controls came at a time of U.S. economic slowdown. As a result, the policy change caused negative growth in the country's balance of payment position over the next couple of years.

Full liberalization of the Philippine peso began only in 1991. This has been followed by the country's increased participation in trade and investment flows with the rest of the world. Together, these changes have resulted in the strengthening of the peso. The real effective exchange rate index has been increasing from 1989 to 1999, and trade deficits ensued due to a decline in the country's relative cost competitiveness.

Capital account liberalization resulted in massive inflows of speculative capital into the financial and real estate sectors, which then started an artificial boom in Manila. On the other side of the coin, this provided the means through which billions of dollars fled the country starting in 1997. Due to the Asian financial crisis, there resulted negative growth in fixed capital formation and changes in stock in 1998 and 1999; subsequently, growth in investments has been flat. The deterioration in the capital account continued through 2004, with deficits being recorded starting in 2000. The balance reverts to a positive position in 2006 as portfolio investments returned to the region and to the Philip-

ines. However, this is expected to change with the balance becoming negative in the near term with the heightened risk-aversion arising from the sub-prime crisis.

On the other hand, the current account has shifted from being in a chronic balance of payments deficit position to an increasing surplus. This increasing surplus in the current account in the face of a negative trade balance and fluctuating capital and financial flows can be traced to the rapidly accelerating inflow of remittances from overseas Filipino workers (OFWs). During 2003-04, the IMF recorded growth in the current account balance of 465.28 percent. With the perceived shift in the nature of services rendered by OFWs to more knowledge-based ones, growth of the current account surplus is expected to continue. Recent observations indicate an outpacing trend in the annual growth of the number of deployed OFWs by the annual growth in remittances.

The presence of OFW remittances has substantially eased the financial constraints for the Philippines. Accelerating inflows of these remittances has led to appreciation of the Philippine currency. This has had two effects: (i) it has drastically reduced the price competitiveness of domestic products for both export and domestic consumption and, (ii) it has brought about a large and persistent balance of trade deficit but an increasing current account surplus. Thus, product market integration has allowed the economy to import both final and intermediate

products from other countries, while at the same time, capital market integration, through the liberalized inflow of foreign currency, has allowed the separation of exports and imports without a pressing need for the exchange rate to adjust.

The inflow of remittances has also injected significant liquidity into the economy that the authorities have had difficulty in sterilizing. However, the disappearance of exchange rate uncertainty and the increased liquidity have allowed interest rates to remain low.

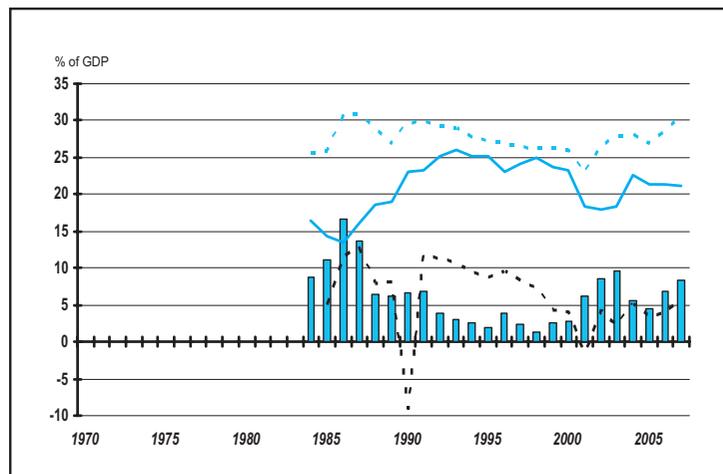
Growth in remittance flows has also provided the economy with an opportunity and an increasing attraction of deploying its labor abroad instead of doing the production domestically. This has proven to be very attractive to foreign employers and (potential) investors, given the continuing political uncertainties and governance issues hounding the country.

The net result has been the decoupling in the production and consumption sides of the economy. This has meant that saving and investment trade-offs are no longer made on the basis of price ratios of the domestic production possibility frontier, but have essentially been shifted to world price ratios. This has allowed the evolution of the saving-investment picture, where saving has increased while investment (as a response to comprehensive rate-of-return calculations that include large uncertainty and governance premiums) has remained rather timid. Thus, saving may now be largely based on family saving-consumption factors that do not necessarily respond to opportunities of domestic investment. Unfortunately, the investment has largely involved home building and consumer durables, at least for the moment. Banks, insurance companies, investment funds and others have only recently developed investment vehicles that exploit the opportunities provided by the new environment.

Conversely, the OFW phenomenon has had negative effects on employment. The availability of overseas employment opportunities may have raised the reservation wage to a level that makes it difficult to attain full employment. The remedy for this “Dutch disease” impact requires significant improvements in human capital formation and administrative governance.

This benign macroeconomic environment has, however, not resulted in cascading beneficial economic changes. Perhaps because of poor governance, low confidence and poor infrastructure investment, investment has been visibly sluggish. This has reduced the multiplier effect that one would otherwise have expected from the inflow of OFW remittances. Finally, the increase in reservation wages in the economy coupled with slow industry growth has reduced the potential for employment in a growing economy. The level of unemployment has proven stubbornly difficult to reduce.

Increasing integration presents several dilemmas for the government. While the easier flow of remittances has led to growth and a benign financial environment, it has also spawned an economic environment that is difficult for the country’s export competitiveness and employment situation. The challenge now is to remedy the bottlenecks that increase the cost of doing business in the Philippines during this period where remittance inflows provide the financing for development infrastructure needs, both hard infrastructure in the form of physical infrastructure like roads and ports, as well as soft infrastructure in the form of social services such as improved education. In aiming to get further involved in the global arena, the government also needs to craft social safety nets that would ease the social tension arising from the income disparity that is brought by the country’s integration into the global market.



Chinese Taipei is a small open economy that relies heavily on its external sector. Exports have been the primary economic activity for Chinese Taipei since its colonial days. In the 1960s, the move to industrialization shifted with economic activity moving from the agricultural sector to the manufacturing of goods.

With growing financial globalization and cross-border integration in manufacturing chains as well as financial markets, managing the external imbalance has become increasingly difficult for Chinese Taipei. Chinese Taipei's financial sector did not ease gradually until the mid-1980s. Liberalization measures included the easing of interest rates and exchange rate controls, as well as financial market liberalization. Since the 1990s, the interest rate and saving rate in Chinese Taipei has declined, which appears to be contrary to the theory of financial liberalization.

The balance of payments for Chinese Taipei can be characterized by a large current account surplus and a net outflow in the financial account. The imbalance is corrected in the service account, mainly through increases in brokerage, professional and technical service payments. The imbalance is further adjusted through financial accounts. Since the financial reform and the abolition of foreign exchange control, portfolio investments and financial derivatives have posted persistent net outflows. It should be noted that China takes up the lion's share of Chinese Taipei's investment abroad.

The private saving rate in Chinese Taipei has been among the highest in the world. However, the rate of domestic investment has not increased, while the saving rate has begun to decline. The decline in saving can be partly explained by the demographic shift. Without taking into consideration the free flow of capital, the relation between saving and investment is unclear with little evidence to support the presence of the Feldstein-Horioka effect for Chinese Taipei. With an open economy, it is perhaps more appropriate to take into account the impact of financial trade. Indeed, the current account appears to be the missing variable in the equation for Chinese Taipei. When the current account is introduced into the regression model, both domestic and overseas investments can be accounted for.

By switching to an outward-looking strategy and promoting foreign trade early in the course of its development, Chinese Taipei was able to achieve a much more rapid pace of economic expansion than would have been possible had it focused its attention only on its limited domestic market. Chinese Taipei's foreign trade grew rapidly.

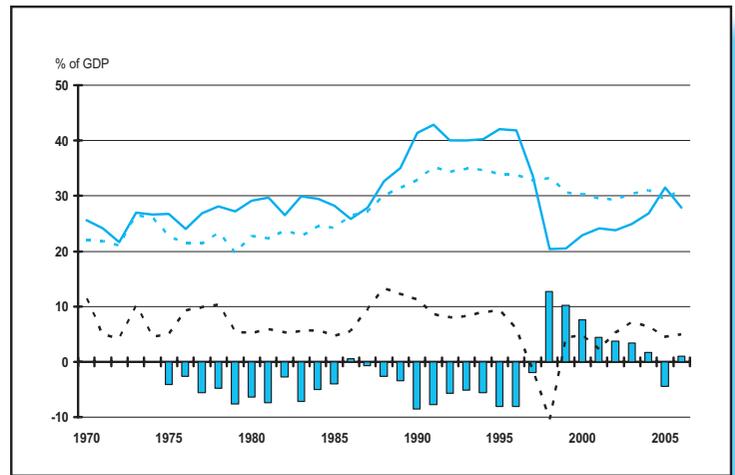
In the mid-1980s, Chinese Taipei went through a different phase of capital imbalance where investments and trade between China and Chinese Taipei were officially permitted. The financial reform introduced in the 1980s has also meant that the law restricting capital flows was abolished. As a result, outflows of investments outperformed foreign direct investments in Chinese Taipei.

In addition, insurance companies act as institutional investors that compete with financial institutions. Foreign companies were allowed entry via joint ventures with local firms, and later the Ministry of Finance allowed foreign insurance companies to open branches in Chinese Taipei. As part of the Amendments, insurance companies could invest in public bonds, private debt, approved public stocks and bonds, and mutual funds issued by domestic Securities Investment Trust Enterprises.

As exports started to take off, the growing trade deficit needed to be addressed. To correct this external imbalance, the Chinese Taipei government first allowed the currency to appreciate to a level determined by the market and then began to increase public spending and bolster domestic demand.

Currency appreciation is not necessarily harmful to economic growth. Despite the appreciation, the trade surplus continued to widen during the early period of appreciation, whereas export growth in subsequent years was not adversely affected.

The state of Chinese Taipei's financial sector reached a turning point in 2001–02. While ambitious, some success has been achieved since the Second Financial Reform was introduced. The process of merger and consolidation not only allowed industry consolidation to take place, but it also allowed for greater competitiveness with more financial services. The end result is a more sound and competitive financial industry that can better cater to the needs of industry in this fast-changing world economy.



■ Current account balance    - - - Gross savings  
- - - GDP growth    — REER index, 2000=100 (RHS)  
— Gross capital formation

As the international integration of goods and capital markets continues unabated, not only inflation but the overall business cycle will be synchronized. When international dependencies and linkages are increasing, the effects of foreign disturbances on the domestic economy will be more pronounced as compared to previous decades. Under such a scenario, it is more difficult for small countries to employ their own traditional monetary and fiscal policy instruments for external and internal stabilization. In addition, small countries have become increasingly sensitive to monetary and fiscal policy undertaken by large economies. To this extent, increasing integration and the benefits arising from the integration require sacrifice in terms of economic independence. The optimum mix of fiscal and monetary policies to neutralize external shocks depends on the degree of exchange rate flexibility as well as the degree of capital mobility.

A country can experience high output growth and at the same time, sustain a current account deficit. That is, strong economic growth is not inconsistent with current account deficit. Thailand's experience demonstrates that the current account deficit was unsustainable when certain conditions were not met.

Growth and the investment-saving gap, which corresponds to external imbalance, are intricately related since factors that affect investment and saving ultimately impact current account disequilibrium. High output growth gives rise to higher

saving, while investment increases rapidly with favorable expectations of future output growth. If the responses of investment and saving are different, current account imbalance occurs.

Capital inflows under global financial integration allow capital formation to take place in spite of limited domestic saving. The role of financial intermediaries is important in channeling household's saving and in seeking foreign funds to investors via bank credit expansion. The interest rate cannot perform its equilibrating role if institutional constraints create rigidity and sluggish adjustments in the price of credit.

Both internal and external imbalances are mirror images of one another. Adverse consequences of disequilibrium in the domestic market and current account imbalances can be mitigated when prices and interest rates are flexible. Thailand has been exposed to external shocks as the process of trade and financial liberalization has continued unabated. More than ever, the country is subject to terms of trade and world trade volume shocks. If domestic prices are sticky, the role of the exchange rate in insulating output growth from various demand shocks and terms-of-trade shocks become increasingly important.

During the boom, capital inflows financed the current account deficit when savings did not rise as fast as investment. Foreign direct investment remains a stable component of capital flows, while

loan and portfolio investment have become more volatile, a result of global financial integration. Intervention in the foreign exchange market is ineffective because the baht/dollar exchange rate is dictated by the dollar and short-term capital flows into the stock markets. The real effective exchange rate also adjusts to conditions in the balance of payments. The exchange rate must be flexible enough to correct external imbalances.

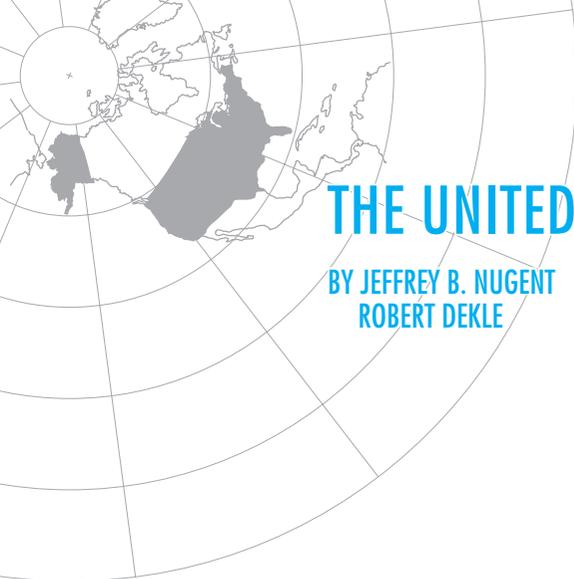
When exchange rate adjustments are not allowed to perform its role to equilibrate current account imbalances, adjustments must take place through output adjustment in order to gravitate back to the long-run external equilibrium. There are complex and multifaceted relationships among the following fundamental macroeconomic variables: the interest rate, the exchange rate, the current account, capital flows, fiscal balance and economic growth. These variables are utilized in the construction of a dynamic model to examine how external adjustments take place under various shock scenarios.

Monetary authorities must closely monitor the movement of capital inflows since sudden and large capital inflows are related to exchange rate instability and speculation. Furthermore, asset price bubbles are related to net capital inflows. However, this fact does not lend support to the imposition of capital controls and heavy-handed intervention in the foreign exchange markets. We have seen that although the baht/dollar exchange rate became more stable after capital controls were put in place in 2007, the real effective exchange rate became more volatile. It should be noted that export competitiveness depends very much on productivity improvements in the trade sector. Thus it is possible for currency appreciation to be consistent with an attempt to upgrade production efficiency. On the contrary, a weak currency may improve competitiveness in the short run, but it may discourage the trade sector from improving its efficiency. There is an issue of moral hazard when the central bank attempts to prevent currency appreciation.

By maintaining a balanced budget, the government can mitigate pressures from the current account deficit arising from rapid capital accumulation and economic boom. Thus maintaining fiscal discipline is necessary during a period of growth in order to avoid unsustainable external imbalances. The posi-

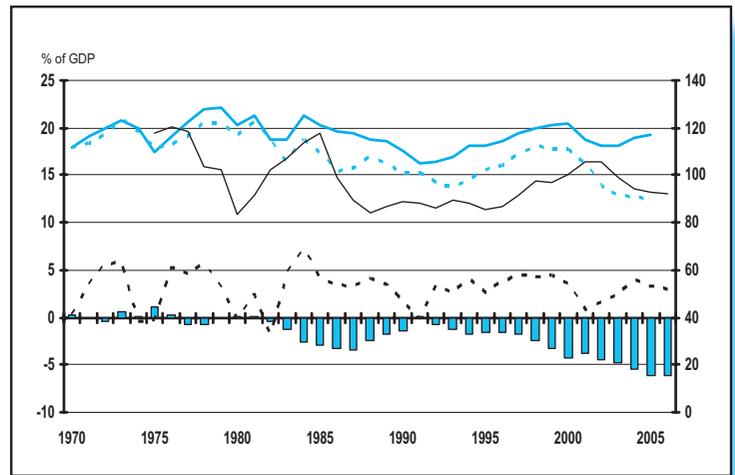
tive GDP growth rate after the 2006 coup was mainly due to net exports. Because exports—the last remaining growth engine—were shutdown by the global recession in 2009, fear of imminent recession prompted the government to run a massive budget deficit in order to stimulate domestic demand. External imbalance has been reduced to a lower priority than maintaining internal balance. Nevertheless, it is imperative to realize that a country cannot pursue internal objectives while ignoring external balances. Increases in domestic absorption require a flexible adjustment in the exchange rate.

The exchange rate is the most effective tool in correcting a current account imbalance. The change in the real effective exchange rate has a strong impact on the current account that lasts for three quarters. An appreciation of the real effective exchange rate causes a sharp fall in the current account surplus and vice versa for the real exchange rate depreciation. If inflation can be contained at a rate that is lower than its trading partners, the government can improve the country's international competitiveness through natural depreciation of the real effective exchange rates, without depreciating bilateral exchange rates. It is the fear of currency appreciation and depreciation that precludes the exchange rate from correcting and mitigating the current account disequilibrium. The policy lesson is clear. Do not attempt to thwart foreign exchange market adjustments either by imposing capital controls or foreign exchange intervention. Unrealistic exchange rates invite speculation and may lead to currency crisis. The loss in output caused by disequilibrium adjustment cannot be offset by the gain from exchange rate stability.



# THE UNITED STATES

BY JEFFREY B. NUGENT  
ROBERT DEKLE



Trends in the U.S. current account balance and net foreign asset positions over the last several decades have been quite remarkable. Before the 1980s, the United States was generally running current account surpluses and enjoyed a large positive balance in net foreign assets. Since the mid-1980s, however, it has consistently had current account deficits and has become a large net debtor. In particular, the net foreign asset position of the United States was 15 percent of GDP in 1952, declined to 5 percent in 1980 and to 0 in 1985; by 1999, the balance was -5 percent of GDP and it further declined to -20 percent by 2005. Since there is considerable evidence that net foreign asset positions are positively correlated with GDP per capita across countries and U.S. GDP per capita is among the world's highest and has been growing rather steadily, this pattern has been especially striking.

This chapter traces the evolution of these imbalances over time and demonstrates the roles played by fiscal and monetary policy, private saving and investment, and the changing structure of U.S. assets held by foreigners and of foreign assets held by U.S. nationals. It also discusses the evolution of exchange rates, interest rates and various kinds of asset and product prices, and their role in these external adjustment problems.

The two most common adjustments to persistent and potentially unsustainable current account deficits are recessions (often induced by contractionary monetary and fiscal policies) and currency deprecia-

tion. Yet, neither the recessions experienced since 1980 nor periods of quite substantial currency depreciation have done much to reduce the current account balances (though they have kept the imbalances from being even larger than they actually have been).

This experience also gives rise to certain puzzles. One is that the deterioration in the net foreign asset position of the United States has been considerably less than that implied by the accumulated current account deficits, especially since 2000. Why is this so? The explanation seems largely attributable to differences in the mix of assets that U.S. nationals hold abroad (high return but risky assets) and the mix of U.S. assets held by foreign nationals (low return, low-risk currency and government bonds). Moreover, even on the same kinds of assets, U.S. nationals seem to earn higher rates of return than do foreign individuals and institutions. Exchange rate changes also seem to have played a role in this since the dollar depreciation since 2000 has given rise to valuation effects such that the asset values of foreign holders have appreciated much less (and those of U.S. holders of foreign assets much more) than would otherwise have been the case.

A second and related puzzle is why, despite its seemingly profligate fiscal and monetary policies and periodic financial crises arising from apparent regulatory failures with respect to U.S. financial institutions, do investors from other countries seem willing to finance these persistent current account

deficits? Once again, the answer seems to depend on different motives in the two cases. Even in conditions of financial turmoil such as is the case in the United States at present, foreign holdings of U.S. assets are motivated by the greater security and possible tax advantages of U.S. bonds and other financial assets relative to investment opportunities in their home countries. A related advantage is the larger market for different types of assets in the United States and their wider variety.

As for the future outlook, the surest and most straightforward way for the United States to rectify its increasingly negative net foreign asset position and assure the sustainability of its current imbalances would be to reduce its negative saving-investment gap by increasing household saving and eliminating its fiscal deficit. With stagnant or declining stock market prices, sharply declining home prices and rising unemployment, there may be some basis for optimism in this respect. If so, this could halt and perhaps even reverse the long-term decline in personal saving rates. Yet, in the past, falling incomes and negative capital gains have not necessarily raised the personal saving rate appreciably. Moreover, with incomes and asset prices falling elsewhere in the world as well, U.S. net exports may not grow as much as might be hoped for and thus the current account deficit may well remain, even at lower levels of income.

In view of the apparent willingness of foreigners to keep investing in the United States and the aforementioned factors limiting the deterioration in the U.S. net foreign asset position, even continuing current account deficits may be sustainable. While some have speculated that achieving current account balance through currency depreciation would require an unrealistically large depreciation, a simulation experiment reported in this study indicates that such fears may be exaggerated.

# PAST ISSUES OF PEO/STRUCTURE PROJECT

## 1. *The Emerging Role of the Private Sector in the Asia Pacific Region*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Yasukichi Yasuba, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, 1991

## 2. *Changing Patterns of Foreign Direct Investment in the Pacific Region*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Yasukichi Yasuba, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, March 1992

## 3. *Changing Patterns of Trade in Goods and Services in the Pacific Region*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, March 1994

## 4. *Capital Flows in the Pacific Region: Past Trends and Future Prospects*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, September 1995

## 5. *Exchange Rate Fluctuations and Macroeconomic Management*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, June 1997

## 6. *Domestic Savings in the Pacific Region: Trends and Prospects*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, November 1998

## 7. *Productivity Growth and Industrial Structure in the Pacific Region*

Volume I (Executive Summary Reports), II (Background Papers)  
Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.  
Published by the Japan Committee for PEO, Osaka, Japan, March 2000

## 8. *Fiscal Policy Issues in the Pacific Region*

Volume I (Executive Summary Reports)

Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.

Published by the Japan Committee for PEO, Osaka, Japan, September 2001

Volume II (Background Papers), 'Fiscal Deficits in the Pacific Region'

Edited by Dr. Akira Kohsaka.

Published by Routledge, London, England, March 2004

## 9. *Infrastructure Development in the Pacific Region*

Volume I (Executive Summary Reports)

Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.

Published by the Japan Committee for PEO, Osaka, Japan, August 2003

Volume II (Background Papers), 'Infrastructure Development in the Pacific Region'

Edited by Dr. Akira Kohsaka.

Published by Routledge, London, England, December 2006

## 10. *Macroeconomic Management under Debt Workouts in the Pacific Region*

Volume I (Executive Summary Reports)

Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.

Published by the Japan Committee for PEO, Osaka, Japan, August 2005

## 11. *Aging and Economic Growth Potentials in the Pacific Region*

Volume I (Executive Summary Reports)

Edited by Dr. Akira Kohsaka, PEO/Structure Coordinator.

Published by the Japan Committee for PEO, Osaka, Japan, April 2007

# PACIFIC ECONOMIC COOPERATION COUNCIL

The Pacific Economic Cooperation Council (PECC) was founded in 1980 at the initiative of the Prime Ministers of Japan and Australia, with the aims of serving as a regional forum for cooperation and policy coordination to promote economic development in the Asia-Pacific Region.

PECC is a unique tripartite partnership of senior individuals from business and industry, government, academic and other intellectual circles in 24 Asia-Pacific Economies<sup>1</sup>. All participate in their private capacity and discuss freely on current, practical policy issues in search of broad-based answers to regional economic problems.

PECC advocated the need for a formal, intergovernmental organization in the Pacific from the time of its creation. The regional ministerial process of the Asia Pacific Economic Cooperation (APEC) has realized that goal and now provides PECC with a formal channel by which its practical recommendations can be implemented. PECC is the only non-governmental official observer of APEC since the formation of APEC. PECC has provided information and analytical support to APEC ministerial meetings and working groups.

To promote economic cooperation and the idea of a Pacific Community, the PECC organization's governing body - the Standing Committee<sup>2</sup> - establishes ad hoc task forces to undertake and promote research on issues it has decided need to be addressed by the regional community. For 2008-2009, four signature projects have been established, and PECC's member committees also collaborate

on four international projects additionally. Pacific Economic Outlook (PEO) is among these PECC activities and PEO/Structure, which has dealt with longer-term macro-economic issues in the Pacific region, is the one of the international projects mentioned above. The Japan Committee for PEO also supports activity of "State of The Region", which has been one of the signature projects and made policy recommendation to APEC, since 2006.

The groups of PECC activities meet periodically to organize seminars or workshops, conduct studies and publish their research outcomes and recommendations for the benefit of the Pacific community.

PECC member committees and PECC work groups send tripartite delegations to the PECC General Meetings. In the interim, policy matters are handled by a Standing Committee, and day-to-day administrative and coordinating functions are carried out by the International Secretariat based in Singapore.

For more information on PECC, please contact the PECC International Secretariat.

## PECC International Secretariat

Address : 29 Heng Mui Keng Terrace  
Singapore 119620

Email : [info@pecc.org](mailto:info@pecc.org)

Phone : 65-6737-9822

Fax : 65-6737-9824

Website : <http://www.pecc.org/>

---

<sup>1</sup> The PECC Economies include Australia, Brunei Darussalam, Canada, Chile, China, Colombia, Ecuador, Hong Kong China, Indonesia, Japan, Korea, Malaysia, Mexico, Mongolia, New Zealand, Peru, The Philippines, Singapore, Pacific Islands Forum, Chinese Taipei, Thailand, The United States and Viet Nam. France (Pacific Territories) is an Associate Member. The Pacific Basin Economic Council (PBEC) is the regional business organization, and the Pacific Trade and Development Conference (PAFTAD) is the region-wide organization of academic economists, both of which are Institutional Members.

<sup>2</sup> The Standing Committee is PECC's governing body. It includes the Chairs of PECC Committees in each of the 24 full member economies. PBEC and PAFTAD also have seats on Standing Committee.

# PACIFIC ECONOMIC COOPERATION COUNCIL MEMBER COMMITTEES

## PACIFIC ECONOMIC COOPERATION COUNCIL

The PECC International Secretariat  
29 Heng Mui Keng Terrace,  
7<sup>th</sup> Floor, Building A  
Singapore 119620  
Tel : 65-6737-9822  
Fax : 65-6737-9824  
Email: [info@pecc.org](mailto:info@pecc.org)

## AUSTRALIA

Australian Pacific Economic Cooperation  
Committee (AUSPECC)  
Room19, JG Crawford Building  
Australian National University  
Canberra ACT 0200  
Australia  
Tel : 61-2-6-125 0567  
Fax : 61-2-6-125 0169  
Email: [jan.buchanan@booz.com](mailto:jan.buchanan@booz.com)

## BRUNEI DARUSSALAM

Brunei Darussalam National Committee for Pacific  
Economic Cooperation (BDCPEC)  
Ministry of Foreign Affairs & Trade  
Jalan Subok, Bandar Seri Begawan BD 2710  
Brunei Darussalam  
Tel : 673-238-3374  
Email: [vincent.kong@mfa.gov.bn](mailto:vincent.kong@mfa.gov.bn)

## CANADA

Canadian National Committee for Pacific  
Economic Cooperation (CANCPEC)  
Asia Pacific Foundation of Canada  
Suite220-890, West Pender Street  
Vancouver, BC, V6C 1J9  
Canada  
Tel : 1-604-684 5986  
Fax : 1-604-681 1370  
Email: (tba)

## CHILE

Chilean National Committee for Pacific Economic  
Cooperation (CHILPEC)  
c/o Chile Pacific Foundation  
Av. Los Leones 382, Of. 701  
Providencia, Santiago  
Chile  
Tel : 56-2-334 3200  
Fax : 56-2-334 3201  
Email: [info@funpacifico.cl](mailto:info@funpacifico.cl)

## CHINA

China National Committee for Pacific Economic  
Cooperation (CNCPEC)  
China Institute of International Studies  
3 Toutiao Taijichang, Beijing 100005  
China  
Tel : 86-10-8511 9648  
Fax : 86-10-85119647, 65235135  
Email: [cncpec@netchina.com.cn](mailto:cncpec@netchina.com.cn)

## COLOMBIA

Colombia National Committee for Pacific Economic Cooperation (COLPECC)  
Asia, Africa & Oceania Bureau  
Ministry of Foreign Affairs  
Palacio de San Carlos, Calle 10, No 5-51 Bogota  
Colombia  
Tel : 57-1-381-4000 ext.1509  
Fax : 57-1-381-4077 ext.1532  
Email: aocolpecc@cancilleria.gov.co

## ECUADOR

Ecuadorian Committee for the Pacific Economic Cooperation Council (ECPECC)  
Ecuadorean Committee to the Pacific Basin, ECPB  
Sovereignty and Border Under-Secretariat  
Building, Carrión Str. No 522 @ Páez Str.  
4F, Pichincha, Quito  
Ecuador  
Tel : 593-2-2500-654  
Fax : 593-2-2508-937  
Email: ecupec@mmrree.gov.ec

## HONG KONG, CHINA

Hong Kong Committee for Pacific Economic Cooperation (HKCPEC)  
Trade and Industry Department  
17/F., Trade and Industry Department Tower  
700 Nathan Road, Kowloon  
Hong Kong, China  
Tel : 852-2398-5305  
Fax : 852-2787-7799  
Email: hkcepec@netvigator.com

## INDONESIA

Indonesian National Committee for Pacific Economic Cooperation (INCPEC)  
Centre for Strategic and International Studies (CSIS)  
3F, the Jakarta Post Building  
Jl. Palmerah Barat 142-143, Jakarta 10270  
Indonesia  
Tel : 62-21-5365 4601-4  
Fax : 62-21-5365 4607  
Email: incpec@pacific.net.id  
tevy\_poluan@csis.or.id

## JAPAN

Japan National Committee for Pacific Economic Cooperation (JANPECC)  
The Japan Institute of International Affairs (JIIA)  
11F, Kasumigaseki Bldg., 3-2-5 Kasumigaseki  
Chiyoda-ku, Tokyo 100-6011  
Japan  
Tel : 81-3-3503 7744  
Fax : 81-3-3503 6707  
Email: peccjp3503@jiiia.or.jp

## KOREA

Korea National Committee for Pacific Economic Cooperation (KOPEC)  
4F, 300-4, Yomgok-Dong, Seocho-Gu  
Seoul 137-747  
Korea  
Tel : 82-2-3460 1242  
Fax : 82-2-3460 1244  
Email: kopecsec@kopec.or.kr

## MALAYSIA

Malaysia National Committee for Pacific Economic Cooperation (MANCPEC)  
Institute of Strategic and International Studies (ISIS)  
No. 1 Pesiaran Sultan Salahuddin  
PO Box 12424 50778 Kuala Lumpur  
Malaysia  
Tel : 60-3-2693 9366, 2693 9439  
Fax : 60-3-2693 9430, 26938485  
Email: mahani@isis.org.my

## MEXICO

Mexico National Committee for Pacific Economic Cooperation (MXCPEC)  
Ministry of Foreign Affairs  
Plaza Juarez No.20, Floor 6  
Col.Centro, Deleg. Cuauhtemoc,  
C.P.06010  
Mexico City  
Mexico  
Tel : 52-55-3686-5382 / 3686-5371  
Fax : 52-55-3686-5374  
Email: epaz@sre.gob.mx  
or emaldonado@sre.gob.mx

## **MONGOLIA**

Mongolian National Committee on Pacific Economic Cooperation (MONPECC)  
Suite 303, DCS Building  
Ministry of Foreign Affairs  
Peace Avenue 7B  
Ulaanbaatar-48, Mongolia 14210  
Tel : 976 (11) 262394  
Fax : 976 (11) 262394  
Mobile : 976 (11) 8815 9519  
Email: info@monpecc.org

## **NEW ZEALAND**

New Zealand Committee of the Pacific Economic Cooperation Council (NZPECC)  
Te Whare Wananga o te Upoko o te Ika a Maui  
P.O.Box 600,  
Wellington  
New Zealand  
Tel : 64-4-4635794  
Fax : 64-4-4635454  
Email: gary.hawke@vuw.ac.nz

## **PERU**

Peruvian National Committee for Pacific Economic Cooperation (PERUPEC)  
Ministry of Foreign Affairs  
Jr Lampa 545, 4th Floor, Lima  
Peru  
Tel : 511-623-3033  
Fax : 511-623-3009  
Email: gpena@rree.gob.pe

## **THE PHILIPPINES**

Philippine Pacific Economic Cooperation Committee (PPECC)  
c/o Philippine Foundation for Global Concerns, Inc.  
43/F Philamlife Tower  
8767 Paseo de Roxas, Makati City 1226  
Philippines  
Tel : 63-2-8436536 / 8454564  
Fax : 63-2-8454832  
Email: ppecc@pfgc.ph

## **SINGAPORE**

Singapore National Committee for Pacific Economic Cooperation (SINCPEC)  
c/o Nanyang Technological University  
Student Services Centre, Level 3  
42 Nanyang Avenue  
Singapore 639815  
Tel : 65-65137995  
Fax : 65-67955819  
Email: atankg@ntu.edu.sg

## **PACIFIC ISLANDS FORUM (PIF)**

Pacific Island Forum Secretariat  
Private Mail Bag, Suva  
Fuji  
Tel : 679-3312-600  
Fax : 679-322-0230  
Email: sg@forumsec.org.fj  
Copied to: info@forumsec.org.fj

## **CHINESE TAIPEI**

Chinese Taipei Pacific Economic Cooperation Committee (CTPECC)  
Taiwan Institute of Economic Research (TIER)  
7F, 16-8, Tehui Street  
Taipei  
Chinese Taipei 104  
Tel : 886-2-2586 5000  
Fax : 886-2-2594 6528 (Direct) 2586 8855  
Email: d11224@tier.org.tw  
or d15626@tier.org.tw

## **THAILAND**

Thailand National Committee for Pacific Economic Cooperation (TNCPEC)  
c/o Department of International Affairs  
Ministry of Foreign Affairs  
Sri Ayudhya Road, Bangkok 10400  
Thailand  
Tel : 662- 643-5248-9  
Fax : 662-643-5247  
Email: apecdesk@mfa.go.th

## **THE UNITED STATES**

United States Asia Pacific Council  
1819 L Street, N.W., 2<sup>nd</sup> Floor,  
Washington, D.C., 20036, USA  
Tel : 1-202-293 3995  
Fax : 1-202-293 1402  
Email: info@usapec.org

## **VIET NAM**

Viet Nam National Committee for Pacific  
Economic Cooperation (VNCPEC)  
Tel : 84-4-7341833  
Fax : 84-4-08043689  
Email: sonhoagovt@gmail.com

## **ASSOCIATE MEMBERS:**

### **FRANCE (PACIFIC TERRITORIES)**

France Pacific Territories National Committee for  
Pacific Economic Cooperation (FPTPEC)  
Secrétariat du comité France (Territoires du Paci-  
fique) pour le P.E.C.C.  
c/o Secrétariat Permanent pour le Pacifique,  
Bureau n 1170  
27, rue Oudinot 75007, Paris  
France  
Tel : 331-5369 2495  
Fax : 331-5369 2276  
Email: jacques.leblanc@outre-mer.gouv.fr

## **INSTITUTIONAL MEMBERS:**

### **PACIFIC TRADE AND DEVELOPMENT CONFERENCE (PAFTAD)**

PAFTAD Secretariat  
Australia-Japan Research Centre  
Asia Pacific School of Economics and Manage-  
ment (APSEM)  
Australian National University  
Canberra ACT 0200  
Australia  
Tel : 61-2-61250161/3780  
Fax : 61-2-61250767  
Email: paftad.sec@anu.edu.au

### **PACIFIC BASIN ECONOMIC COUNCIL (PBEC)**

Pacific Basin Economic Council  
Room 1304, Wing On Centre, 111 Connaught Road,  
Central  
Hong Kong  
Tel : 852-2815-6550  
Fax : 852-2545-0499  
Email: info@pbec.org

### **JAPAN COMMITTEE FOR PACIFIC ECONOMIC OUTLOOK**

c/o Kansai Institute for Social and Economic  
Research (KISER)  
29<sup>th</sup> Floor Nakanoshima Center Building  
6-2-27 Nakanoshima, Kita-ku  
Osaka 530-6691, Japan  
Tel : 81-6-6441-5750  
Fax : 81-6-6441-5760  
Email: peo@kiser.or.jp

# KANSAI INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH (KISER)

## Background

The Kansai Institute for Social and Economic Research (KISER) is a nonprofit organization in Kansai (the region centered in Osaka, Kobe and Kyoto) that has its objectives in contributing to the development of the national and regional economies through academic advances.

KISER was established April 2002 as a result of the consolidation of the three research institutions in the region: the Kansai Economic Research Center (KERC), the Center for Industrial Renovation of Kansai (CIRK) and the Socio-Economic Research Institute in Kansai.

KISER promotes research projects through the collaboration of academia and local business community under governmental cooperation. The necessary funds for KISER are raised through membership fees from approximately 200 leading firms in various industries from all over Japan.

## Purpose and Activities

KISER is currently engaged in the following projects:

- Conducting theoretical and empirical research on social and economic issues in Japan and overseas, including economic policies and regional development.
- Making proposals on both national and regional policies formulated through its flexible research capabilities that take advantage of its academic, industrial and governmental networks.
- Encouraging research exchange among Japanese and overseas economists, as well as among foreign residents in Kansai.
- Carrying out research commissioned by government agencies, regional public institutions, and private enterprises.

- Hosting seminars and symposiums by inviting specialists from all over the world.

## KISER Highlights

- \* **Policy agenda for the national and local governments** (Discussion on policy agendas regarding the most pressing and challenging contemporary themes. Topics include structural reforms, macroeconomic policy, and aging and fewer children problem among others.).
- \* **Issues for public administrative and fiscal reforms and for local government's initiatives.**
- \* **Proposals for revitalization of industrial competitiveness and for regional development strategies.**

### <Economic Analysis>

- \* **Macroeconomic analysis of the Japanese economy.**

- \* **Quantitative analysis of the regional economy.**

- \* **Compilation and publishing of a variety of data on regional economy** “White Paper on the Kansai Economy”

### <Member Service and Public Interest>

- \* **Research entrusted by public entities**

- \* **Sponsoring symposiums, seminars and lecture meetings.**

- \* **Sponsoring professional conferences and academic meetings** (Modern Economic Policy Conference).

- \* **Promoting International Academic Exchange** PECC-PEO (Pacific Economic Cooperation Council — Pacific Economic Outlook).

\* Encouraging interactions among academia, business communities, and governmental bodies.

\* Public affairs (delivery service of the e-mail newsletter “KISER”, maintaining our website).

### Senior Officers

KISER is administered by a board of directors, which consists of representatives from major corporations and universities in the Kansai region.

### Chairman

SHIMOZUMA, Hiroshi  
Chairman, Kansai Economic Federation

### Vice Chairman

NOMURA, Akio  
Chairman, Osaka Chamber of Commerce and Industry

TATEISHI, Yoshio  
Chairman, Kyoto Chamber of Commerce and Industry

MIZUKOSHI, Kohshi  
Chairman, Kobe Chamber of Commerce and Industry

SAITO, Norihiko  
Co-Chairman, Kansai Association of Corporate Executives

TSUJII, Akio  
President, Kansai Employers' Association

### President

HONMA, Masaaki

### Contact

Address : 29<sup>th</sup> floor, Nakanoshima Center Building,  
6-2-27 Nakanoshima, Kita-ku,  
Osaka 530-6691, Japan

E-mail : [contact@kiser.or.jp](mailto:contact@kiser.or.jp)

Phone : 81-(0)6-6441-5750

FAX : 81-(0)6-6441-5760

URL : <http://www.kiser.or.jp>





