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MANAGING CAPITAL FLOWS

The Search for a Framework

Edited by
Masahiro Kawai and Mario B. Lamberte

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Preface

Sustained economic growth can contribute significantly to poverty reduction, as evidenced by marked declines in poverty incidence for economies that have enjoyed long periods of economic growth. But a financial crisis could disrupt growth and frustrate such development. While crisis-hit economies will recover from the crisis, they may not return to the pre-crisis growth path. Because a crisis can have long-term development implications, the Asian Development Bank Institute (ADBI) is keen to make a contribution to the understanding of the causes of a crisis and to the formulation of policy measures that ADB's developing member countries could adopt to avoid a crisis.

Many fast growing economies in Asia suffered from a financial crisis in 1997–98, which could be attributed largely to their inability to deal with large capital flow volatility. Although few deny the benefits of capital inflows for recipient economies, they often create problems especially if they are substantial and volatile. Massive capital inflows can create too much bank lending, excessive investment, and speculative activities, which can lead to goods price inflation, asset market bubbles, and potential vulnerabilities in bank, household, and corporate balance sheets. Moreover, sudden stops or reversals in capital inflows could lead to a currency crisis, the bursting of asset price bubbles, investment collapse, banking sector stress, and economic difficulties.

Since the recovery from the Asian financial crisis, many economies in the region have experienced massive private capital inflows against the backdrop of current account surpluses over many consecutive years. Cognizant of the implications of potentially volatile capital flows for the sustainability of Asian economies' growth, Thailand's former Finance Minister Chalongphob Sussangkarn made a request at ADB's Annual Meeting in Kyoto in May 2007 to conduct a study on capital flows in Asia, the results of which could be inputs for the region's policymakers in managing capital flows from national and regional perspectives. In response, ADB tasked ADBI to conduct the study. ADBI's research proposal, which laid the groundwork for this book project involving experts from leading think tanks in the region, was presented at the informal meeting of the ASEAN Finance Ministers held in Washington in October 2007. Most of this study was conducted in the first half of 2008 before the visible eruption of the global financial crisis.

Following the failure of Lehman Brothers in September 2008, the world economy experienced the worst global financial and economic crisis since the Great Depression. The economies of several European peripheral countries were severely damaged by a sudden stop in inward flow, and/or withdrawal, of capital. Even though Asian economies were not affected much by capital flow volatility with a few exceptions, they were hit hard by the downturn in export demand. But Asian economies have quickly recovered and are now leading global growth. There are signs that capital of a largely short-term nature is returning to Asia in a significant way, raising serious concern among policymakers in the region who are trying to prevent rapid appreciation of their currencies against the US dollar and to contain inflation and increases in asset prices to stabilize their economies and sustain the recovery. Indeed, following Brazil's move, Taipei,China; Indonesia; and the Republic of Korea have recently imposed capital controls to limit speculative capital inflows.

These recent developments suggest that managing capital inflows remains an important policy issue for many emerging market economies that needs to be studied rigorously and debated openly. This study clearly benefited from lessons learned from the impact of the global financial crisis on international capital flows. With the publication of this book, ADBI hopes to contribute to the debate by providing analyses that can help policymakers develop a framework for managing capital flows that is consistent with prudent macroeconomic and financial sector stability.

Masahiro Kawai
Dean and CEO, Asian Development Bank Institute

Abbreviations

ABMI	Asian Bond Markets Initiative
ABS	Australian Bureau of Statistics
ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
ADM	Asian Dollar Market
AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
ASEAN	Association of Southeast Asian Nations
BBC	Basket-Band-Crawl
BI	Bank Indonesia
BIBF	Bangkok International Banking Facility
BIS	Bank for International Settlements
BNM	Bank Negara Malaysia
BOK	Bank of Korea
BOP	Balance of Payments
BOT	Bank of Thailand
BSP	Bangko Sentral ng Pilipinas
CBB	Central Bank Bills
CEE	Central and Eastern European (countries)
CEIC	China Economic Information Center
CIP	Covered Interest Parity
CMI	Chiang Mai Initiative
CPF	Central Provident Fund
CPI	Consumer Price Index
DR	Depositary Receipts
EAE	Emerging Asian Economy
EC	European Commission
ECB	European Central Bank
ECB	External Commercial Borrowing (India)
ECLAC	Economic Commission for Latin America and the Caribbean (United Nations)
EEC	European Economic Community
EMDB	Emerging Market Database
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
EMP	Exchange Market Pressure

EMU	Economic and Monetary Union
ERM	Exchange Rate Mechanism
EU	European Union
FASBI	Fasilitas Bank Indonesia
FDI	Foreign Direct Investment
FIF	Foreign Investment Fund
FII	Foreign Institutional Investors
FPRI	Fiscal Policy Research Institute
FTC	Fine Tuning Contraction
GDP	Gross Domestic Product
GND	Grama Niladhari Division
GoI	Government of Indonesia
GOI	Government of India
IADB	Inter-American Development Bank
ICAPM	Intertemporal Capital Asset Pricing Model
ICT	Information and communication technology
IFA	International Financial Architecture
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
IPO	Initial Public Offering
IRF	Impulse Response Functions
IS/LM	Investment Saving/Liquidity Preference Money Supply
IT	Inflation Targeting
JSCB	Joint Stock Commercial Bank
JSX	Jakarta Stock Exchange
KLCI	Kuala Lumpur Composite Index
LIBOR	London Inter-Bank Offered Rates
LOOP	Law of One Price
MAS	Monetary Authority of Singapore
MHPI	Malaysia House Price Index
MOF	Ministry of Finance
MSB	Monetary Stabilization Bonds
MSS	Market Stabilization Scheme
NASDAQ	National Association of Securities Dealers Automated Quotation System
NDA	Net Domestic Asset
NEER	Nominal Effective Exchange Rate
NFA	Net Foreign Asset
NGO	Non-government organization
NOP	Net Open Position
NPL	Non-Performing Loans
NYSE	New York Stock Exchange

OECD	Organisation for Economic Co-operation and Development
PBI	Bank Indonesia Regulation
PBOC	People's Bank of China
PER	Price Equity Ratio
PPP	Public-Private Partnership
PRC	People's Republic of China
QDII	Qualified Domestic Institutional Investors
QFII	Qualified Foreign Institutional Investors
RBA	Reserve Bank of Australia
RBI	Reserve Bank of India
REER	Real Effective Exchange Rate
RP	Repurchase Rate
SAFE	State Administration of Foreign Exchange
SBI	*Sertifikat Bank Indonesia* (Government Bonds)
SBV	State Bank of Vietnam
SCIC	State Capital Investment Corporation
SDA	Special Deposit Account
SET	Stock Exchange of Thailand
SGS	Singapore Government Securities
SME	Small and medium-sized enterprise
SOCB	State-Owned Commercial Bank
SOE	State-Owned Enterprise
SSC	State Securities Commission
SUN	Indonesian Government's State Debt Security
TWI	Trade-Weighted Index
UIP	Uncovered Interest Parity
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
URR	Unremunerated Reserve Requirements
VAR	Vector Autoregression
VECM	Vector Error Correction Model
WB	World Bank
WTO	World Trade Organization

Note: Throughout this book the term 'billion' refers to 1000 million; the term 'trillion' refers to 1000 billion.

Contents

PART III COUNTRY STUDIES

Introduction

Masahiro Kawai and Mario B. Lamberte

In 1997–98, emerging Asian economies were subjected to a crisis, with Thailand, Republic of Korea (hereafter Korea), Indonesia, and Malaysia being the most affected economies. The crisis was preceded by surges in private capital inflows of a largely short-term nature, creating double mismatches of currencies and maturities, and inflating asset prices, followed by a sudden stop and massive reversals of capital flows. With central banks of crisis-affected countries not being able to hold the line, currencies depreciated sharply, exposing the weaknesses of the banking system.

Although the crisis devastated several emerging Asian economies, the recovery of crisis-hit countries proved to be remarkable, facilitated by comprehensive government reforms and a favorable external environment. Since the recovery from the Asian financial crisis, most emerging Asian economies have enjoyed current account surpluses, attracting more foreign capital, and accumulating international reserves that have reached new heights. Yet, these very same developments pose major policy challenges to policymakers in the region.

Massive capital inflows put pressure on the currency to appreciate; this has prompted monetary authorities in the region to intervene in the foreign exchange markets. However, the tendencies of emerging Asia's currencies to appreciate against the US dollar continue, threatening their competitiveness. Policymakers in the region are faced with questions on best policy responses and regional cooperation initiatives to utilize capital inflows while maintaining macroeconomic stability.

Against this background, the Asian Development Bank Institute (ADBI) organized a series of conferences to provide a forum for policymakers, academics, and private sector participants to identify, study, and debate issues on capital flows and alternative measures for managing such flows. As these papers have been largely prepared as a basis for policy dialogue among national and regional policymakers, we hope that they would help shape the development of a framework for managing capital flows in the region.

The sixteen chapters in this volume are the fruit of the collaborative efforts of the participants in this project. The chapters are grouped into three parts: (i) Managing Capital Flows in Emerging Asia and Review of the Literature (Chapters 1 and 2); (ii) Perspective Papers (Chapters 3 to 7); and (iii) Country Studies (Chapters 8 to16).

The first chapter, by Masahiro Kawai and Mario B. Lamberte, which partly draws from the analyses made by various chapters of this book, provides a comprehensive discussion of the experiences of Asia's emerging economies with surges in capital inflows and in managing such inflows. They argue that following the restoration of the US and European financial stability and the easing of the ongoing global credit crunch precipitated by the US subprime crisis, capital inflows to emerging Asian economies (EAEs) will likely resume in a big way and pose serious policy challenges to EAEs for macroeconomic management, exchange rate policy, and financial sector supervision. In the final section of the chapter, the authors suggest possible policy measures to manage capital flows that are consistent with macroeconomic and financial sector stability. They include, among others, improving prudential regulations, using capital controls at the time of inflow surges rather than as a permanent measure in a country where the regulatory authorities have the administrative capacity to enforce them, making the fiscal stance countercyclical to surges in capital inflows, rebalancing growth, and exploring regional collective action such as exchange rate coordination and strengthening of regional financial market surveillance and integration.

Chapter 2 by Masahiro Kawai and Shinji Takagi presents a succinct literature survey focusing on developing and emerging market economies. More specifically, they review empirical work on the benefits of free capital mobility and discuss the evolution of thinking on capital account liberalization, the use of capital controls as an instrument of managing capital inflows, and the effectiveness and limitations of conventional macroeconomic and structural instruments. The authors point out that the literature provides little practical guidance on capital account liberalization, except to advocate the need for pursuing sound macroeconomic policies and establishing an effective framework of prudential regulation. They stress the need for additional work to develop tools to identify and quantify the various risks of capital inflows.

Chapter 3 by Stephen Grenville discusses key operational questions confronting policymakers, particularly those directed to central bankers. Grenville addresses the question of why capital flows cause problems to economies, particularly emerging market economies, and discusses policy responses that might be grouped into two categories: those preventative measures put in place *before* the crisis, and those used to try to ameliorate the unfolding crisis. He suggests a practical research agenda that would encompass the design parameters of a managed float, reserve holdings, and intervention policies, including the possibility of using state-contingent assets and government foreign/domestic debt management, as well as conventional reserves.

Chapter 4 by Susan Schadler reviews episodes of large capital inflows of economies in several regions since the early 1990s and investigates the macroeconomic characteristics of successful episodes. Schadler finds that only a modest portion of the capital inflow episodes have ended in crisis, and overheating pressures have not in general been severe. While all regions experienced some crises, proportionately more emerging Asia episodes had hard landings. She points out that much attention has been given to the issue of whether sterilized intervention or capital controls are effective in managing capital flows, but insufficient attention has been accorded to fiscal policy which she argues is most likely to have a strong and constructive effect.

Chapter 5 by Robert N. McCauley surveys the nature of hot money inflows into Asia since the peak of the US dollar in the first quarter of 2002 and the policy responses to them. McCauley points out that the most important qualitative change since 2002 involved foreign bank flows, which have returned to net inflows after five years of pay-down after the 1997–98 financial crisis. Carry trades, although difficult to measure, appear to have become important. He observes that capital inflows have become more volatile in recent episodes and that the authorities in the region have adopted measures both to encourage outflows and to discourage inflows to deal with such volatility. McCauley concludes that progress in Asia toward fuller capital account convertibility has the character of two steps forward, one step back, rather than a monotonic process.

Chapter 6 by Eduardo Levy-Yeyati, Sergio L. Schmukler, and Neeltje van Horen analyzes the effects of capital controls and crises on the integration of emerging economies with the international financial system. The authors characterize the behavior of the cross-market premium around crises and changes in different types of capital controls by computing summary statistics and by using an event-study methodology. They find that controls on cross-country capital movement appear to work as intended and segment markets effectively. They also find that when crises erupt, the cross-market premium becomes volatile, reflecting the shocks that markets receive and the difficulties in performing instantaneous arbitrage. The authors conclude that cross-market premium could be used as a tool to measure capital market integration, particularly during periods of capital controls and crises.

Chapter 7 by Jürgen von Hagen and Iulia Siedschlag discusses the experience of Central and Eastern European countries which recently joined the European Union with capital account liberalization and discusses some lessons and implications for EAEs. The authors find that since 2000, the group of fast liberalizers has experienced larger net capital flows than the gradual liberalizers. They argue that fiscal policy is the more appropriate policy instrument for dealing with large capital inflows and add that more effective spending controls and improved budgeting procedures rather than higher taxes will best promote macroeconomic stability.

The next nine chapters detail the experiences of emerging Asian economies in managing capital flows. They analyze the types and magnitude of capital flows, their impacts on the domestic economy, and effectiveness of national authorities' responses, and discuss policy implications.

In Chapter 8, Yongding Yu provides a comprehensive account of the evolution of the People's Republic of China's (PRC) management of capital flows. The PRC's successful management has been crucial in achieving high growth rates and macroeconomic stability, and should be treated as part of a long-term economic reform and liberalization program, not merely a way to reduce the pressure on the Chinese yuan to appreciate. With the lowering of the interest rate in the US, Yu argues that the objective of tightening monetary conditions has become increasingly difficult to achieve. Thus, he recommends that the PRC maintain capital controls whenever possible so that the People's Bank of China can implement an independent monetary policy to sustain the economy's growth in the next decade.

In Chapter 9, Ajay Shah and Ila Patnaik point out that there is a substantial mismatch between the needs of India, a fast-growing and fast-globalizing trillion dollar economy, and the present policy framework of capital controls and monetary policy. The authors argue that at this point in India's progression towards integration into the world economy, the rapid dismantling of capital controls appears to be the best strategy. However, this opening up needs to be accompanied by a monetary policy reform, a shift towards greater exchange rate flexibility, and the creation of currency derivatives markets. They point out that the lack of defined goals of the central bank is the most important weakness of the Indian policy environment.

In Chapter 10, Ira S. Titiheruw and Raymond Atje examine capital flows in Indonesia's post-Asian financial crisis period and the country's economic performance. They observe that the government shifted its development financing away from reliance on foreign currency to local currency bonds, which have attracted foreign capital inflows. Foreign capital inflows have remained volatile, as was apparent during the mini crisis in 2005. Currently, the government and the monetary authority direct their attention towards achieving sounder economic fundamentals such as maintaining fiscal restraint and controlling inflation. The monetary authority has undertaken some measures to monitor capital flows in both directions which can help improve its capability to respond in a timely manner against any eventuality.

In Chapter 11, Soyoung Kim and Doo Yong Yang document the recent trend in capital inflows and asset prices in Korea, and review how a surge in capital inflows can increase asset prices. They find that capital inflows shocks increased the stock prices but not land prices. The effects of capital inflows on the nominal and real exchange rates are limited, and this is related to the accumulation of foreign exchange reserves. Aside from encouraging capital outflows and exploring the use of fiscal policy to counter the effects of massive capital inflows, the authors suggest that Korea expand its risk management policies on credit expansion into the equity and real estate market.

In Chapter 12, Kee Kuan Foong discusses issues pertaining to capital flows in Malaysia under two regimes: fixed exchange rate and managed float exchange rate. In recent years, massive net inflow of portfolio funds generated a rise in liquidity in the financial system. To overcome inflationary pressure and to stabilize interest rates, the monetary authority conducted sterilization operations combined with prudential lending procedures, which effectively lowered credit growth. The author also explores other policy measures to overcome the negative effects of capital flows. He points to fiscal policy which Malaysia is trying to use in conjunction with sterilization to handle surges in foreign capital.

In Chapter 13, Josef T. Yap examines the impacts of foreign currency inflows on the Philippines' domestic economy and evaluates policy responses of the country's monetary authority. He finds that capital inflows could lead to an increase in reserves, a real appreciation of the peso against the basket of major trading partners' currencies, domestic liquidity, and inflation; but they appear to have no significant impact on domestic interest rate, consumption, investment, and government expenditures. Results of his analysis lead him to conclude that the reserve accumulation and subsequent sterilization has not undermined the policy of inflation targeting. To revive domestic private investment, Yap recommends efficient utilization of overseas remittances, which are quite substantial in the Philippines.

In Chapter 14, Hwee Kwan Chow finds that Singapore's experience with capital flows after the Asian crisis appears to have been somewhat benign. She argues that it is the overall package of policies – including strong economic fundamentals and a robust financial system, prudent policy management on both the fiscal and monetary side, and credible exchange rate policy aligned with underlying fundamentals – and having