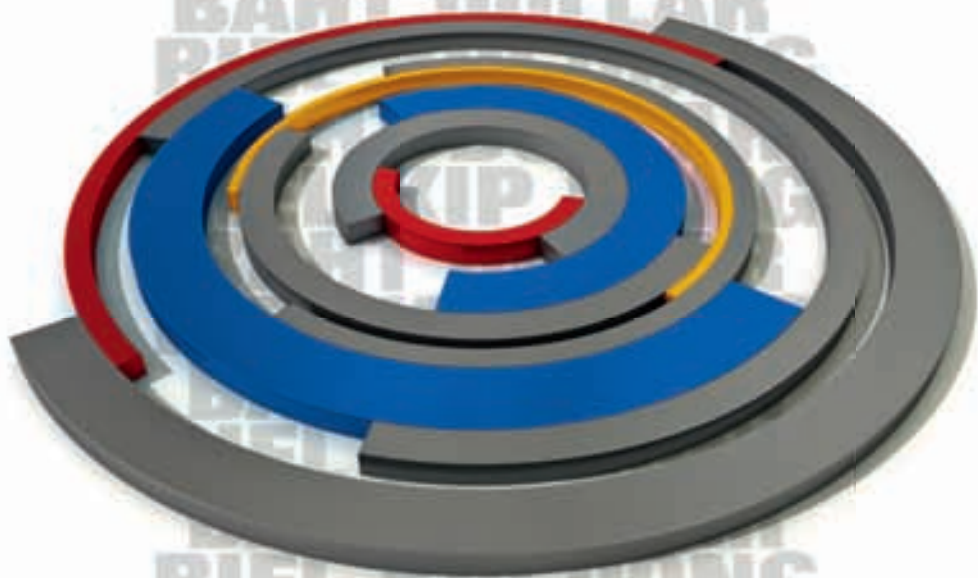


DEALING WITH MULTIPLE CURRENCIES IN TRANSITIONAL ECONOMIES



THE SCOPE FOR REGIONAL COOPERATION IN CAMBODIA,
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC, AND VIET NAM

Edited by Giovanni Capannelli and Jayant Menon



Lao PDR

Viet Nam

Cambodia



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Foreword

The Asian financial crisis of 1997/98 generated several cooperation initiatives to strengthen domestic financial sectors and ensure stability among the 10 members of the Association of Southeast Asian Nations (ASEAN) plus the People's Republic of China (PRC), Japan, and the Republic of Korea—the so-called ASEAN+3. More than a decade after the Asian financial crisis, the region today is facing a bigger challenge: recovering from a global financial crisis. While Asian countries continue to be battered by internal and external shocks, economic authorities are struggling to find the appropriate policy responses to ensure a sustainable growth path for the region.

While the “Plus-Three” economies (the PRC, Japan, and the Republic of Korea) are well represented in global economic dialogues and forums, smaller ASEAN economies such as Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam need to reinforce their ties so that they may have a strong, coordinated voice enabling them to raise their concerns in regional and international forums. Closer monetary cooperation among these countries could also provide an impetus for greater growth and development in the region as a whole.

Cambodia, the Lao PDR, and Viet Nam—the CLV countries—share economic and financial structures characterized by a relatively large use of foreign currencies, mainly the US dollar, in their domestic financial systems. The presence of multiple currencies limits their degree of freedom to conduct monetary and exchange rate policies. The “multiple-currency phenomenon” also creates a loss of seigniorage, the difference between the value of money and the cost to produce it. The need for monetary cooperation among the CLV countries, therefore, is a compelling one.

Against this backdrop, the Asian Development Bank (ADB), prompted by a request from the State Bank of Viet Nam that was seconded by the central banks and finance ministries of the CLV countries, decided to conduct a study on the scope for monetary cooperation among them. The aim of the study is to contribute to the discussion on regional currency systems and monetary policy coordination from the perspective of small economies that share similar economic and financial structures.

The study has two important characteristics that make it especially attractive. First, it is demand-driven, because it was undertaken at the request of the CLV countries themselves. Second, the approach was highly participatory: the study team included ADB staff, academics, domestic consultants, and personnel from the finance ministries and central banks of the CLV countries. The study also benefited from the invaluable support

of the German Institute for Economic Research (DIW) under the leadership of Alfred Steinherr, who served as the study's principal consultant.

This study is a pioneering work on the multiple-currency phenomenon in the CLV counties, with important recommendations for promoting regional monetary and financial cooperation that will be of interest to policy makers, development institutions, scholars, and the general public.

ADB's Office of Regional Economic Integration places great value on this study—what we like to call a knowledge product—and remains committed to helping Asian countries pursue economic development and poverty reduction by fostering a closer dialogue on regional monetary and exchange rate policy.

Srinivasa Madhur
Senior Director and Officer-in-Charge
Office of Regional Economic Integration
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This book is the outcome of a collaboration between the Asian Development Bank (ADB) and the central banks and finance ministries of Cambodia, the Lao People’s Democratic Republic (Lao PDR), and Viet Nam—the CLV countries. The following institutions were involved in the study: the National Bank of Cambodia; the Ministry of Economy and Finance, Cambodia; the Bank of the Lao PDR; the Ministry of Finance, Lao PDR; the State Bank of Viet Nam; and the Ministry of Finance, Viet Nam. The underlying study was financed under ADB’s Technical Assistance (TA) 6280: Strengthening Economic and Financial Monitoring in Selected ASEAN+3 Countries. The German Institute of Economic Research (DIW) provided guidance and technical input for the study, and verified its analytical structure, its economic relevance, and the consistency of its policy recommendations.

An organizing committee, composed primarily of officials from the central banks and finance ministries of the CLV countries, formulated the proposal, gave guidance throughout the study, and ensured project implementation. The committee members were Lonh Hay (National Bank of Cambodia); Ros Seilava (Ministry of Economy and Finance, Cambodia); Vathana Dalaloy (Bank of the Lao PDR); Bounleua Sinxayvoravong (Ministry of Finance, Lao PDR); Mai Hoang Phuong (State Bank of Viet Nam); and Phan Hoai An (Ministry of Finance, Viet Nam). Other officials of the CLV countries also participated in workshop and meeting discussions that led to the preparation of this study. ADB’s Office of Regional Economic Integration team was supervised by Srinivasa Madhur and led by Giovanni Capannelli. Jayant Menon provided intellectual leadership and technical input, while other ADB staff from various departments and resident missions participated in the meetings that led to the preparation of this report.

The study team that drafted the background report on which this book is based was composed of several scholars, CLV government and central bank officials, DIW experts, and ADB staff. Leading scholars were Alfred Steinherr of DIW and Bolzano University, Italy; Maria Socorro Gochoco-Bautista of the University of the Philippines; Eric Girardin of the University of Aix-en-Provence; Toshiki Jinushi of Kobe University; and Alicia García-Herrero from Banco Bilbao Vizcaya Argentaria (BBVA). Huot Pum and Khan Vanek wrote the chapter on Cambodia, Phouphet Kyophilavong on the Lao PDR, and Nguyen Van Dinh on Viet Nam. DIW staff Patricia Alvarez-Plata, Erik Klär, and Stefan Kooths also shared writing assignments. Both Giovanni Capannelli and Jayant Menon contributed to and edited this book.

Marvin Castell handled the overall coordination of the editorial process. David Plott served as the economics editor. Mary Ann Asico, Joanne Gerber, and Toby Miller assisted with manuscript editing of individual chapters. Aldwin Thadeus Sutarez provided overall copyediting and proofreading. Ariel Paelmo typeset the volume. Rogelio Mercado and Anna Cassandra Melendez helped collect and analyze data and draft some chapters. Herman Ramos produced some charts and Anna Maria Juico assisted with printing. Michael Cortes of FandMDesign Inc. and ADB's Anthony Victoria executed the cover art. Vicente Angeles, Ma. Priscila del Rosario, and Muriel Ordoñez provided assistance whenever needed.

Abbreviations and Acronyms

ABF	Asian Bond Fund
ABMI	Asian Bond Markets Initiative
ACI	Asian currency index
ACU	Asian Currency Unit
ADB	Asian Development Bank
AFTA	ASEAN Free Trade Area
AMF	Asian Monetary Fund
AMS	Asian Monetary System
APEC	Asia–Pacific Economic Cooperation
ASA	ASEAN Swap Arrangement
ASEAN	Association of Southeast Asian Nations
ASEAN+3	members of the Association of Southeast Asian Nations (ASEAN) plus the People’s Republic of China, Japan, and the Republic of Korea
BOL	Bank of the Lao PDR
CBA	currency board arrangement
CLV	Cambodia, the Lao People’s Democratic Republic, and Viet Nam
CMI	Chiang Mai Initiative
CPI	consumer price index
EMEAP	Executives’ Meeting of East Asia Pacific Central Banks
ECU	European Currency Unit
EMS	European monetary system
EMU	European Monetary Union
EU	European Union
FCD	foreign currency deposits
FDI	foreign direct investment
GDP	gross domestic product
GOL	Government of the Lao People’s Democratic Republic
IMF	International Monetary Fund
JSB	joint-stock bank
JVB	joint-venture bank
Lao PDR	Lao People’s Democratic Republic
MCP	multiple-currency phenomenon
NEDP	National Economic Development Plan (Lao People’s Democratic Republic)
NEM	New Economic Mechanism (Lao People’s Democratic Republic)
NPL	nonperforming loan
OCA	optimum currency area

OMO	open market operation
PRC	People's Republic of China
RRR	reserve requirement ratio
SBV	State Bank of Vietnam
SOCB	state-owned commercial bank
SOE	state-owned enterprise
UN	United Nations
UNTAC	United Nations Transitional Authority in Cambodia
US	United States
WTO	World Trade Organization

Multiple Currencies and Regional Cooperation

Giovanni Capannelli and Jayant Menon

In many transitional economies, it is not uncommon for one or more foreign currencies to circulate jointly with the national currency. Together, they serve the three functions of money—as a unit of account, a medium of exchange, and a store of value. When this occurs, it is referred to in the literature as either “dollarization” or the “multiple-currency phenomenon” (MCP). When multiple currencies are in circulation, monetary authorities face a number of challenges: Not only do they lose revenue from the seigniorage on the amount of—and increases in—foreign currencies in circulation, they are also not completely free to conduct independent monetary and exchange rate policies. Furthermore, the lender-of-last-resort function of central banks may be impaired. Since the MCP reduces the capacity of the central bank to print money that the public is willing to hold, it limits the central bank’s ability to perform its function as guarantor and lender of last resort.

On the positive side, the MCP imposes discipline on monetary authorities because budget deficits cannot be easily financed through the printing of money or an inflation tax. There is also likely to be less volatility in prices if the MCP results in an apparently fixed nominal exchange rate. Economic agents generally prefer to use foreign currencies to pay for their imports. They do not have full confidence in the stability of their national currencies, so their rational choice is often to use foreign currencies to avoid losses from huge exchange rate fluctuations and volatile macroeconomic conditions.

Thus, there are costs as well as benefits in the use of multiple currencies, so national authorities need to assess their situations and adopt strategies in line with their countries’ development priorities.

Cambodia, the Lao People’s Democratic Republic (Lao PDR), and Viet Nam—the CLV countries—are affected to varying degrees by the MCP. In Cambodia, the dollar is widely used in all three functions of money in addition to the national currency, the riel. Similarly, in the Lao PDR, the kip is used together with the dollar and the Thai baht for all three functions of money. In Viet Nam, the dong is the only official currency that

can be used as a unit of account and a medium of exchange, but the dollar is allowed to be used as a store of value, and, as a result, a large share of bank deposits are denominated in dollars.

While dealing with multiple currencies is ultimately an issue of national economic policy, the CLV countries stand to benefit from promoting monetary and financial cooperation. For instance, they would be able to exploit economies of scale, introduce best practices, exert peer pressure, and facilitate the adoption of common standards. Regional cooperation on macroeconomic issues, in particular regarding monetary and exchange rate policies, could help CLV countries find a solution to the MCP, thereby creating a win-win situation for all participants, both inside and outside the region.

The experience of the European Union (EU) clearly shows that small economies tend to benefit most from regional cooperation. Several empirical studies have shown that, mainly due to the presence of positive externalities from large to small countries, the income gaps between individual economies and the EU average have narrowed much faster for small economies like Ireland, Portugal, or Greece than for larger ones like Italy or Spain. For their part, large countries will encourage the inclusion of small countries in cooperative efforts once they realize that small countries are a fundamental part of the region, and that ensuring their success will eventually pay off in terms of their own progress, as well as progress for the region as a whole.

This book explores the issues of multiple currencies and regional monetary cooperation among the ASEAN+3 economies (members of the Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea) in the context of increasing regional economic interdependence. It reviews the main issues that inform monetary and exchange rate policies adopted by national authorities in the CLV countries, and discusses the options and opportunities available for enhancing regional cooperation.

An overview of these issues is presented by Giovanni Capannelli and Maria Socorro Gochoco-Bautista in Chapter 2, where they analyze the main forces behind the process of economic and financial integration in the region and discuss the challenges CLV countries face in choosing their optimal monetary strategy. East Asia's intra-regional trade and investment has increased sharply over recent years. Although still lagging behind that of the EU, East Asia has shown some progress toward financial integration, especially following the financial crisis of 1997/98. Data for Cambodia, the Lao PDR, and Viet Nam show that the economies of these three countries have become very open, with an average ratio of trade per gross domestic product (GDP) increasing to 150% from 75% a decade ago. Although the CLV countries do not exchange many goods, services, or

capital among themselves, their interdependence with the rest of East Asia has dramatically increased in the past few years.

But as regional integration brings more opportunities for economic growth, it also implies greater vulnerability to external shocks, especially for transitional economies like those of the CLV, where shifts toward the regional market have increased the effectiveness of transmission channels through the pricing system. The presence of multiple currencies in the CLV countries, albeit to varying degrees, constitutes an underlying reason for looking at policy solutions with some elements of commonality. To reap the gains of regional integration, the CLV countries should start an effective dialogue on monetary issues, focusing on the choice of an appropriate monetary framework and exchange rate regime.

A detailed analysis of monetary frameworks and exchange rate regimes is offered in the following three chapters, which discuss the cases of Cambodia, the Lao PDR, and Viet Nam. In Chapter 3, Huot Pum and Khan Vanak review Cambodia's monetary and exchange rate policies, and assess the possibility for dialogue and cooperation with the monetary authorities of the other two CLV countries. Reducing the high level of dollarization remains a major challenge for Cambodia, with large implications for the country's economic growth. While the central bank maintains control of the monetary base and can regulate liquidity by imposing reserve requirements on commercial banks, it cannot directly control the money supply, and it can only partially determine its exchange rate policy through dollar auctions. As a consequence, fiscal policy becomes the main instrument for influencing the country's macroeconomic adjustments to internal and external shocks. On the positive side, however, dollarization is helping to shelter Cambodia's economy from regional and global economic turmoil, and to lower the costs of purchasing international currencies.

With regard to starting a monetary policy dialogue among the CLV countries, the authors highlight the importance of conducting regional macroeconomic surveillance and of cooperating to ensure that the monetary policy and exchange rate regimes in the three countries remain consistent. They also argue for the desirability of creating an Asian currency unit (ACU), especially as a unit of account and a tool for policy coordination, but they emphasize the importance of meeting price convergence criteria and liberalizing the movement of goods, services, capital, and people.

In Chapter 4, Phouphet Kyophilavong reviews the implementation of monetary and exchange rate policies in the Lao PDR in the presence of the MCP, where not only the dollar but also the Thai baht is widely used in the local economy, alongside the kip. In assessing the pros and cons of this phenomenon, the author concludes that the Lao PDR would be better off with only its national currency in circulation. An interesting aspect of the monetary and financial sectors in the Lao PDR is the progress of reforms

begun more than 20 years ago under the New Economic Mechanism. They transformed the centrally planned economy into a market-oriented one, contributing to economic growth through liberalization, modernization, and integration with the surrounding East Asia and the rest of the world. The author argues, however, that structural reforms of state-owned enterprises and improvements in the fiscal and financial sectors have lagged.

The chapter also analyzes different alternatives for the Lao PDR's monetary and exchange rate policy—including hard-peg regimes like currency board arrangements or full dollarization of the economy—and concludes that none of these solutions is feasible, given the country's current economic conditions and the weakness of its financial institutions. Instead, the country needs greater flexibility in exchange rates, with inflation or monetary targets; and the authorities should create a market for commercial banks based on the demand and supply of foreign exchange. The author also suggests that the Lao PDR should actively participate in regional cooperation initiatives with countries in ASEAN+3 and beyond.

The conduct of monetary and exchange rate policy in Viet Nam is discussed by Nguyen Van Dinh in Chapter 5. While dollarization is much less a problem in Viet Nam than in Cambodia or the Lao PDR, economic authorities in Viet Nam have to deal with stabilization issues and with rigidities in a system not yet completely transformed into a market economy. For example, the government is still keen to retain control of a large number of “strategic” state-owned enterprises, making the country's development strategy considerably different from those of other transitional economies. And while substantial progress has been achieved during the last couple of decades, Viet Nam still needs to improve the efficiency of its central bank and the international competitiveness of its commercial banks.

The author recommends some improvements in Viet Nam's monetary policies, including better management of money flows, more efficient use of available monetary tools, and a better grasp of the transmission mechanisms through the pricing system. Currently, information is insufficient, technological innovations in the payment system and its monitoring process are incomplete, and the institutional framework remains ineffective. While its monetary authorities are struggling to improve coordination across macroeconomic policies, Viet Nam would be better off by increasing its participation in regional dialogues and then taking gradual steps toward greater cooperation. Eventually, the author argues, a greater integration of Viet Nam's banking and financial sectors with those of other countries in the region would also help the country's domestic economic reforms, especially by imposing a shift toward a better legal framework.

In Chapter 6, Eric Girardin undertakes an empirical study of the economic implications of the MCP by putting together a unique data set on the extent of currency substitution in the CLV countries—including a direct measurement of foreign currency in cash circulation. The methodology consists of calculating the supply of foreign currency through capital flows from foreign currencies' original markets. The evidence suggests that, in Viet Nam, financial dollarization is in line with levels generally found in financially globalized emerging economies. In Cambodia and the Lao PDR, however, dollarization is much higher: around 90% of the total narrow fiduciary money in Cambodia and 50% in the Lao PDR.

The author suggests, however, that this picture is misleading because the gap in financial deepening among the CLV countries shrinks considerably when total foreign currency (including cash) holdings are put in the picture. In particular, the levels of financial development reached in Cambodia and Viet Nam are not very different, while the lag in the Lao PDR persists, mostly due to continued macroeconomic instability, which is reflected in the fact that the path of the velocity of money in the Lao PDR has not converged with the paths in the other CLV countries.

In Chapter 7, Toshiki Jinushi summarizes the issues presented in the three country chapters, discusses their findings, and attempts to identify common ground for possible policy recommendations and the basis for regional monetary dialogue. The negative implications of dollarization on seigniorage and on the freedom of monetary policy are often compensated by low inflation, the maintenance of local currency interest rates in line with dollar interest rates, and the avoidance of monetization of fiscal deficits. Thus, accepting dollarization and keeping the current monetary stance remains a realistic strategy for the CLV countries. But in cases when the United States' (US) monetary policy is misaligned with domestic economic cycles, the three countries could face serious challenges that would force them to push for de-dollarization and seek an alternative solution. To be able to do this, economic authorities would need to implement a number of structural reforms, including ones related to tax collection.

Strengthening regional monetary and exchange rate cooperation could be an additional strategy for the CLV countries. It would help them regain seigniorage and enable their central banks to function as lenders of last resort. And this strategy could ultimately change the entire monetary and exchange rate framework in favor of a system in which the stability of the local currency against the dollar would be much less important. But for all this to happen, there would have to be a relatively long adjustment period, because the CLV monetary authorities would have to show considerable commitment to making the necessary reforms to gain credibility in the market.

In Chapter 8, Patricia Alvarez-Plata and Alfred Steinherr explore the evolution of exchange rate regimes in ASEAN+3 countries and analyze

their impact on key macroeconomic variables. Using the International Monetary Fund's de facto classification of exchange rate regimes and exchange rate variability, the authors examine the actual regimes ASEAN+3 countries have adopted; the influence of economic openness and size on the choice of these regimes; and their performance in terms of inflation, current account balances, and real output.

Their findings reveal substantial differences in exchange rate regimes within ASEAN+3, with countries displaying varying degrees of commitment to floating arrangements. Reliance on international trade seems to lie behind the reluctance of most countries to adopt an independent floating exchange rate. High dollarization liabilities in some ASEAN countries also heighten risks associated with large exchange rate fluctuations. The analysis of macroeconomic variables indicates that, in the case of ASEAN+3 countries, the choice of exchange rate regimes has not led to systematic differences in inflation and real output. As such, countries with managed floating regimes have fared no worse than those with pegged or independent floating regimes.

In Chapter 9, Jayant Menon examines the pros and cons of the MCP regarding monetary policy in the CLV countries. The MCP limits the ability of central banks to implement independent monetary policies, as well as their capacity to act as lenders of last resort in the event of a crisis. The inability to conduct an independent monetary policy implies the same for exchange rate policy. Furthermore, since the MCP could result in a situation where there is effectively "no exchange rate," the role that exchange rate policy could play in macroeconomic adjustment is impaired. With real exchange rate shifts requiring changes to wages, the adjustment to shocks could be slow and painful.

On the positive side, the benefits of an effective fixed exchange rate, stability and certainty, are conveyed through the MCP. The MCP also prevents the manipulation of the exchange rate to protect or artificially promote the tradable goods sector. And it imposes a discipline on governments by limiting their ability to finance budget deficits through an inflation tax, or through printing money rather than raising taxes. Given the chronic deficits in transitional economies like the CLV countries, the constraint created by the MCP can serve as a particularly useful safeguard.

In Chapter 10, Patricia Alvarez-Plata and Alicia García-Herrero draw from the experience of Latin American countries, Israel, and the Russian Federation to examine the impact of dollarization and de-dollarization on monetary stability. The analysis focuses on two key issues: (i) the impact of dollarization on inflation, particularly on the pass-through from the exchange rate to prices; and (ii) the impact of dollarization on the effectiveness of monetary policy.

The findings suggest that partial dollarization may not necessarily decrease inflation, but could instead lead to large currency mismatches

due to the impact of exchange rate depreciation on foreign currency-denominated liabilities. The analysis also reveals that the exchange rate pass-through is significantly bigger and generally more persistent in highly dollarized economies. The authors survey policy options for reducing the degree of dollarization, and suggest a mix that includes government intervention (through administrative measures), market forces (through good macroeconomic performance and local currency stability), and the introduction of instruments denominated in the local currency.

In Chapter 11, Eric Klär and Stefan Kooths examine the evolution of monetary cooperation in ASEAN+3, and recommend ways to move the process forward through increased exchange rate cooperation. The authors trace how the 1997/98 Asian financial crisis was instrumental in spurring regional initiatives for monetary cooperation. They highlight three areas where progress has been made: (i) establishing a mechanism for providing liquidity through the Chiang Mai Initiative; (ii) improving regional surveillance through the ASEAN Surveillance Process, the ASEAN+3 Finance Ministers Process' Economic Review and Policy Dialogue, and the Early Warning System, initiated by the Asian Development Bank (ADB); and (iii) strengthening regional capital markets through the Asian Bond Markets Initiative.

To build on these achievements, the authors propose greater exchange rate cooperation and explore the possible forms that it could take. Three possible approaches are highlighted: (i) pursuing the ADB-led initiative for the computation of an ACU, which would serve as a parallel currency similar to the European Currency Unit under the European Monetary System; (ii) taking the ACU further by turning it into an Asian Monetary System or into a currency index against which national currencies would be pegged; and (iii) establishing a peg against a weighted basket of major international currencies. Regardless of the approach eventually chosen, the authors stress the importance of political will and leadership, and point to the experience of Europe as a source of insights and guidance.

In Chapter 12, Alfred Steinherr explores the role of small countries in the emergence of the European Monetary System. Drawing lessons from the European experience, Steinherr describes how small countries could be the main drivers of monetary integration in Asia. For countries such as Cambodia, the Lao PDR, and Viet Nam, integration could address problems caused by currency movements, which are often a great source of domestic financial instability. Steinherr elaborates on the benefits of a fixed exchange rate system for the CLV countries, saying that such a system would help stabilize domestic prices and equalize competitive conditions. These are important considerations for the CLV countries, given their high degree of dependence on intra-regional trade. Steinherr argues in favor of a regional exchange rate agreement under which the benchmark would be a basket composed of regional currencies rather than a single

national currency. Moreover, given the extreme variations between large and small countries in East Asia, another important question will be how the different currencies should be weighted in the regional benchmark.

Finally, in Chapter 13, Erik Klär, Stefan Kooths, and Jayant Menon examine policy options for enhancing monetary stability in the CLV countries and for improving their involvement in the overall ASEAN integration process. To help evaluate the advantages and disadvantages of different policy options, the authors define two main sets of criteria: one concerned solely with economic efficiency, the other with politico-economic considerations. Monetary and exchange rate policy options are also assessed through the use of cooperative and noncooperative scenarios (with the latter composed solely of individual country reforms).

The authors present a number of policy options—that the CLV countries could choose individually and collectively—to enhance monetary stability and foster economic growth. Individually, the CLV countries could pursue long-term reforms to reduce the prominence of dollarization, including improving their monetary and financial systems, increasing macroeconomic stability, and strengthening economic and financial institutions. In the short term, they could reduce the distinctions between domestic and foreign currencies by providing assurance of free convertibility. Collectively, the CLV countries could set up and gradually expand a network of decision makers and researchers that would foster mutual understanding and cooperation. They could also cooperate in strengthening their capital markets. One concrete possibility would be to allow companies from Cambodia and the Lao PDR to list on Viet Nam's stock market at first, and then establish a common CLV bond market. Finally, the CLV countries could increase cooperation on exchange rate matters among themselves and with the ASEAN+3 group in general.

The case for strengthening monetary and exchange rate policy cooperation among the CLV countries is somewhat reinforced by lessons learned from past experiences, in particular the common currency and exchange rate regime introduced by France's colonial administration in its Indochina territories before the CLV countries gained their independence. In the appendix to this book, Henri Bourguinat illustrates the evolution of the regime and the related monetary policies from the late 1870s to the early 1950s, drawing interesting conclusions that support the case for closer cooperation among the CLV countries today.

He explains how the colonial administration's introduction of the piastre—rather than the French franc—as the new common currency for the Indochina territories eliminated the MCP that had existed in the region and boosted regional trade. Although historical events led to the replacement of the piastre (which was linked to the value of silver) with a gold standard, the CLV countries could draw on their common history and apply lessons that could prove useful in overcoming some of today's

difficulties. To be sure, after World War II, France's colonial administration tried to realize an economic and monetary union among Cambodia, the Lao PDR, and Viet Nam, but their attempt failed because of inadequate economic conditions and the decline of France's hegemony in the region.

In summary, this study discusses fundamental monetary and exchange rate issues facing the CLV economies in their process of transition. It explores the issues of multiple currencies and regional monetary cooperation in the context of increasing regional economic interdependence among the ASEAN+3 economies. It also reviews the main issues that inform the monetary and exchange rate policies chosen by the governments of the CLV countries, and discusses the options and opportunities available for enhancing regional cooperation.

The study's findings suggest that while dealing with multiple currencies is ultimately an issue of national economic policy, and should remain so, the CLV countries stand to benefit from promoting regional cooperation in monetary and financial issues to exploit economies of scale, introduce best practices, and facilitate the adoption of common regulatory standards. It shows that starting a regional monetary dialogue may help the CLV countries find a solution to the MCP and reap more benefits from their increasing economic interdependence with their ASEAN neighbors and the rest of East Asia.

PART ONE

Monetary and Exchange Rate Policies in CLV Countries

Forces of Regional Economic and Financial Integration

Giovanni Capannelli and Maria Socorro Gochoco-Bautista

Cambodia, the Lao People's Democratic Republic (PDR), and Viet Nam—the CLV countries—have a common history, one vastly different from that of the rest of Asia. All three countries are former French colonies that shared a common currency under colonial rule, and all three fought wars of independence. All three also adopted Soviet-style central planning in the 1970s, and their economic fates were closely tied to that of the Soviet bloc. The collapse of the Soviet Union and the loss of Soviet aid in the early 1990s plunged the CLV countries into severe economic crisis and served as a major impetus for economic reform. Today, all three countries face the presence of multiple currencies in their economies, although in different forms and to different degrees, with Cambodia and the Lao PDR having a high degree of dollarization. Viet Nam and the Lao PDR resemble each other in another way: they both have a large state-owned sector in their economies.

A common history notwithstanding, it would be a mistake to treat the CLV countries as a homogenous group. They all differ in the pace of their economic and political reforms, the degree of openness, the extent of their international integration, and, consequently, in their economic performance. Viet Nam is acknowledged as the outstanding economic performer. It had a better-qualified labor pool to start with, has been able to implement extensive reforms, and now has the economy most open to international trade (Leung 2006, 2). Cambodia is also growing fast, despite having undergone a very severe form of central planning under the Khmer Rouge regime, which devastated the economy and largely isolated the country from the rest of the world for some time. And while the landlocked Lao PDR is the least open of the three countries, and also the poorest, its economic performance since 2000 has shown remarkable progress, especially after it joined the Association of Southeast Asian Nations (ASEAN).

Despite limitations due to the presence of multiple currencies, monetary policy has played a key role in stabilizing the CLV economies during periods of economic crisis. Both the money supply and credit have

been severely restricted to tame inflation, contain fiscal hemorrhaging, and steady the exchange rate. Stabilization of the economy was a necessary first step in setting the stage for growth and development, and monetary policy will likely continue to be instrumental in transforming the CLV economies. Key to this transformation is the adoption of an appropriate monetary framework to overcome the limitations that have constrained—and continue to constrain—the effective conduct of monetary policy in all three countries.

Currently, the CLV countries confront great challenges to the effective conduct of their monetary policy. Cambodia is hampered by a very high degree of dollarization and a lack of monetary instruments, both of which make it difficult for the government to maintain a competitive exchange rate. The Lao PDR is faced with the difficulty of managing a monetary system with a high degree of multiple currencies and dollarization, a low level of financial development, and a lack of monetary instruments, as well as by a protracted policy-making process. Viet Nam's economy, meanwhile, is still dominated by state-owned enterprises. Its banking sector, for instance, is composed of large state-owned commercial banks that are not fully exposed to market forces, with the resulting loss of competition and efficiency. The country also suffers from a lack of indirect monetary instruments to control inflation and ensure a competitive exchange rate, a serious problem when influxes of foreign capital have led to pressures for the dong to appreciate.

To a great extent, problems endemic to centrally planned economies are still prevalent in the CLV countries: the presence of a large and inefficient state sector, including loss-making state-owned enterprises and commercial banks; a weak government revenue base; large fiscal deficits; and a lack of confidence in the local currency. These vestiges are indicative of the incomplete transition of these economies to more market-based systems. As the CLV countries—which share a common predicament and are all ASEAN members—continue their struggle to transform their economies, it would seem natural for them to perceive a commonality of interests.

The desire of the CLV countries to shift their economic trajectory to one of sustained growth and development may be largely due to the experiences of their Asian neighbors. Ironically, in the years after World War II, per capita incomes in the CLV countries were similar to those of other ASEAN members. However, central planning and the inefficiencies it spawned put the CLV countries on a divergent path from that of the rest of Southeast Asia (Syed 2006, 2). Liberalization of trade and financial markets, as well as openness to foreign investment, transformed most other East Asian countries from import substitution–led industrialization under

the protectionist regimes in the 1960s to the export-driven industrialized “miracle” economies of the 1990s (World Bank 1993).

Of course, the circumstances under which the CLV countries are attempting to transform their economies are different from those that prevailed when other East Asian countries took off. A major challenge the CLV countries face today is instituting market-oriented reforms and restructuring their economies quickly enough to find a meaningful place in a world of rising economic integration driven by market forces and marked by competition for export markets and foreign investments.

During the last couple of decades, Asian regionalism has emerged as a powerful force, creating opportunities for the CLV countries to integrate with their East Asian neighbors. Market forces have established regional production networks and supply chains through a nexus of trade and investment. Moreover, the Asian financial crisis of the late 1990s boosted support for regional monetary and financial cooperation. The crisis exposed the risks of not having a lender of last resort and revealed the lack of coordination of national regulations, which were clearly not designed to address circumstances beyond each country’s borders. Indeed, one major lesson from the crisis was that, as regional integration intensifies, external circumstances make the commonality of interests more pronounced. Consequently, the financial crisis triggered a number of initiatives for regional cooperation, including the formation of the ASEAN+3¹ Finance Ministers Meeting, and the adoption of steps such as the Chiang Mai Initiative (CMI) and its recent multilateralization, as well as the Asian Bond Markets Initiative (ABMI) (Asian Development Bank [ADB] 2008; Capannelli et al 2009). Also, regional central banks, under the auspices of the Executives’ Meeting of East Asia–Pacific Central Banks (EMEAP), created the Asian Bond Fund and launched several other programs to promote regional financial cooperation.

Increased interdependence has provided the rationale for using regional cooperation as an institutional framework. For the CLV countries, political support for regional cooperation as an institutional framework is important, as it could bolster domestic support for policies with binding commitments to accelerate reforms and increase efficiency, thus fostering economic growth.

In this chapter, we analyze the rationale and driving forces for monetary dialogue among the CLV countries. The main points we make in support of a closer monetary dialogue are the following:

¹ASEAN countries plus the People’s Republic of China, Japan, and the Republic of Korea.

- In addition to a shared economic history that is distinct from that of the rest of Asia, there is a great degree of commonality of interests among the CLV countries today, especially their desire to share the prosperity enjoyed by other regional economies.
- The CLV countries are becoming more open and integrated through trade and investment with the other ASEAN and the “Plus-Three” countries. Monetary integration enhances integration in the real economy, and may lead to a greater regionalism.
- Weak institutions in the CLV countries still constrain their ability to transform their economies into more market-oriented systems. National regulation is often inadequate and global regulation inadequate or absent, as the recent global economic and financial crisis has shown. Regional cooperation could serve as an institutional framework for reforms with binding commitments. Such commitments, however, would require political support.
- The CLV countries also have much to learn from the experiences of other East Asian countries, especially their transformation from agrarian-based primary goods producers to export-led industrialized economies in an increasingly integrated world. These experiences highlight the need for internal economic reforms. There are also relevant lessons to be learned from the experiences of smaller countries in the European Union (EU), specifically the benefits they accrued from pursuing regionalism.
- A major lesson from the Asian financial crisis is the importance of adopting an optimal monetary framework and exchange rate regime. The perils of the continued use by most countries in the region of a mercantilist strategy of undervaluing the domestic currency under a soft dollar standard became clear as capital flows undermined their ability to conduct independent monetary policies and maintain stable financial markets. In the CLV countries, monetary policy has played an important role in setting the stage for growth by stabilizing the domestic economies after the collapse of the Soviet market, and it will continue to play an important role in the future. The choice of a monetary framework and exchange rate regime, taking into account the presence of multiple currencies, remains a major challenge. The CLV countries would benefit from engaging in a monetary dialogue among them to assess the best options and ensure their viability.

The time is ripe to initiate a dialogue on monetary cooperation to advance the cause of—and reap the full gains from—regional integration. The CLV countries have much to learn from each other and from their regional neighbors.

2.1 Real Sector Integration

Based on the traditional theory of economic regionalism, and on the experience of integration in the EU, real sector integration is a natural precursor to monetary integration. In East Asia, however, the pattern is different, with integration occurring in the real and financial sectors at the same time. This is because of the initiatives taken in the wake of the Asian financial crisis, which accelerated the path to regional financial cooperation, and eventually to regional financial integration. In this section, we review the pattern of economic integration of East Asian economies in both the real sector and in financial markets, with a focus on the CLV countries. Before we look at regional integration indicators, however, we briefly present some basic economic facts about the CLV countries in a regional context.

2.1.1 Basic Economic and Trade Indicators

Table 2.1 presents some economic indicators for the CLV countries. With a combined population of more than 106 million in 2008, and a gross domestic product (GDP) of \$106 billion, the CLV countries represent about 18% of ASEAN's total population and 7% percent of its GDP. The three countries obviously differ in size: Viet Nam is by far the largest, with more than 80% of their combined population and GDP, while the Lao PDR accounts for only 5% of each indicator. In terms of per capita GDP, the average for the CLV countries in 2008 was approximately \$1,000, which is less than half the ASEAN average of more than \$2,500. But in terms of economic performance, the 6.8% average annual GDP growth rate of the CLV countries for the period 1980–2008 outperformed the ASEAN average of 5.5%. Similarly, the average per capita GDP growth rate of the CLV countries was 5% compared with ASEAN's 3.5%. In other words, the CLV countries are surpassing the growth level of other ASEAN countries and gradually narrowing the income gap.

The average GDP growth for the CLV countries and the disaggregated trend for each economy during the 1990–2008 period are shown in Figure 2.1. While the CLV average closely follows that of Viet Nam's economy, due to the latter's very large share of the total, it is interesting to note the relatively high growth volatility of Cambodia's economy, with the lowest growth rate at 1.1% in 1991 and the highest at 13.3% in 2005.

A common characteristic of the CLV countries is their high degree of openness and dependence on trade. Figure 2.2 shows the rapidly increasing trade/GDP ratios for Cambodia, the Lao PDR, and Viet Nam for the period from 1995 to 2008. The figure shows how trade/GDP ratios have increased dramatically, indicating the economic openness of the CLV countries and the degree of their integration with other countries through trade. In particular, the trade/GDP ratio for Viet Nam increased from 67%

Table 2.1: CLV Countries: Basic Economic Indicators

Economy	Population (million)	GDP			Per capita GDP		
		in \$ billion at current prices	in \$ billion at PPP	Average growth rate 1980–2008 at constant prices	at current \$ prices	in \$ PPP	Average growth rate 1980–2008 at constant prices
East Asia	2,116.6	12,277	17,415	4.4	5,800	8,228	2.7
ASEAN+3	2,086.6	11,670	16,396	4.3	5,593	7,858	2.6
ASEAN	582.7	1,503	2,768	5.5	2,579	4,751	3.5
CLV	106.1	106	283	6.8	1,010	2,686	5.0
Cambodia	13.7	11	28	8.2	823	2,082	4.7
Lao PDR	6.3	5	13	6.4	859	2,127	3.7
Viet Nam	86.2	90	241	6.6	1,042	2,794	5.2
Other ASEAN	476.6	1,396	2,486	5.4	2,579	4,751	3.5
Brunei Darussalam	0.4	15	20	0.2	37,031	50,168	(1.8)
Indonesia	228.6	512	910	5.1	2,239	3,980	3.7
Malaysia	27.3	222	384	6.2	8,118	14,082	3.6
Myanmar	58.8	26	68	6.5	446	1,156	4.3
Philippines	90.5	167	318	3.2	1,845	3,515	0.8
Singapore	4.7	182	239	6.9	38,976	1,231	4.3
Thailand	66.4	273	547	5.8	4,116	8,239	4.5

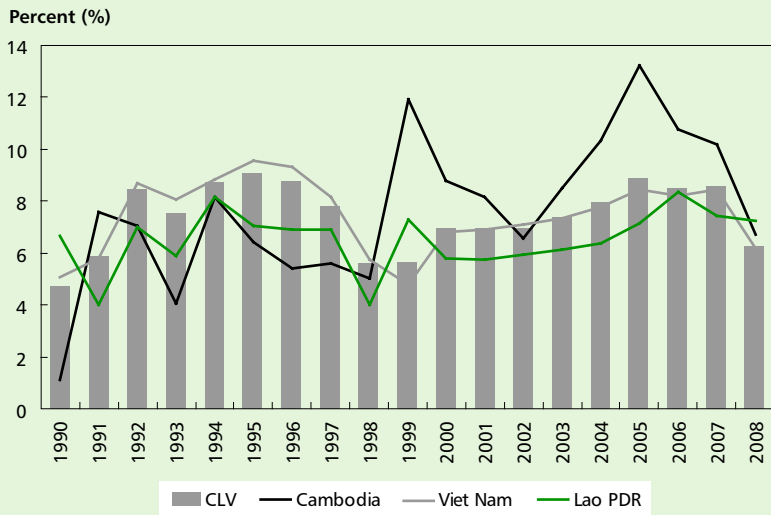
ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; East Asia = ASEAN+3 plus Hong Kong, China and Taipei, China; GDP = gross domestic product; Lao PDR = Lao People's Democratic Republic; PPP = purchasing power parity; () = negative value; \$ = US dollar.

Note: Regional GDP growth average rates were computed using Gross National Income (GNI) Atlas Method (in current \$) as weights.

Source: International Monetary Fund. 2009. World Economic Outlook Database. October; World Bank. World Development Indicators Online. www.worldbank.wdi.org/ (accessed October 2009).

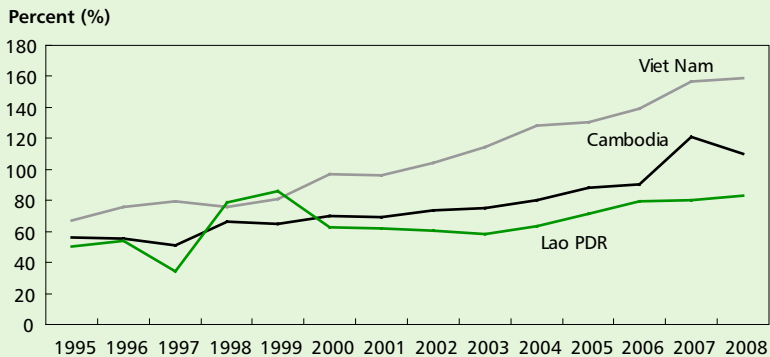
in 1995 to almost 160% in 2008. While the trade/GDP ratios for both Cambodia and the Lao PDR remain lower than that of Viet Nam, the value of total trade for both economies today is approximately the same as the value of their GDP. In 1995, it was about half.

The trade pattern of the CLV countries shows that they are in structural deficit. For the last few decades, they have systematically imported more than they exported. Table 2.2 shows the aggregated trade structure for the CLV countries for 1990, 2000, and 2008, including imports and exports, with the major trade and intra-regional flows. Disaggregated tables for the

Figure 2.1: CLV Countries: Real GDP Growth

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.

Source: World Bank. World Development Indicators Online. www.worldbank.wdi.org/ (accessed October 2009)

Figure 2.2: CLV Countries: Trade/GDP Ratio

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.

Source: International Monetary Fund. 2009. *Direction of Trade Statistics and World Economic Outlook*. October.

Table 2.2: CLV Countries: Evolution of Trade Structure (% share on total)

Trade partners	2008		2000		1990	
	Exports to	Imports from	Exports to	Imports from	Exports to	Imports from
CLV	2.5	2.0	2.1	1.8	1.4	1.3
Cambodia	1.7	0.2	0.9	0.2	0.3	0.3
Lao PDR	0.2	0.3	0.5	0.6	0.6	0.1
Viet Nam	0.6	1.5	0.7	1.0	0.4	0.9
ASEAN	14.0	29.1	17.9	31.2	16.1	21.5
ASEAN+3	35.6	66.2	46.1	63.7	30.9	30.4
East Asia	38.9	79.2	51.2	79.1	42.3	39.1
Europe	19.0	6.2	20.8	8.5	11.2	13.4
North America	24.4	3.9	10.1	2.5	0.2	0.2
AUS & NZ	6.9	2.0	8.1	2.1	0.3	0.4
CER	3.0	1.3	1.7	1.7	4.6	3.8
Rest of World	7.9	7.5	8.2	6.1	41.4	43.2
World Total	100.0	100.0	100.0	100.0	100.0	100.0
Total Trade Value						
\$ billion	66,185	93,365	15,997	17,751	2,631	3,047

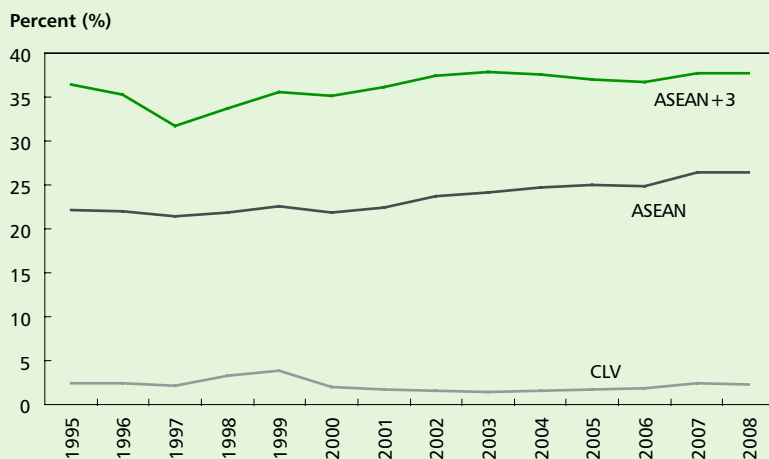
ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; AUS & NZ = Australia and New Zealand; CER = Central Europe, Eastern Europe, and the Russian Federation; Lao PDR = Lao People's Democratic Republic.
Source: International Monetary Fund. 2009. *Direction of Trade Statistics and World Economic Outlook*. October.

three countries are presented in Tables A2.1 and A2.2, in the appendix to this chapter.

The CLV countries are typically highly dependent on imports from their neighboring countries and on exports to countries outside the region. In 2008, for example, they sourced 80% of their imports from East Asia, while only 40% of their total exports were destined to these regions. The remaining 60% were mainly shipped to North America (about 25%) and Europe (20%). This export structure evolved over the last 2 decades, as North America and Europe replaced former Soviet bloc countries as the main export destination for the CLV countries. For example, in 1990, North America and Europe accounted for only 10% of the CLV exports, but just 10 years later, their combined share had climbed to 30%.

Cambodia has seen the most dramatic change in its trade structure. Today, more than 90% of its imports come from East Asia, compared with 60% in 1990; while about 60% of its exports go to North America, compared with almost none in 1990. Over the last 2 decades, Viet Nam

Figure 2.3: Intra-regional Trade Share in Selected Regional Groups, 1995–2008



ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

Source: International Monetary Fund. 2009. *Direction of Trade Statistics and World Economic Outlook*. October.

has also become much more dependent on imports from East Asia and on exports to North America and Europe. The Lao PDR's trade structure, however, has remained relatively stable during this period (Tables A2.1 and A2.2 in the appendix to this chapter).

A striking characteristic of the CLV countries is the very low extent to which they trade among themselves. As Figure 2.3 shows, during the last 15 years or so, intra-regional trade among the CLV countries has always remained below 4% of total trade (it was 2.3% in 2008). This absence of reciprocal trade flows is quite telling about the low degree of economic integration among Cambodia, the Lao PDR, and Viet Nam. After all, the relative importance of intra-regional trade versus external trade is a straightforward measure of interdependence.²

As discussed earlier, however, such low intra-regional trade among the CLV countries does not represent a serious disadvantage from a broader regional perspective because the CLV countries could participate

²Intra-regional trade share of region $i = (X_{ii} + M_{ii}) / (X_{iT} + M_{iT})$, where: X_{ii} = intra-regional exports (exports of region i to region i), M_{ii} = (intra-regional imports) imports of region i from region i , X_{iT} = total exports of region i to the world, and M_{iT} = total imports of region i from the world.

in regional production networks and supply chains through the resource-based and labor-intensive comparative advantages they enjoy. This can be seen in the relative importance of imports from and exports to other ASEAN countries, which have barely changed over the years.

While there are historical, political, and economic reasons for the very low trade interdependence among the CLV countries, Figure 2.3 illustrates how the trends for other ASEAN+3 economies are different. While intra-regional trade has remained relatively constant as a share of total trade for the CLV countries, intra-regional trade in the other ASEAN+3 countries has climbed. Within ASEAN, it rose from 21% in 1997 (the year the financial crisis broke out) to 27% in 2008, while it increased from 32% to 38% for the whole of ASEAN+3 countries.

A more sophisticated indicator of regional interdependence is trade intensity, which measures the tendency of countries in a given region to trade with partners located within that region.³ Intra-regional trade intensity is calculated as the ratio between the intra-regional trade share (nominator) and the share of total world trade with the region over total world trade (denominator). It increases not only when a region has a larger weight in world trade, but also when intra-regional trade rises faster than the region's share of world markets.

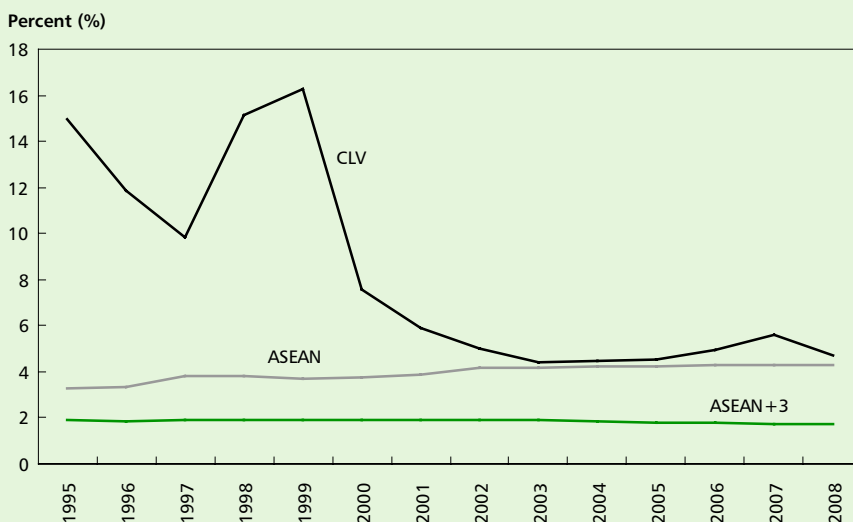
Figure 2.4 presents the evolution of the intra-regional trade intensities for the CLV, ASEAN, and ASEAN+3 countries since 1995. It shows that, as the CLV economies have become more integrated with East Asia and have expanded their trade with the rest of the world, their intra-regional trade intensity has declined. The CLV countries' share of total world trade has in fact increased rapidly during the last 15 years as they have traded much more intensively with non-CLV economies than among themselves, as mentioned above. This has mainly been a result of their increasing trade relations with North America, Europe, Oceania, and other regions of the world.

2.1.2 Regional Production Networks and Trade and Investment Cooperation

The comparative advantage of the CLV countries still lies in primary resource-based activities and labor-intensive manufacturing. However, the similarity in their comparative advantages can be seen as an obstacle to greater cooperation among them. This is because their trade structure appears to be more competitive than complementary. In the context of the ASEAN market, however, this is not necessarily an obstacle to greater integration: The CLV countries can be a complement to the comparative

³Intra-regional trade intensity of region i = $[(X_{ii} + M_{ii}) / (X_{iT} + M_{iT})] / [(X_{Ti} + M_{Ti}) / (X_{TT} + M_{TT})]$, where: X_{Ti} = total exports of region i to the world, M_{Ti} = total imports of region i to the world, X_{TT} = total world exports, and M_{TT} is total world imports.

Figure 2.4: Intra-regional Trade Intensities in Selected Regional Groupings, 1995–2008



ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

Source: International Monetary Fund. 2009. *Direction of Trade Statistics and World Economic Outlook*. October.

advantages of other ASEAN countries, which have increasingly focused on manufactured goods at the higher end of the value-added chain. Labor-intensive manufacturing and primary resource-based activities could, in principle, relocate to the CLV countries from the more advanced but higher labor-cost ASEAN countries, thereby facilitating integration of the CLV countries into the regional supply chain and production networks. This is already happening, for example, for Viet Nam in electronic parts and components.⁴

At the same time, a viable regional production network including the CLV countries would make the entire region more attractive as a destination for foreign direct investment (FDI). While the People's Republic of China (PRC) remains a great competitor in attracting FDI from the rest of the world, labor costs are increasing in its coastal areas, and factors such as Viet Nam's proximity to the PRC and the desire of some foreign investors to diversify their country risk could cause foreign investors look elsewhere

⁴Chia (2006). It must be noted, however, that for the CLV countries to be fully part of the production networks, much still needs to be done to reduce the risk of supply disruptions, and to improve their human capital resources and physical infrastructure.

when setting up production facilities. In turn, the transfer of technology engendered by FDI could greatly help reduce the income gap between the CLV countries and the rest of the region, making ASEAN a stronger and more united group politically and economically.

The common desire to integrate into the ASEAN, East Asian, and global economies has led the CLV countries to embrace greater openness and a market orientation. Following the East Asian model, they have promoted trade liberalization and welcomed foreign investment in recognition of the role economic openness can play in fostering economic development. In particular, accession to the ASEAN Free Trade Area (AFTA) has drastically reduced the protectionist nature of the CLV trade regimes and their bias against export-led growth. Because the CLV countries joined ASEAN after the idea of AFTA had been introduced in 1992, and because they are at a notably lower degree of development than the ASEAN average, they have been given more time to meet their tariff reduction obligations. The deadline for the CLV countries to reduce or eliminate tariffs is 2015 instead of 2010, the deadline for the rest of the ASEAN countries. The other ASEAN countries have also adopted an “integrated system of preferences” for imports from the CLV countries. Under this unilateral preferential scheme, the deadline for eliminating tariffs on most products in 11 priority sectors was set at 2012 for the CLV countries, compared with 2007 for the other ASEAN countries.⁵

The CLV countries have also sought accession to the World Trade Organization (WTO) to gain the benefits of most-favored nation status, and to expand international trade and encourage FDI. Cambodia, the Lao PDR, and Viet Nam have realized that, as WTO members, they could improve their international reputation in a way that will enable them to defend their interests better. They would also be able to use the WTO’s trade dispute mechanism to settle trade disputes with other member countries. Accession to the WTO has been a long and difficult process, yet the three countries have persevered. They have had to undertake reforms in domestic economic policies and legal frameworks, and they have had to strengthen or create institutions to comply with WTO membership requirements. Some of these reforms are still being implemented. Cambodia applied for WTO membership in December 1994 and became a member in October 2004, while Viet Nam applied in January 1995 and became a member only in November 2006. The Lao PDR applied in July 1997 and negotiations are still underway.

The CLV countries have also signed bilateral trade agreements with the United States (US): Cambodia in 1996, Viet Nam in 2001, and the Lao PDR in 2005. Laws to attract FDI and other foreign investment were

⁵Myanmar is also being granted such privileges under the AFTA scheme.

enacted in the late 1980s and mid-1990s, and have since been amended to bring them more in line with those of other ASEAN countries by relaxing restrictions on foreign ownership and providing investors with numerous fiscal incentives (Syed 2006). Both WTO membership and bilateral agreements with the US have also been instrumental in setting deadlines for the CLV countries to open up their service sectors to foreign firms.

The growing role of the PRC in the CLV economies represents a significant development in the regional economic relations of the three countries. Since the early 2000s, for example, the PRC has become Cambodia's biggest investor, and it is showing increasing interest in transferring some garment production to the Lao PDR.⁶ Moreover, Viet Nam's foray into electronics is part of that country's progressive integration into regional production networks, as mentioned above. Its manufacture of such goods for export to advanced markets such as Japan, North America, and Europe is largely centered on a PRC-driven trade model. All this is evidence that it is possible to engage the PRC in a way that is beneficial to smaller economies such as those of the CLV countries.

Economic openness, however, also involves certain disadvantages. The Lao PDR's relatively less-developed status, for example, means that trade and investment with the PRC may be dominated by natural resources such as gold and copper that the PRC needs to further industrialize; and this, in turn, might crowd out the production and export of manufactured goods by the Lao PDR. As in other ASEAN countries, such as the Philippines, FDI in extractive industries can also be a double-edged sword because it promotes growth without generating much employment, given the capital-intensive nature of such industries. It is thus important for countries like the CLV to improve their human resource skills to raise productivity and attract FDI in labor-intensive manufacturing.

2.1.3 Lessons from Other ASEAN Members

The CLV countries have much to learn from the experiences of other ASEAN members. While the other members did not have to make a transition from centralized to market-oriented economic systems, they did have to transform themselves from largely producers of primary goods—with heavily protected domestic markets and limited foreign markets—to globally competitive industrial tigers.

In many ways, the challenges the CLV countries face today in forging closer economic integration through trade liberalization with regional neighbors are reminiscent of the fears among the older ASEAN countries when they first embarked on the AFTA program, in the early 1990s. A major issue, for instance, is the ability of the CLV countries to coordinate

⁶Sotharith (2006). This may be partly due to the unfilled garment quotas of the PRC.

and promote regional integration and domestic structural reforms simultaneously, something that will require building domestic support and overcoming institutional constraints. A major lesson that the CLV countries can draw from the experiences of the older ASEAN members is that, despite all the problems and dire predictions of doomsayers, they benefited significantly from trade liberalization.

In the early 1990s, it was difficult for the older ASEAN members to see the rationale for regional cooperation and integration because their neighboring countries had comparative advantages in similar products, such as primary and low-level manufactured goods. They were wary about their ability to cope with increased competition, given the limited size of their domestic markets and their inadequate human, financial, and institutional resources. Because the older ASEAN countries had initially adopted a strategy of import substitution supported by a protectionist trade policy, it was not easy for the authorities to sell the idea of trade liberalization to entrenched domestic interests whose success was built on close ties with government. In addition, the adjustment costs engendered by inevitable structural changes would necessitate the creation of social “safety nets,” especially for the poor, which most countries could not afford. Thus, it was difficult to build a coalition in support of more openness to trade and competition.

Some studies predicted a negative net effect from trade diversion, on account of welfare losses due to AFTA’s preferential treatment of inefficient regional producers. There were studies that envisaged losses in revenue from trade taxes, which would have indeed been an important problem for countries like the Philippines, where such taxes accounted for about a quarter of total tax revenues. Another issue was the expected increase in competition among ASEAN countries in attracting FDI. Some analysts saw this as an ironic outcome of integration because it would force countries in the region to compete rather than cooperate. One result would be that countries that lost out in the competition for FDI would be unable to make the desired transition to export-led industrialization from agrarian-based, highly protected economies. Instead, they would end up being saddled by an intensification of their traditional comparative advantage and thus remain in a “low labor trap” (Vo 2006, 13).

AFTA itself would probably not have seen the light of day but for the fact that it was the brainchild of ASEAN foreign ministers rather than of trade ministers, who traditionally saw big business as their constituency. Domestic authorities were thus more willing to use the binding commitment to AFTA to implement measures to liberalize trade and investment, something that would not have been possible through unilateral efforts alone. Hence, AFTA helped to promote liberalization by opening domestic markets to competition from the outside while pursuing regional integration. With lower AFTA-induced tariffs, domestic producers

would have to become efficient enough to compete not only in regional markets for their exports, but also against imports in their home markets.

With the exception of the Philippines, most of the older ASEAN countries pursued reforms and enjoyed export-led growth after a short period of import substitution. The CLV countries, however, have had a much shorter and more precarious history of economic liberalization and market orientation since the start of their reforms, in the late 1980s and early 1990s. Furthermore, unlike the older ASEAN countries, the CLV countries are undergoing this transformation at a time when income gaps with regional neighbors remain wide. This creates a stronger incentive for the CLV countries to make up for lost time and integrate themselves faster into regional production networks.

2.2 Monetary and Financial Integration

Despite the achievement of substantial integration of trade and investment in East Asia in recent decades, the Asian financial crisis of 1997/98 drew stark attention to the need for greater regional monetary and financial cooperation. This was partly due to the realization that national regulations cannot handle external shocks or regional spillovers manifesting themselves as financial contagion. Also, the crisis produced frustrations with the prevailing international financial architecture and with the absence of a global lender of last resort. The immediate priority of regional policy makers in the aftermath of the crisis was to reduce the vulnerability of countries to financial-market volatility and to develop a defense system with safety nets against future crises. They also wanted to reduce the practice of recycling local savings through Western financial markets, accomplishing this by deepening Asian financial markets and monetary integration (Dieter 2007, 3; Park and Wyplosz 2007, 7).

The ASEAN+3 Finance Ministers Meeting, launched in 1999, was aimed mainly at helping Asian countries out of the financial crisis. It resulted in two initiatives that were subsequently institutionalized: the Chiang Mai Initiative (CMI), to shield regional currencies from speculative attacks of the type suffered by the Thai baht and other regional currencies during the crisis; and the Asian Bond Markets Initiative (ABMI), to promote the development of local capital markets.

As the crisis unfolded, Japan proposed to create an Asian Monetary Fund (AMF), but the US and the International Monetary Fund (IMF) both opposed the plan. When Japan was forced to abandon the idea, ASEAN+3 countries established the CMI, in May 2000, creating a system of bilateral contracts to swap international reserves in the event of future currency

crises. The swap arrangements involved the monetary authorities of the PRC, Japan, the Republic of Korea, and the five largest ASEAN economies: Indonesia, Malaysia, the Philippines, Singapore, and Thailand (ADB 2008). Due to the limited transactions involving the national currencies of Cambodia, the Lao PDR, and Viet Nam—the riel, the kip, and the dong—these currencies were not included in the CMI.

Recently, ASEAN+3 finance ministers decided to multilateralize the CMI by creating a managed pool of regional reserves. They also agreed to establish a regional surveillance agency to monitor the macroeconomic conditions of member countries, expand the total size of the CMI to \$120 billion, and reduce the need for IMF conditionality in the use of regional funds. In May 2009, an important additional step was taken toward institutionalizing the CMI: an agreement on contributions to be made by individual countries, the countries' voting rights, and on the fund's governing mechanisms and implementation schemes.

While the CLV countries were not included in the original CMI, they are now part of the CMI multilateralization (CMIM). Their relative importance in the overall mechanism of pooled reserves remains low, however, due to the small size of their economies and the limited use of their currencies. Table 2.3 compares the shares of the ASEAN+3 countries' GDPs and international reserves to their CMIM contributions. The CLV countries, with a combined share of less than 1% of the ASEAN+3 total GDP and international reserves, covering approximately 1% of the CMIM total reserve fund, or \$1.15 billion (\$120 million from Cambodia, \$30 million from the Lao PDR, and \$1 billion from Viet Nam). The next important step for the CMIM is the creation of an independent agency to conduct regional surveillance. While both ADB and ASEAN Secretariat have been assigned to provide initial support for the establishment of the agency, discussions are still underway among ASEAN+3 members on where to locate it.

The other important initiative to promote regional financial and monetary integration, the ABMI, was aimed at developing Asian capital markets. It was adopted in 2002 to help widen the variety of local currency-denominated bonds in Asian markets and improve market infrastructure, nationally and regionally. ASEAN also launched a study in 2000 on the possibility of creating a regional bond market, which would help protect investors against maturity and currency mismatches, identified as being among the major causes of the 1997/98 financial crisis. However, this idea was sidelined in favor of one that involved ASEAN+3, to include Asia's major financial players. In addition to the ABMI, Asian central bankers, under the auspices of EMEAP, created an Asian Bond Fund (ABF) to help develop Asia's bond markets by investing in dollar-denominated sovereign and quasi-sovereign bonds issued by Asian countries. Both the ABMI and the ABF were effective in increasing the attractiveness of local currency bonds to foreign investors, developing deeper and more liquid financial

Table 2.3: ASEAN+3 Countries: CMIM Contributions, GDP Shares, and International Reserves

Countries/ Groups	GDP 2008 share (%)	International reserves	CMIM contributions	
		March 2009 share (%)	May 2009 share (%)	Value (\$ billion)
CLV countries	0.89	0.61	0.96	1.15
Cambodia	0.09	0.05	0.10	0.12
Lao PDR	0.04	0.01	0.03	0.03
Viet Nam	0.76	0.55	0.83	1.00
Other ASEAN countries	11.89	12.49	19.04	22.85
Brunei Darussalam	0.12	0.01	0.03	0.03
Indonesia	4.35	1.31	3.98	4.77
Malaysia	1.89	2.40	3.98	4.77
Myanmar	0.23	0.05	0.05	0.06
Philippines	1.43	1.07	3.07	3.68
Singapore	1.54	4.54	3.98	4.77
Thailand	2.32	3.10	3.98	4.77
Total ASEAN	12.78	13.10	20.00	24.00
PRC	37.37	53.42	32.00	38.40
Japan	41.80	27.85	32.00	38.40
Korea, Republic of	8.04	5.64	16.00	19.20
"Plus Three"	87.22	86.90	80.00	96.00
ASEAN+3	100.00	100.00	100.00	120.00

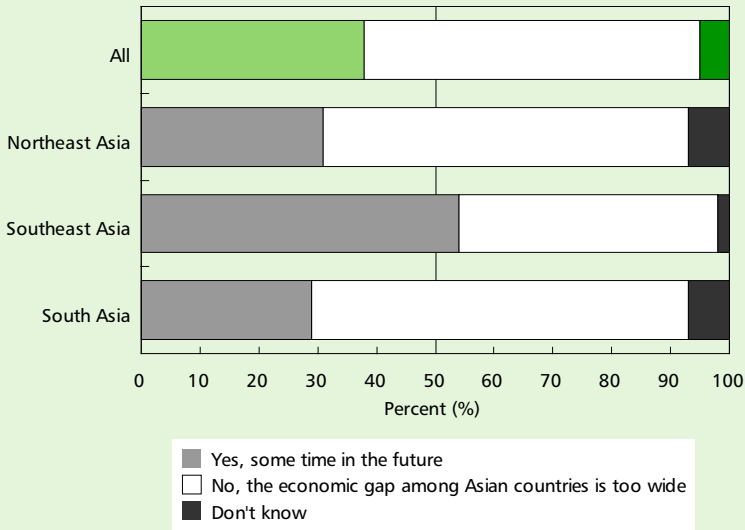
ASEAN = Association of Southeast Asian Nations, CMIM = Chiang Mai Initiative multilateralization, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Authors' elaborations based on data by the International Monetary Fund, ASEAN+3 finance ministers, central banks, and media reports.

markets in various Asian countries, and encouraging regulatory reforms (ADB 2008).

Since the Asian financial crisis, a large body of literature has emerged on the feasibility of creating a common currency in the region. It has been suggested that Asian countries could collectively peg their currencies to the dollar, the yen, or to a dollar–yen–euro combination; or establish a multilateral-currency basket. The resulting exchange rate stability would promote intra-regional trade and investment, and would encourage cross-border participation in local bond markets. Scholars are divided on the issue. Proponents of a common currency argue that it is possible to identify an optimum currency area (OCA) among selected East Asian

Figure 2.5: Asian Opinion Leaders' Views on Creating an Asian Common Currency



Note: The Asian Development Bank survey gathered responses from 600 Asian opinion leaders from Northeast Asia (244), Southeast Asia (198), and South Asia (158). The question on the common currency was as follows: After the financial crisis of 1997/98, many regional economic analysts suggested the creation of a common currency for Asia. In your opinion, will Asian countries ever create such a currency?

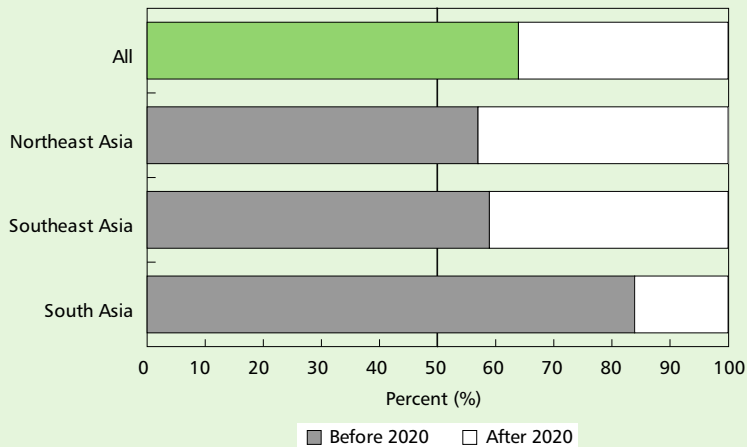
Source: Authors' elaborations based on the Asian Development Bank perception survey 2007.

countries that would make such a vision feasible. Skeptics, on the other hand, argue there are few indications that sufficient conditions exist for an OCA, and besides, they doubt that monetary authorities would cede their sovereignty to a regional central bank.

Asian opinion leaders are also divided. A survey conducted by ADB in 2007⁷ shows that more than half of Asian opinion leaders (58%) feel that creating a regional common currency is impossible because the economic gap among Asian countries is too wide. While a majority of opinion leaders from Southeast Asia (54%) are enthusiastic about the idea, those from Northeast and South Asia are more skeptical (Figure 2.5). The ADB survey also shows that, should an Asian common currency be created, opinion leaders believe that ASEAN+3 is the best grouping of countries to launch it, primarily because of the inclusion of the PRC and Japan. A second choice

⁷ADB (2008). The survey was conducted among opinion leaders in 12 Asian countries from four categories: academia, business, government, and the media.

Figure 2.6: Timing for an Asian Common Currency: ADB Survey's Responses



Note: Elaboration of total responses favoring the creation of an Asian common currency (226)—See Figure 2.5.

Source: Authors' elaborations based on the Asian Development Bank (ADB) perception survey (2007).

would be a subset of ASEAN countries with the kind of close economic convergence needed to launch a common currency. Once an agreement among Asian countries is reached to create a common currency, however, the survey shows that a large majority of opinion leaders (64%) believes that it could be realized before 2020 (Figure 2.6).

To be sure, there are different views among proponents of an Asian common currency regarding the combinations of currencies, timing, and processes (Kuroda and Kawai 2002; Wyplosz 2001). As a precursor to the common currency, some experts believe it would be useful to create an Asian Currency Unit (ACU)—or a basket of properly weighted Asian currencies—along the lines of the European Currency Unit (ECU), adopted in 1979. An ACU could be particularly useful in a variety of functions: (i) as a statistical indicator showing the trends of individual currencies against the regional benchmark, (ii) as a way to denominate new financial assets, and (iii) as an official unit of account for exchange rate policy coordination (Ito and Ogawa 2002; Kawai 2006). Other scholars also see value in introducing an ACU as a “parallel currency,” before economic conditions are ripe for a monetary union (Eichengreen 2006). This approach has an intrinsic appeal for the CLV countries because a parallel currency could replace the current system of multiple currencies, ensuring regional financial stability, and promoting intra-regional trade and investment.

Ironically, despite the attention given to the idea of regional monetary and financial integration and the popularity of monetary union, little in practical terms has been done to bring these to greater fruition. Although financial and monetary cooperation are usually lumped together, the truth is that financial cooperation is probably easier to undertake than monetary cooperation because there are fewer issues involving national sovereignty.

An important way to reduce the vulnerability of Asian countries to financial market volatility is to deepen and enlarge the size of their financial markets. Wider and deeper local bond markets could protect against currency and maturity mismatches, enable monetary authorities to conduct better sterilization operations, and improve financial intermediation. At the same time, closer regional financial integration could help promote capital market development. The CLV countries, for example, would certainly benefit from developing their bond markets. By doing so, they would be able to add open market operations and market-determined interest rates to their monetary policy arsenal, finance budgetary expenditures, mobilize and better allocate domestic savings, and protect their financial sectors from currency and maturity mismatches, especially as capital controls become more porous over time. In turn, this would help insulate the CLV countries from financial shocks as they further open their economies not only to trade but also to capital flows. Moreover, financial cooperation geared to developing regional bond markets could enable the use of the region's pool of savings for reinvestment within the region, particularly in the latecomers to economic development such as the CLV countries.

The basic idea behind using monetary cooperation to stabilize exchange rates is to limit fluctuations in bilateral exchange rates caused by external shocks or competitive devaluation. Such cooperation would further promote trade and investment integration. An oft-cited example is the exchange rate mechanism known as ERM1, which helped foster trade integration within the EU, especially for the smaller, least-developed members.⁸

While the conventional sequence for regional economic integration starts with trade followed by monetary integration, some have argued that the reverse strategy might be sensible in Asia (Dieter 2007). One reason is that, since barriers to trade in the region are already much lower than they were in the 1960s and 1970s in Europe, the benefits from regional free trade would be much more limited, at least for the larger countries. Similarly, the external conditions that allowed Europe to protect its financial markets until the late 1980s are no longer present today in

⁸Gil-Pareja et al. (2007). The analysis was conducted for the initial 15 members of the EU, and shows how monetary cooperation benefited countries such as Ireland, Portugal, and Spain by generating rapid increases in their intra-EU exports.

Asia, with its high degree of global financial integration. Also, the cost of financial instability is very high, and initiatives for financial cooperation, simultaneously with others for trade and investment cooperation, are high on the agenda for regional economic authorities. Yet another reason to put monetary and financial integration ahead of integration in the markets for goods and services is that free trade agreements are costly to implement. A monetary union, in contrast, may speed up intra-regional trade without requiring free trade agreements or other measures. In short, whereas free trade agreements immediately increase costs, a monetary union immediately reduces costs.

It is interesting to note that the CLV countries did experience monetary union in the past, under French colonial rule, when they had a common currency called the “piastre.”⁹ Adoption of the piastre boosted commercial exchanges with neighboring countries, especially the PRC, and ended the multiple-currency phenomenon, which was prevalent then, as it is in the CLV countries today.¹⁰ This experience supports the main finding of empirical studies that a monetary union facilitates trade. The colonial piastre was a metallic standard, first backed by silver and subsequently by gold at a fixed parity. However, this system did not last. The silver standard was abandoned as the world price of the precious metal started to gyrate wildly. And, following the trend in other Asian countries, the French colonial government abandoned the gold standard soon after its adoption.

This experience of the CLV countries with a common currency cannot be regarded as an unambiguous success. One reason was the inherent weakness of any commodity standard, as illustrated by the world’s experience with the gold standard, which ended when the US abandoned the dollar’s peg to gold in 1971. The other reason was simply bad timing: The CLV countries had adopted the gold standard just as their neighbors were abandoning it. However, the apparent lack of political commitment by the French colonial administration made the choice of separate, nationally based monetary frameworks and exchange rate regimes less than ideal.

Aside from the issue of sequencing the different forms of integration, for monetary dialogue in the region to be effective, it should aim not only to define the goals, but also to secure the highest level of commitment and cooperation from the countries involved. Monetary union may not necessarily be the final goal. Some analysts have pointed out that liquidity assistance, monitoring and surveillance, and exchange rate stabilization

⁹See the paper by Henri Bourguinat, in the Appendix to this book.

¹⁰As briefly discussed in Chapter 1, the multiple-currency phenomenon denotes the presence of several currencies circulating in the economy, with specific functions, alongside the domestic currency. This phenomenon is analyzed in greater detail in the second part of this book.

might be the maximum level of cooperation that any given group of Asian countries would be currently willing to pursue. For the CLV countries, their rudimentary monetary policy frameworks and weak financial positions preclude them from any leadership role in regional monetary and financial policy making. However, their desire for more meaningful cooperation may be a motive force not only for dialogue among themselves but also with the more mature Asian economies, who in turn see bridging the information and income gaps with the CLV countries as a prerequisite to strengthening the region as a whole.

2.3 Monetary Policy in the CLV Countries

As Chapters 3, 4, and 5 show, the CLV countries currently conduct a very basic form of monetary policy with a limited array of indirect tools and multiple goals, although price stability is said to be the main priority of their monetary authorities. Based on the economic history and current situation of these three transitional economies, the lack of a reliable revenue base has been a major constraint on overall macroeconomic stability and on the proper and effective conduct of monetary policy.

Unlike in Cambodia, where most state-owned enterprises have been recently privatized, the state sector remains dominant in both Viet Nam and the Lao PDR, despite the avowed shift in the two countries to a greater market orientation. This heavy presence of the state in these economies, especially in banking, tends to damage fiscal viability because directed lending and implicit subsidies through low-interest loans to state-owned enterprises lead to budgetary deficits. This situation undermines the proper and effective conduct of monetary policy, since the temptation to monetize the deficit is great, resulting in inflation. It also discourages the development of financial markets, given the tendency of the government to resort to outright monetization rather than bond issuance. As long as state-owned commercial banks dominate the banking systems in these two countries, there will be little competition and therefore little incentive for their banks to become efficient and profitable. Nor is there much incentive for these governments to allow the economy to operate in line with market principles. The resulting large nonperforming loans limit the effectiveness of monetary policy through bank lending or other credit channels. Despite the fact that macroeconomic stability may be achieved in the CLV countries, there is a risk that the situation may unravel again, especially with a greater exposure to external shocks and porous capital controls as countries become more regionally and globally integrated. Reducing the role of the state in the economy, therefore, is a major priority.

Another significant obstacle to the effective conduct of monetary policy is the high degree of dollarization in Cambodia and in the Lao PDR,

the latter also facing the problem of multiple currencies. Although the degree of dollarization is less pronounced in Viet Nam, it is difficult for authorities there to adjust the exchange rate to ensure a level conducive to export growth. Aside from the loss of seigniorage revenue, there is also an inherent tightening bias in monetary policy, since the central bank cannot print dollars. Of course, some observers have regarded this as a blessing because governments are less able to impose an inflation tax. Indeed, in recent years, neither Cambodia nor the Lao PDR has monetized their budget deficits. The experience of Viet Nam, however, suggests that by undertaking reforms and ensuring the stability and growth of the economy so that confidence in the domestic currency returns, progress toward de-dollarization can be achieved quietly and indirectly. This has not happened, however, in the two other economies. In Cambodia, despite large interest rate spreads in favor of the riel, at least 95% of deposits remain denominated in dollars.

Exchange rate stability is an important way to control inflation in small, open economies such as the CLV countries. But the transmission process of monetary policy to prices is not completely clear. While the three countries see price stability as the main goal of monetary policy, it is uncertain whether the money supply is being used to stabilize the exchange rate, and thus control inflation indirectly through a low exchange-rate, pass-through effect, or to control inflation directly, as is the case within a monetarist framework. Stable inflation would give rise to a stable exchange rate. But using the money supply to stabilize the exchange rate means that, since money supply is endogenous, it would have to respond to offset exchange-rate shocks. In contrast, controlling the money supply to control inflation only indirectly stabilizes the exchange rate, and it does not directly offset shocks to the exchange rate.

As Huot Pum and Khan Vanek explain in Chapter 3, Cambodia uses monetary policy to stabilize the exchange rate to lower the pass-through effect to inflation. Its monetary policy, for example, mainly aims at maintaining price stability through exchange rate stability. The objective of the National Bank of Cambodia is to smooth out fluctuations of the two major currencies (the riel and the dollar), which is why exchange rate stability is sometimes the objective of monetary policy, even if the main aim is to maintain price stability. In all three CLV countries, price stability is usually the goal of monetary policy, but not always the only one.

In Chapter 4, for example, Phouphet Kyophilavong shows that the Lao PDR monetary policy is seen to play a key role in reducing poverty, as was the case in other ASEAN countries in the past. Similarly, in Chapter 5, Nguyen Van Dinh describes how the monetary authorities in Viet Nam formulate their policy to take into account concerns about income equality as well as growth, and by creating an economy that is based both on market and socialist principles. The problem, however, is that pursuing

these multiple ends may become inconsistent with the main goal (or goals) of monetary policy.

Given the absence of well-functioning financial markets, the CLV countries suffer from a shortage of indirect monetary instruments. In Cambodia, for example, authorities use foreign exchange–market intervention in the form of purchases or sales of dollars for local currency to affect the money supply and the exchange rate. This process, however, is constrained by the quantity of dollars available to the central bank. Moreover, because the few indirect tools of monetary policy that are available are still administered largely by the government, the effectiveness of monetary policy may be undermined. Under such circumstances, it would be difficult to establish empirically that monetary policy affects inflation to a significant degree. All three CLV countries must face the difficult task of maintaining consistent monetary and exchange rate policies while undertaking reforms to liberalize their financial sectors and gradually open up their capital accounts.¹¹ Another important problem is that monetary authorities face critical information gaps that impede effective policy making and implementation.

Responses to increased capital flows, especially large private investment inflows, are major problems for CLV monetary authorities. They lead to pressure on the domestic currency to appreciate, making it more difficult to implement exchange rate policies. All three CLV countries understand the importance of exchange rate stability in controlling inflation, as well as the need to maintain a competitive exchange rate to spur export growth. As capital controls become more porous and neighboring countries commit to liberalizing their capital accounts, CLV monetary authorities may need to adopt an alternative policy framework, since the exchange rate stabilization may no longer be sufficient to control inflation.

The CLV countries share the need to formulate an appropriate framework to make monetary policy more effective and, more importantly, to help complete the market-oriented transformation of their economies, which will better their position in today's globalized world. If the CLV countries see regional cooperation and integration as an economic and political objective, they will each need to adopt a monetary framework that would not be wedded to the dollar. Given the greater openness to the outside world, any new monetary framework devised by a CLV country would have to take into account the vulnerability of its domestic economy to external shocks, and the fact that such shocks imply both opportunities and risks. In this respect, the CLV countries find themselves at a crossroad

¹¹The capital account in Cambodia is already quite open.

similar to that which their Asian neighbors faced in the aftermath of the financial crisis in the late 1990s.

Like most of their ASEAN neighbors, the CLV countries have now become open economies, more integrated through trade into the wider ASEAN+3 region and into the rest of the world. If some form of regional monetary cooperation is introduced, however, the overall framework for monetary and exchange rate policy will need to change, and stability against the dollar might not be as important as it is today, especially for the more highly dollarized economies of Cambodia and the Lao PDR. Furthermore, as the case of Viet Nam illustrates, carrying out the reforms necessary for transforming the domestic economy along market-oriented principles, combined with integration into the region and the rest of the world, can itself be a successful de-dollarization strategy. While dollarization may have served the CLV countries well in the recent past, particularly in restraining the temptation to monetize their budget deficits, de-dollarization will likely be a long-run goal, to be achieved after reforms have been successfully undertaken and institutions built or strengthened.

2.3.1 Optimal Monetary Framework

An optimal monetary framework—and an exchange rate regime consistent with it—are essential ingredients for economic growth and stability. While the monetary framework needs to serve as an appropriate and credible nominal anchor, an optimal exchange rate regime is one that produces the best conduct of monetary policy. Actually, the exchange rate regime must also be compatible with the realities of a country's past, contemporary politics, and the nature of its markets and institutions. Otherwise, there will be a great temptation to breach the rules (Hochreiter et al. 2002, 197). In other words, the choice of an optimal exchange rate regime does not occur in a vacuum, but rather in a context of specific economic and political conditions. It also cannot be chosen independently of the optimal monetary strategy. As emphasized in the literature on this subject,¹² when selecting their optimal monetary policies, national authorities should compare alternative exchange rate regimes, looking at the credibility of anti-inflation policy and the spillover effects of monetary policy, as well as taking into account the degree of independence of the central bank.

The identification of an optimal monetary strategy by a country's central bank (or other monetary authority) traditionally begins with the choice of a nominal anchor—either an exchange rate—or a monetary-based one. The choice of a nominal anchor depends, in turn, primarily on the nature of the shocks that usually hit the economy, and on the structural features that affect its ability to absorb these shocks. A monetary anchor

¹²For example, see: Hamada (1976). Also Rogoff (1985, 2003).

is generally preferred if shocks to the economy originate in the real sector (such as shocks to consumer tastes or the productivity of firms), while an exchange rate anchor is preferred when shocks originate in the financial sector (such as money demand shocks, shifts in desired international portfolio compositions, and so on). In the CLV countries, the openness of their economies to trade and their expanding export base make them vulnerable to terms-of-trade shocks and large fluctuations in export income, suggesting a monetary anchor. But the actual choice of a monetary-based or an exchange rate-based anchor will also depend on the relative weight assigned by the monetary authorities to the stabilization of inflation versus output-value or balance-of-payments targets.

Since a country generally experiences *both* real and monetary shocks, a purely monetary or a purely exchange rate anchor could be inadequate, giving rise to rigidity in policy responses to different types of shocks. Furthermore, one has also to consider the effect of financial innovation, which usually accompanies greater liberalization of the financial sector and the capital account. In many cases, however, financial innovation and liberalization can lead to instability in the money demand function, thus making it difficult to opt for a monetary anchor. In the CLV countries, for example, rapid monetization has led to a decline in the velocity of money, creating potential instability in the money demand function. In other words, for CLV countries, it may be difficult to implement the usual financial programming prescription of targeting monetary aggregates.

In the aftermath of the Asian financial crisis in the late 1990s, countries such as the Republic of Korea, the Philippines, and Thailand gave up on using a monetary anchor, unilaterally opting for direct inflation targeting to anchor inflationary expectations through a more flexible exchange rate regime. One clear advantage of such a strategy was that it anchored inflationary expectations while allowing policy makers some flexibility in responding to economic shocks based on their nature and likely duration. As a matter of fact, in the post-crisis period, many East Asian countries have adopted monetary frameworks aimed at achieving price stability through inflation targeting (Genberg 2006, 13).

As economic interdependence has rapidly expanded among East Asian countries, and as the risk of monetary and exchange rate volatility has increased with it, the rationale for closer monetary and exchange-rate policy cooperation in the region becomes stronger by the day. In particular, given that exchange rate regimes vary across the region, with some key currencies such as the PRC yuan using a *de facto* fixed rate against the dollar (although in theory the yuan is supposed to be anchored to a basket of currencies) while many other currencies use free floats, intra-regional exchange rate variations may negatively affect the smooth functioning of the regional production networks and supply chains, creating possible sources of economic and financial vulnerability. Sudden exchange rate

variations of East Asian currencies against currencies from within or outside the region also affect capital flows, and may produce monetary imbalances. This is especially true now that the advanced economies are recovering from the global economic and financial crisis, and Asian countries are leading the way out.

Regional monetary and exchange-rate policy cooperation in East Asia can begin, for example, through the setting of a common inflation target, without necessarily involving the coordination of exchange rates. This would be compatible with capital mobility, and would likely favor price stability, financial market integration, convergence in interest rates, and intra-regional exchange rate stability. Following this approach, exchange rate stability would be the outcome of a process in which the countries choose their own optimal monetary strategies and successfully control inflation, rather than having exchange rate stability imposed in advance through a mechanism coordinating exchange rates across the region.

Viet Nam has committed to adopting an inflation-targeting framework in the very near future. However, some analysts suggest that Viet Nam should target the real exchange rate instead (Packard 2005, 2007). They reason that Viet Nam (along with Cambodia and the Lao PDR) does not currently meet the prerequisites for inflation targeting. As is shown in Chapters 3, 4, and 5, all the CLV countries are greatly concerned about maintaining their domestic currency at a competitive level to help exports, as are the other East Asian countries. Furthermore, an inflation-targeting monetary framework would focus only or mostly on controlling inflation and this may have an anti-growth bias.

If a CLV country were to decide in favor of an exchange rate anchor, it is not obvious which type of exchange rate regime would deliver the best monetary policy, including a credible anchor and solid rules to make the exchange rate regime work properly. It is also not obvious whether the choice of exchange rate regime would affect economic performance. The experience of the European Monetary Union (EMU), for example, suggests that the exchange rate regime each country had adopted before joining the eurozone was not critically important to economic performance afterward. Empirical studies show that the European countries that had adopted a floating exchange rate based on inflation targeting performed as well as, or even better than, other EMU members in satisfying the Maastricht convergence criteria, particularly on inflation (Hochreiter et al. 2002, 131). But this finding is not unchallenged. Studies examining evidence from countries in Central Europe and the Baltics find support for the inflation-reducing effect of fixed exchange rates, even when removing most convertibility restrictions.

Hence, it remains difficult to establish a clear link between a particular exchange rate regime and a country's future economic performance, even when the goal is to adopt a common currency eventually, as in the case of

the EMU. The implication is that it is possible to achieve greater economic integration and good monetary policies under any exchange rate regime: historical, political, and institutional factors, rather than purely economic ones alone, may be the main criteria for deciding which kind of exchange rate regime to adopt. The main advantage of adopting inflation targeting as a regional monetary framework is that it does not force member countries to coordinate their exchange rates at a certain level; instead, it allows them to maintain sovereign monetary frameworks. And adopting a regional inflation-targeting framework may be useful for the CLV countries, giving them the necessary impetus to introduce domestic reforms to make this framework viable. There are, however, two main risks in choosing this indirect form of cooperation. First, countries may not feel compelled to strictly follow the target in the absence of a monitoring system, sanctions, or an incentive mechanism. Second, the actual inflation-targeting criteria each country applies, such as fluctuation bands and inflation indicators, need to be closely coordinated across the region. Otherwise, the standards may differ too much from country to country, leading to a variety of outcomes with different degrees of stringency.

2.4 Rationale for Regional Monetary and Financial Cooperation

A sovereign country can always unilaterally select a nominal anchor for monetary policy and an exchange rate regime without consulting with its neighbors. However, policy spillovers in the form of positive and negative externalities affecting neighboring countries create a strong rationale for monetary and exchange rate policy cooperation, especially in the presence of increasing regional economic interdependence. In such a situation, noncooperation among regional members would lead to a suboptimal equilibrium (Hamada 1976), so a country's unilateral approach to welfare and efficiency maximization is ruled out. Particularly when there are significant externalities—given that a government serves a wider constituency than its own citizens—cooperation can be seen as an effort by individual countries to maximize their payoff matrixes jointly. It is also a way to internalize spillovers, thus contributing to better national and regional economic policies and outcomes.

Regional cooperation assumes a particularly positive connotation for countries such as the CLV—in which institutional deficits constrain the conduct of optimal monetary policy—because it can serve as an institutional framework for achieving political and economic objectives. As the European experience shows, the adoption of an effective regional cooperation framework can strengthen the efficiency of national institutions, foster economic development, and reduce the income gap

between advanced and developing countries. And small, open developing economies such as the CLV countries usually have more to gain from regional cooperation and integration.

Cooperation on a monetary strategy may occur in different forms and with varying degrees of intensity. Countries may simply exchange information and consult each other before deciding on their own what best suits their needs. Or they may agree to a deeper form of cooperation. Concerning the exchange rate regime, they may consider proposals that would not require ceding national sovereignty, as would be the case with a common currency. As discussed earlier, an example of an implicit form of cooperation would be using inflation targeting—to anchor inflationary expectations—in combination with a more flexible exchange rate regime. In any case, starting a regional monetary dialogue could be a useful way for countries searching for an optimal monetary arrangement to learn from each other's experiences and find solutions to common economic challenges. Regional monetary and exchange rate policy cooperation may also help reduce the detrimental use of competitive devaluation. In the case of a monetary union, for example, competitive devaluation of member currencies would cease to exist as an option.

Through regional cooperation, countries can establish certain “rules of the game” and set up an appropriate monitoring mechanism to ensure that such rules are adhered to. In turn, regional surveillance could improve the conduct of monetary policy in individual countries, thereby preventing crises. Cooperation would also allow for the pooling and mobilizing of reserves to assist member countries in times of crises, and it could enhance confidence among members. Moreover, it is often politically more palatable for policy makers to accept advice and assistance from neighbors in the region than from multilateral institutions such as the IMF. The memories of the failure of the IMF to effectively act as a lender of last resort during the Asian financial crisis are still fresh in the minds of many regional policy makers.

As the data presented above show, financial integration in East Asia is increasing fast from initially quite low levels. And several new initiatives for financial cooperation are now deepening the regional integration taking place in the real economies. This process could be even further strengthened with more formal means of cooperation and the necessary institutional infrastructure to support it. While the CLV countries are lagging in financial integration and cooperation among themselves as well as with their neighbors, they are among the largest beneficiaries of regional initiatives, which can complement their weak institutional frameworks and help sustain economic their development and “quality growth” (Leung 2006, 6).

While there are good economic reasons for countries to cooperate with each other, there are also major obstacles that stand in the way.

Countries will agree to monetary and financial cooperation when they conclude that its benefits are higher than its costs, and when specific mechanisms for regional cooperation are already in place. But it is intrinsically difficult for countries to make a clear cost-benefit analysis with respect to their national interests: Even if political difficulties could be surmounted, there would be technical problems in modeling and measuring the potential gains from cooperation. In the presence of limited information, cooperation may also be perceived as benefiting only other members at the expense of one's own country. The literature casts doubt on the benefits from financial cooperation. Recent studies on international monetary coordination using game theory do not support the conclusion that, in the presence of monetary policy spillovers, cooperation among central banks is necessarily welfare-improving. One conclusion is that the anti-inflation credibility of monetary authorities may be better served by a certain degree of competition in international monetary policy. For instance, Rogoff (1985) shows that monetary policy coordination leads to a better Phillips curve trade-off for central banks, and that this may not be a good thing. With cooperation, any unilateral monetary expansion induces real exchange rate depreciation. However, given the better Phillips curve trade-off, wage setters would then expect higher inflation, thus worsening the anti-inflation credibility of the national monetary authorities. Other works show the importance of understanding the nature of spillover effects arising from other countries' policies and the ability to anticipate their moves. Canzoneri and Gray (1985) emphasize that the design of an optimal exchange rate regime should be sensitive to the nature of policy spillovers, especially whether the domestic monetary policy affects output and employment in other countries (Canzoneri and Henderson 1991; Rogoff 1989).

Even if these theoretical qualifications could be dismissed, the significant differences in the history, culture, political systems, and levels of economic development of Asian countries remain formidable obstacles to regional cooperation, especially since they make it difficult for countries to agree on common principles. To some extent, however, the CIV countries, as a subregional grouping of ASEAN, might be better able to circumvent such differences due to their shared economic history and contemporary affinities, and to move toward the formation of a common vision for monetary and exchange rate policy cooperation.

Having a feasible common vision is important because its articulation may by itself affect the dynamics of regional cooperation and the economic performance of individual countries. The satisfaction of the optimum currency area (OCA) criteria, for example, is linked to the decision to form a monetary union. If countries agree on a common goal, and their actions are subject to the judgment of their peers in the region as well as that of their domestic constituents, this would affect the nature and speed

of their policy actions and reforms. If a common vision is well articulated, countries in the region might feel the need to coordinate their policies and set a timetable for the attainment of that common vision.

2.5 Lessons from Europe

Many of the points made above regarding the benefits of regional cooperation can be better grasped through a look at the European experience, especially the formation of the EMU and the adoption of the Exchange Rate Mechanism 2 (ERM2), an exchange rate regime used for currency stabilization between the eurozone and non-eurozone countries. The ERM2 sets fluctuation bands and requires the monetary authorities of participating non-eurozone countries to keep the exchange rate of their currencies against the euro within the band. While adhering to a common exchange rate policy is not a prerequisite for joining the EMU, a clear requirement is belonging to the ERM2 and having a political commitment to the vision of a monetary union. Under these conditions, some EMU candidate countries opted to use an exchange rate anchor or hard pegs (such as a currency board), while others opted for more flexible exchange rate regimes with direct inflation targeting.

Hence, one lesson from the European experience is that the choice of the exchange rate regime by individual countries is not critically important to the ability to form a monetary union as long as they select nominal anchors that allow them to meet convergence criteria. Perhaps this invariance with respect to the choice of exchange rate regimes occurs largely because there is a common vision and political commitment to begin with. In any case, there is no requirement for the countries to have a common exchange rate regime during the transition period.

Countries using the ERM2 as a transitional regime before joining the eurozone, however, face substantial challenges. Since the bands limit exchange rate flexibility while capital remains mobile, capital inflows may increase during the transition period and lead to a trade-off between exchange rate stability and inflation, as investors are attracted by the end point of exchange rate stability under the monetary union. Allowing flexibility of the exchange rate in the midst of such capital inflows means a trend toward appreciation. On the other hand, nominal exchange rate stability implies continuous unsterilized interventions, inducing the money supply to grow and inflation to rise. If authorities try to meet the inflation criteria, they would need to use contractionary fiscal policy. And if inflation takes time to adjust because prices are sticky, this will have a recessionary effect on the economy. Inflation rates will tend to diverge across the region, with less synchronization of real output and business cycles.

The so-called Balassa–Samuelson effect is another possible complication of ERM2. As trade integration increases, most of the productivity gains will be in the traded goods sector rather than the non-traded goods sector, giving rise to real appreciation that induces either a trend toward appreciation of the nominal exchange rate or higher inflation. Hence, the trade-off between exchange rate stability and inflation intensifies, making it more difficult to meet the OCA criteria and achieve monetary union. These complications have led some scholars to advocate a flexible exchange rate solution for EMU candidate countries, as fixed exchange rates are dangerous in the absence of a hard peg and capital inflows, while flexible exchange rates can better cope with capital flow reversals.

Hence, another lesson from the European experience is that, in a world with high capital mobility, more exchange rate flexibility may be preferable to less. In the case of the CLV countries, capital controls are becoming porous, and capital inflows are becoming more pervasive. Such capital inflows are related to export income, FDI, and remittances from overseas workers. Hence, a high degree of exchange rate flexibility of the CLV countries' currencies against those of other East Asian countries might better accommodate rapid economic growth and real exchange rate changes.

Chow and Kim (2003) also suggest the importance of introducing exchange rate flexibility in the interim period before the adoption of a common currency in East Asia. They show that a common currency peg, in tight form or with a narrow band, would be quite costly given the idiosyncratic economic structures in East Asian countries. They also argue that a flexible exchange rate regime will allow accommodation to potential inflationary shocks, which is important when there are large economic development gaps among countries, as is the case in East Asia. There is no need to resort to recessionary policies, such as a contractionary fiscal policy, to contain inflation. This is a particularly important point for the less-developed countries like the CLV ones, which need to spend more on public infrastructure to grow. And these countries need to grow to narrow their income gaps vis-à-vis the more developed countries, a potential hindrance to meeting the OCA criteria.

Of course, a more flexible exchange rate regime is not without its minuses. Allowing little or no foreign exchange market intervention in the presence of capital inflows and outflows will mean nominal appreciation and depreciation and, hence, greater exchange rate volatility. This could give rise to currency mismatches and distress in the financial and corporate sectors unless there is adequate financial market regulation and supervision. It is also unclear how a country with such volatility could eventually join a monetary union. If that is the aim, then the option of maintaining a very flexible managed float until more normal conditions

prevail (in terms of real exchange rates and capital flows) could postpone membership for a long time. Yet a fixed exchange rate regime might be no better. It could lead to greater divergence from OCA criteria because of capital inflows and real exchange rate appreciation, as discussed above.

Many questions remain unanswered. Is there hope for a common vision of monetary union for the CLV countries, for ASEAN, or for the wider East Asian region, if only in the distant future? Even if these countries share a vision of a common currency, will they all be able to meet the OCA criteria? Based on the European experience, the answer to both questions is yes.

Failure to meet OCA criteria at present does not close the door to currency union in the future. The European march toward currency union was really a crawl over several decades, beginning with trade liberalization, market integration, harmonization of standards, the creation of legal structures, and a long period of policy harmonization before monetary unification. East Asia is trying to follow a similar path, at least making some progress toward a harmonization of standards. One important step that helped the European countries to stabilize their currencies and promote economic growth was the introduction of the ECU, more than 3 decades ago. Even if they do not coordinate their exchange rates or pursue a common currency, East Asian countries may end up realizing the importance of creating an ACU as a basket of regional currencies. An ACU could at least serve as a regional benchmark against which exchange rates could be monitored. Also, individual countries could determine their optimal monetary strategies by analyzing divergence indicators. The second half of this book explores this possibility in greater detail.

In summary, the CLV countries may find merit in pursuing monetary and exchange rate dialogue among themselves, within ASEAN, and with the wider East Asian region. The CLV countries and other East Asian countries can effectively use existing structures—such as ASEAN+3—to engage in much-needed cooperation over monetary and exchange rate policies aimed at increasing financial stability.

Appendix

Table A2.1: CLV Countries: Evolution of Exports Structure (% share on total)

% share To	2008 Exports of			2000 Exports of			1990 Exports of		
	Cam- bodia	Lao PDR	Viet Nam	Cam- bodia	Lao PDR	Viet Nam	Cam- bodia	Lao PDR	Viet Nam
Cambodia	–	0.1	1.9	–	0.0	1.0	–	–	0.4
Lao PDR	0.0	–	0.2	0.3	–	0.5	–	–	0.6
Viet Nam	4.9	13.2	–	1.7	24.6	–	16.7	5.5	–
ASEAN	9.8	50.4	13.4	6.8	42.7	18.1	74.6	68.4	13.8
ASEAN+3	13.6	64.5	36.4	9.9	47.1	48.9	82.5	84.6	28.7
East Asia	14.0	65.7	39.9	11.2	48.0	54.4	83.4	85.0	40.5
Europe	22.5	11.0	18.9	20.6	26.2	20.6	7.1	9.9	11.3
North America	60.4	2.8	22.4	66.3	2.6	5.9	0.4	1.6	0.1
AUS & NZ	0.3	0.0	7.6	0.2	0.1	8.9	0.2	0.1	0.3
CER	1.2	0.8	3.1	0.1	0.9	1.9	2.8	0.5	4.8
Rest of World	1.5	19.7	8.1	1.5	22.1	8.3	6.1	3.0	43.0
World Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Trade Volume									
\$ billion	4,292	1,637	60,257	1,123	391	14,483	42	64	2,525

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; AUS & NZ = Australia and New Zealand; CER = Central Europe, Eastern Europe, and the Russian Federation; Lao PDR = Lao People's Democratic Republic; \$ = US dollar, – = not applicable.
Source: International Monetary Fund. 2009. *Direction of Trade Statistics* and *World Economic Outlook*. October.

Table A2.2: CLV Countries: Evolution of Imports Structure (% share on total)

% share	2008 Imports of			2000 Imports of			1990 Imports of		
	Cam- bodia	Lao PDR	Viet Nam	Cam- bodia	Lao PDR	Viet Nam	Cam- bodia	Lao PDR	Viet Nam
Cambodia	–	0.0	0.3	–	0.5	0.2	–	–	0.3
Lao PDR	0.0	–	0.3	0.0	–	0.7	–	–	0.1
Viet Nam	15.4	4.7	–	6.4	11.3	–	17.9	11.8	–
ASEAN	54.7	74.9	25.1	38.9	77.7	28.5	43.3	60.9	19.0
ASEAN+3	77.8	91.2	64.2	56.3	87.3	63.3	58.2	86.2	27.0
East Asia	91.2	92.1	77.6	88.0	88.9	77.9	61.4	87.1	36.1
Europe	3.0	3.7	6.6	6.6	6.5	8.8	28.3	9.0	13.3
N. America	2.2	1.4	4.1	2.8	0.7	2.6	0.1	0.8	0.2
AUS & NZ	0.5	0.6	2.1	0.5	0.9	2.3	2.5	0.9	0.4
CER	0.3	0.3	1.4	0.1	0.3	1.9	2.5	na	4.0
Rest of World	2.8	1.9	8.2	2.1	2.7	6.6	5.2	2.3	46.1
World Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Trade Volume									
\$ billion	8,065	2,814	82,486	1,425	690	15,637	56	149	2,842

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; AUS & NZ=Australia and New Zealand; CER = Central Europe, Eastern Europe, and Russian Federation; N. America = North America; na = no data available; – = not applicable.

Source: International Monetary Fund. 2009. *Direction of Trade Statistics* and *World Economic Outlook*. October 2009.

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Cambodia: Coping with Dollarization

Huot Pum and Khan Vanak

A notable feature of Cambodia's economy is its high level of dollarization, which presents policy makers with the challenge of how best to sustain growth and reduce poverty. Cambodia's monetary authorities neither sought nor encouraged dollarization, but since the country adopted an open economy and a liberal exchange rate system, the dollar has effectively become a second national currency alongside the riel.¹ In fact, the dollar has become *the* dominant currency. As a result, monetary authorities cannot influence money supply directly, although they can control related variables such as base money and the reserve requirements of banks. High dollarization has also led to a loss of flexibility in exchange rate policy. Since most traditional monetary and exchange rate instruments are not available to the National Bank of Cambodia (NBC), the central bank finds it very difficult to conduct policy effectively (Box 3.1). As a consequence, the burden for macroeconomic adjustments in Cambodia falls mainly on fiscal policy.

The banking system was established in 1954, after the closure of the Bank of Indochina. The central bank was founded at the same time. Both were abolished, however, during the Khmer Rouge regime (1975–1979), but were reintroduced in 1980. The banking system at that time could be described as a mono-bank system.

Under this system, the monetary authority functioned as both a central and commercial bank through a network of provincial branches and agencies. For international transactions, the central bank established the Foreign Trade Bank of Cambodia (FTB).² The name of the central bank, the People's National Bank of Cambodia, was changed to the National

¹The national currency of Cambodia was introduced for the first time in 1955, after the collapse of the Bank of Indochinese. The piastre, which was the common currency of the Indochinese zone, was replaced by the riel.

²FTB was separated from NBC in 1996, and was under the supervision of the Ministry of Economy and Finance until 2005. FTB has been privatized since the beginning of 2006.

Box 3.1: History of the National Bank of Cambodia

(Note: During the change of each political regime, the name of the central bank for the country was changed accordingly. Here, to facilitate the understanding, we can assume that the name of the central bank for Cambodia is always “National Bank of Cambodia/NBC”.)

The National Bank of Cambodia (NBC) was established on 23 December 1954, after the country gained independence from France in 1953 and the Indochina Printing Institution was closed. NBC printed its own national currency, the riel, to completely terminate the monetary alliance with the currencies of Viet Nam and the Lao People’s Democratic Republic, the *piastre*. A local banking system was established, in which state and private banks operated together within the country.

In 1964, to pursue the nation building policy of the *Sangkum Reastre Niyum*, the banking system was reformed and NBC transformed from a semi-autonomous institution into a state-owned bank with commercial characteristics. Domestic and foreign private banks were closed, and the government established some state-owned banks such as Bank of Inadanajati, Development Bank, and the Rural Agricultural Bank. From the end of 1970 to April 1975, the state liberalized the banking system once again. Private banks were allowed to operate along with state banks under NBC’s regulation and supervision.

Unfortunately, on 17 April 1975, under the Pol Pot regime, NBC was closed, the banking system totally destroyed, the NBC building left in ruins, and use of riel banknotes abandoned. On 10 October 1979, NBC was reopened.

In an effort to address the obstacles facing the banking system, Dr. Chea Chanto, NBC governor, became one of the founders of the new NBC. At that time, NBC had to be reconstituted from scratch because there were no financial resources, documents, experience, or human resources. The country’s intellectuals had been either killed or scattered, or were reluctant to return to work out of a fear that Pol Pot’s regime would return.

NBC set up a new leadership structure as well as operational activities. In addition, the bank extended its network to 20 provincial and municipal branches. NBC re-issued riel banknotes on 20 March 1980 to facilitate the exchange of goods in the daily lives of the people and for the payment of civil servant’s salaries. During the 1980s, the banking system was a mono-banking system. NBC functioned as the monetary authority; the cashier of the government in the form of the National Treasury; and the provider of banking services including credit, deposits, and payment system.

The ruined NBC building was demolished and then rebuilt in 1990. Since 1989, the banking system has been gradually reformed through the transformation of the 20 provincial and municipal banks into specialized provincial and municipal banks operating with economic and financial

autonomy in their territory. NBC played its role as monetary authority to direct and supervise these banks. In 1991, the first commercial bank (Cambodia Commercial Bank) was established as a state joint-venture Bank to attract investors and serve the activities of the United Nations Transitional Authority in Cambodia (UNTAC).

On 30 January 1992, the National Assembly adopted the Law on the Change of Organization's Name and Duty of the Central Bank of Cambodia.

The Paris Peace Accord on 23 October 1991 proved to be a political milestone that led to the transformation of the economic regime from a planned economy to a free-market economy. This resulted in a change in Cambodia's banking system from a mono-banking system to a two-tier banking system. Furthermore, the state authorized banking activities in Cambodia in the form of commercial banks under local laws and branches of foreign banks. These required NBC to strengthen its management capacity and its role as banking supervisor through a series of laws and *prakas* that include the following:

- Law on the Organization and Conduct of NBC, adopted by the National Assembly on 26 January 1996. This law specified that the principal mission of NBC is to "determine and direct the monetary policy aimed at maintaining price stability."
- The Law on Foreign Exchange, adopted by National Assembly on 22 August 1997.
- The Law on Banking and Financial Institutions, adopted by National Assembly on 18 November 1999.

Finally, NBC compiled and prepared the Financial Sector Blueprint for 2001–2010, which formed part of the government's Financial Sector Development Strategy, aimed at building public confidence in the banking system and helping to integrate the country into the global financial system.

In summary, the brief history of NBC can be divided into three stages:

- From 1954 to 1975, the period during which NBC gained independence in operations, including autonomy to print riels as the national currency and manage Cambodia's banking system.
- From 1975 to 1979, the period during which NBC was closed and the whole banking system totally destroyed.
- From 1979 to present, the period during which NBC was reborn and has been gradually strengthened to a point where it has gained recognition from the international community.

Bank of Cambodia in 1994, a year after the United Nations Transitional Authority in Cambodia (UNTAC) organized and supervised the first general elections. The mono-bank system was transformed into a two-tier banking system in 1996 with technical assistance from the International Monetary Fund (IMF). Under the new system, NBC functions as a banking supervisor for second-tier banks.

NBC's monetary policy has aimed at maintaining price stability. In 2005, broad money (M2) and bank deposits grew by about 16% year-on-year, with the upward trend continuing into 2006, reflecting robust economic activity and improved confidence in the banking system as a result of political stability. Moreover, NBC will likely continue its managed floating exchange rate policy in the future, avoiding intervention in the market to target a specific exchange rate. Instead, it intervenes only to limit exchange rate volatility. Despite the growth in bank deposits and lending, the share of the riel in these areas has been as low as 4% and 6%, respectively, indicating the highly dollarized nature of Cambodia's economy. While authorities want to encourage greater use of the national currency, they have emphasized that they have no intention of imposing restrictions on the use of foreign currency. Instead, they envisage that greater use of the riel will develop as an outcome of economic development. In this respect, the need to maintain macroeconomic stability is key (Box 3.2).

The main purpose of this chapter is to review current monetary and exchange rate policies in Cambodia and assess the country's ability to introduce policies that could be coordinated among Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam.

3.1 Economic Performance and Reform Since 1990

Ty (2006) divides the recent history of Cambodia's economy into three major periods: the collapse of the socioeconomic system after the fall of King Sihanouk's regime in the 1970s, the transition to a market-based economy following the Paris Peace Accords in 1991, and the current economy.

3.1.1 Collapse of the Socioeconomic System

A General Lon Nol-led coup d'état on 18 March 1970 ended the regime of King Sihanouk. The monarchy was dissolved and Cambodia became the "Khmer Republic." This signaled the collapse of the socioeconomic system in Cambodia.

The new government, however, faced a war waged against it by Sihanouk and North Viet Nam, which badly damaged the country's economy. Production and exports were substantially reduced, and by 1972, Cambodia, which had traditionally been a net exporter of rice, had

Box 3.2: Short History of Cambodia's Monetary and Exchange Rate Policies

A monetary union created in 1950 among France's colonies of Indochina stood as the equivalent of a central bank of Indochina, which included Cambodia, the Lao People's Democratic Republic, and Viet Nam. After independence in 1953, Cambodia introduced its own currency, the riel, which was pegged to gold and backed by 13 million non-tradable French francs and 4 million francs in France's own treasury. Cambodia enjoyed remarkable stability under the leadership of King Sihanouk until the late 1960s, when it became mired in the Viet Nam war. This saw a period of devaluations and hyperinflation. A flexible rate system was then introduced in 1971, and the exchange rate for tourism and imports was abolished and a unified exchange rate adopted. But in 1973, a dual exchange rate system was reintroduced with a "basic" rate for most transactions and a "preferential" rate for aid-related imports and services. A three-tier exchange rate structure was introduced in 1974. During the Khmer Rouge period (1975–1979), economic activities were entirely managed by the state apparatus. The currency was banned, banks and markets were all closed, and barter was a unique feature of Democratic Kampuchea (DK).

In the immediate post-DK era, the Thai baht and Vietnamese dong were used for transactions across the country. In 1980, a national currency backed by rice was introduced. The currency was named the Cambodian riel in 1990. After that, the exchange rate system consisted of two rates: the official rate and the parallel market rate.

Massive central bank financing of recurrent budget deficits during 1988–1991 led to high inflation in the range of 90%–177% a year. This eroded public confidence in the national currency.^a The official exchange rates were unified in 1993, and since then, a managed floating regime has prevailed. Cambodia's economy became effectively dollarized during 1991–1993 when Cambodia was administered by the United Nations. The dollar still circulates freely and is used for payments along with the riel.

^aMost of the public tried their best to protect their own assets. They sold their riel-denominated assets in exchange for gold in the first phase and for the dollar in the second phase. They got stuck with dollars afterward.

to import rice for the first time. The rice harvest that year was less than one-third of normal levels.

The war ended in 1975, with the National United Front's entry into Phnom Penh, and the fall of Saigon in Viet Nam. Unfortunately, as soon as Pol Pot took power, he began to destroy all existing culture and socioeconomic systems over a period of more than 3 years. Free economic activities were prohibited and people were forcibly resettled in the countryside to work

in collectives to produce rice. It is estimated that more than 1.5 million Cambodians were killed or died of starvation under the regime. By the time Viet Nam's troops ousted the Khmer Rouge government in early 1979 and installed a communist government loyal to Ha Noi, Cambodia's physical infrastructure was in ruins and its human capital base shattered.

3.1.2 Transition to a Market-Oriented Economy

Up until the 1980s, Cambodia was still an agriculture-based economy. Rice, timber, rubber, fishery, and other agricultural products were the main exports that sustained the economy. Indeed, it is estimated that over 80% of the total labor force was involved in agriculture.

The Paris Peace Accord in 1991 brought Cambodia long-awaited peace. It contributed significantly to political stability and paved the way for a transition to a market-oriented economy, along with a new Constitution. As a result, a lot of structural reforms took place within the next 10 years, and continue to this day. The stages of reform can be divided into five periods:

- The start of the transition period (1993)
- An economy based on foreign aid (1994)
- Strong foreign investment in the garment industry (1995–1996)
- Political instability and the effects of the Asian financial crisis (1997–1998)
- Association of Southeast Asian Nations (ASEAN) regional integration (1999–present)

In 1993, UNTAC settled into Cambodia with the main objective of keeping peace. By that time, a large number of nongovernment organizations (NGOs) were active in the country trying to reduce poverty. Cambodia at this time was viewed as a country dependent on foreign aid. In August 1994, the government set up the Council for the Development of Cambodia as a “one-stop shop” for approving foreign direct investment (FDI) projects. This generated more foreign investment, especially from companies led by ethnic Chinese in ASEAN countries such as Malaysia and Singapore, as well as from the People's Republic of China (PRC) and Taipei, China. Investment also flowed in from Australia, France, the United Kingdom, and the United States (US). According to the World Bank, FDI in Cambodia has dramatically increased since 1994. In 1995 alone, it grew 10-fold over the previous year to around \$100 million. Between August 1994 and September 1996, the Cambodian Investment Board, which approves incentives available to domestic and foreign investors as well as investment applications, approved 330 applications amounting to \$2.8 billion. Most FDI has targeted hotel construction, casinos, logging, and light industry, especially garment manufacturing.

Cambodia's market-oriented economy produced high growth until 1997, when two shocks hit the economy: the Asian financial crisis and political unrest within the country. The domestic political instability caused most international aid institutions to suspend their activities and foreign firms to cease production. FDI also decreased dramatically.

Political stability eventually returned, however, and this, combined with Cambodia's historic entry in April 1999 into ASEAN, helped put economic growth back on track.

3.1.3 The Current State of Cambodia's Economy

Cambodia's economy performed reasonably well in 2008, with gross domestic product (GDP) growing 6.8% despite high oil and food prices (Table 3.1). Normally, the economy contracts slightly in the second quarter due to seasonal factors, then picks up in the third and fourth quarters. However, in 2008 the economy contracted more sharply in the second quarter, with GDP down 8.2%, hit not only by higher oil and food prices but also by political uncertainties ahead of the election. GDP growth then bounced back in the third quarter to 7.3% in response to government policies aimed at curbing food and petroleum product prices, a return of political stability following the general elections in July, and a resurgence in agriculture during the harvest season. Growth during the fourth quarter, which is traditionally strong, however, was battered by the global financial crisis that started in the US, and Cambodia's GDP shrank 3.6% (Figure 3.1).

Per-capita income in Cambodia rose from \$253 in 1994 to \$699 in 2008 (Table 3.1). As a result, the poverty rate fell from 47% in 1994 to 35% in 2004 and 30% in 2007 (Royal Government of Cambodia 2008). This represents a per annum rate of poverty reduction of 1% over the period. Moreover, poverty declined throughout the country, in both rural and urban areas (Figure 3.2).

The government has adopted prudent fiscal and monetary policies to manage inflation and ensure macroeconomic stability. In 2008, it was able to bring the inflation rate under control. Although inflation peaked at 25.72% in the second quarter because of high oil and food prices and an appreciation of the dollar, it was contained at 13.46% by the end of the year and averaged 19.73% for the whole of 2008. Inflation is expected to decline to single digits in 2009. The exchange rate, meanwhile, is broadly stable at 4,065 riels (KR) to the dollar, while foreign exchange reserves climbed to more than \$2 billion, equal to 3 months of imports (Table 3.1).

In the short term, Cambodia will continue to face challenges caused by the global financial and economic crisis, the worst to hit the world since the Great Depression of the 1930s. In general, the four pillars of

Table 3.1: Cambodia: Main Economic Indicators

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008e
GDP at current price (KR billion)	9,191	10,129	11,719	13,408	14,089	15,633	16,781	18,535	21,438	25,754	29,849	35,042	41,968
GDP at current price (\$ million)	3,481	3,387	3,105	3,515	3,651	3,984	4,280	4,663	5,339	6,293	7,275	8,614	10,325
GDP per capita (\$)	295	281	253	282	288	312	331	350	394	455	514	594	699
Real GDP (% increase)	5.3	5.7	5.0	12.6	8.4	8.1	6.6	8.5	10.3	13.3	10.8	10.2	6.8
GDP deflator in KR (% increase)	3.4	4.3	10.2	1.7	(3.1)	2.6	0.7	1.8	4.8	6.1	4.6	6.5	12.2
Inflation in KR (% increase, year average)	7.1	8.1	14.7	4.0	(0.8)	(0.9)	(0.1)	1.2	3.9	5.8	4.7	5.9	19.73
KR/\$ parity (year average)	2,640	2,991	3,774	3,814	3,859	3,924	3,921	3,975	4,016	4,092	4,103	4,068	4,065
KR/\$ parity (end of period)	2,720	3,400	3,800	3,775	3,895	3,910	3,934	3,983	4,030	4,127	4,056	4,003	4,130
Budget revenue (% GDP)	8.2	8.4	8.0	9.9	10.1	10.0	10.6	9.8	10.4	10.6	11.4	12.1	13.3
Budget expenditure (% GDP)	14.4	12.5	13.3	13.6	14.5	16.4	18.0	16.2	14.2	13.2	14.1	14.7	15.2
Current deficit/surplus (% GDP)	(0.9)	0.2	(0.2)	1.6	1.3	1.0	1.0	0.8	1.7	1.8	1.2	3.2	3.8

Continued on next page

Table 3.1 continued

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008e
Overall deficit/ surplus (% GDP)	(6.5)	(4.1)	(5.4)	(3.8)	(4.3)	(6.0)	(7.2)	(5.4)	(3.8)	(2.7)	(3.3)	(2.8)	(2.3)
Total liquidity (KR billion)	912	1,063	1,230	1,442	1,831	2,240	2,888	3,329	4,329	5,025	6,942	11,311	11,858
Total liquidity (% increase)	40.3	16.6	15.7	17.2	27.0	22.3	28.9	15.3	30.0	16.1	38.2	62.9	4.8
Total liquidity (% GDP)	9.9	10.5	10.5	10.8	13.0	14.3	17.2	18.0	20.2	19.5	23.3	32.3	28.3
Gross foreign reserves (\$ million)	234	262	390	422	484	548	663	737	809	915	1,097	1,616	21,04
Gross foreign reserves (months of imports G&S)	5.5	5.5	3.6	2.8	2.7	2.8	3.1	3.1	2.7	2.5	2.5	3.3	3.5
Population (million)	11.8	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.8	14.2	14.5	14.8

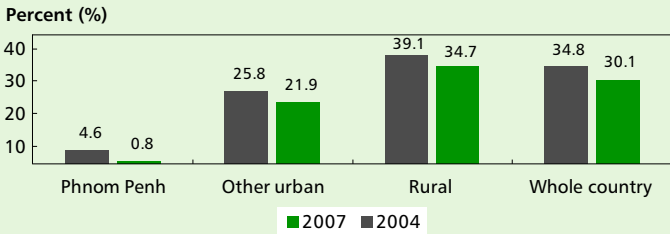
e = estimate, GDP = gross domestic product, G&S = goods and services, KR = riel, \$ = US dollar, () = negative value.
Source: Ministry of Economy and Finance, Department of Economic Policy (2009).

Figure 3.1: Cambodia: Quarterly Real GDP Growth Rates (%)



e = estimate, GDP = gross domestic product, Q = quarter.
 Source: National Institute of Statistics, Ministry of Planning (2008).

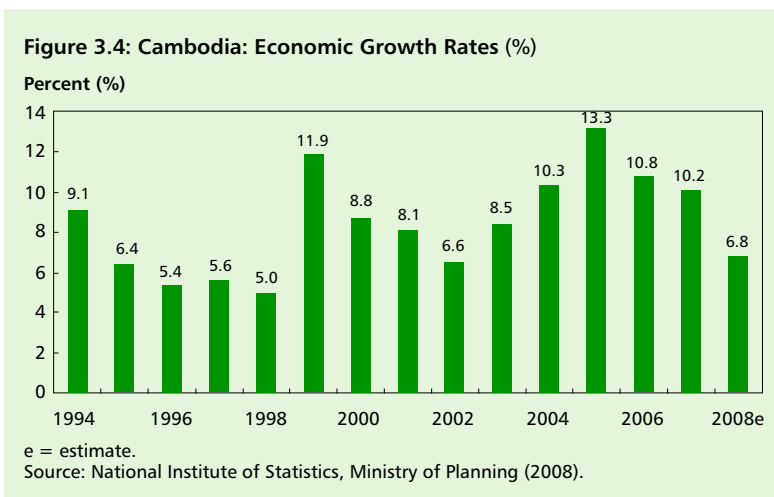
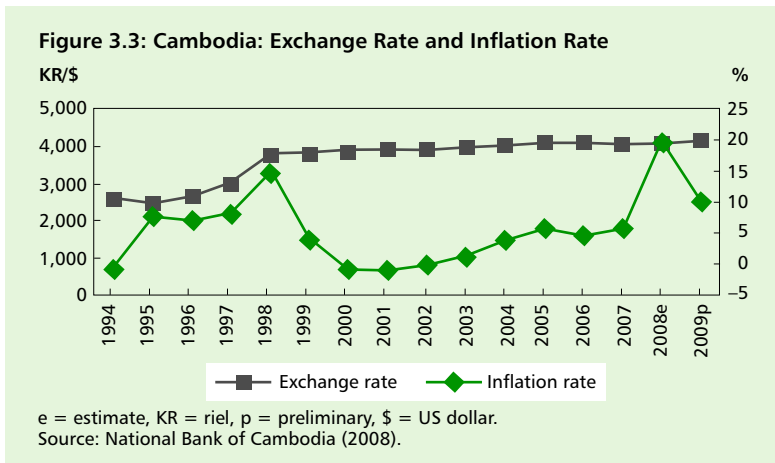
Figure 3.2: Cambodia: Poverty Rates (%)



Source: National Institute of Statistics, Ministry of Planning (2008).

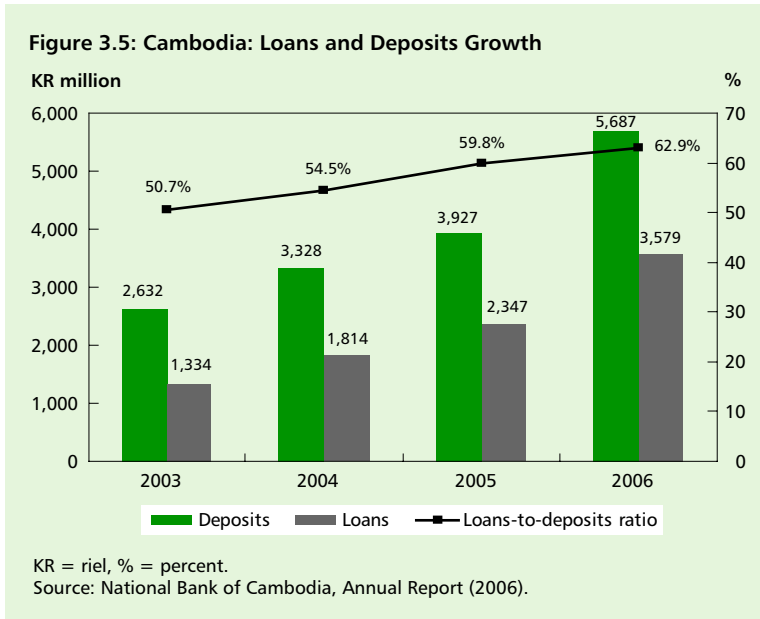
growth are agriculture, garments, tourism, and construction. Despite the global downturn, the economy remains in relatively good shape, underpinned by a continued increase in investment in agriculture, broad-based development of nonagriculture sectors, political stability, active private sector participation, reform efforts, increased official development aid, and sustained FDI.

Cambodia’s economic performance in 2008 was characterized by two key features. First, agriculture played a substantial role in maintaining GDP growth as other sectors, adversely influenced by external factors, contracted. Second, fiscal tightening combined with ongoing reforms in



public finance provided the fiscal space needed to address the immediate issue of soaring inflation driven by oil and food price increases. Cambodia was able to contain the inflation rate on average around 19.73%, while the price of oil and food surged three-fold and two-fold, respectively (Figure 3.3).

Economic growth in the last decade was robust, averaging around 9.4% annually. From 2003 to 2007, GDP grew at an average annual rate of 10.6%, peaking at 13.3% in 2005. Growth for 2008 is estimated at 6.8%, with a further decline in the growth rate expected in 2009 (Figure 3.4). The slower growth in recent years appears to be part of the business cycle, compounded by the impact of the global financial crisis.



3.2 Financial Markets and the Banking Sector

3.2.1 Banking and Financial Reforms

Over the last decade, developments in the banking sector have been significant, following a restructuring of the banking system in 1999. This has been evident in the degree of banking and finance sector stability, and the increase in financial services promoted through the institutional and legal reforms that were part of the government's 10-year financial sector blueprint, a long-term development plan adopted in 2001 and revised in 2007.³ Financial deepening as measured by the ratio of M2 to GDP has improved, rising from a modest level of about 8% in 1996 to 20% in 2005. This is an important indication of growing confidence in the banking sector, with the loan-to-deposit ratio climbing from 50.7% to 62.9% from 2003 to 2006 (Figure 3.5). Nevertheless, these services are still limited. Only around 15% to 20% of people living in cities use them. Moreover, deposits have not been optimally used to finance domestic demand. An estimated \$500 million to \$700 million in funds were considered as “sleeping money” in the banking system by the end of 2006 (NBC 2007).

³The updated development plan was renamed the “Financial Sector Development Strategy 2006–2015.”

Elsewhere, NBC's capacity to conduct both on-site and off-site banking supervision has been enhanced. Normally, banks are subject to at least one on-site examination every 2 years, but based on the assessment of the supervisor, they can be subjected to more frequent examinations, if it is deemed necessary. NBC also meets with the board of directors of banks that have not complied with prudential regulations to discuss measures they have taken to enhance operational and credit risk management. With respect to exemptions for large exposure limits, NBC is fully aware of the associated risks and grants exemptions only in cases where due diligence reveals that the loans are fully secured and the risks fully covered.

3.2.2. Cambodia's Banking Sector and the Global Financial Crisis

Cambodia's financial sector remains vibrant and competitive. The rapid increase in deposits in the commercial banks attests to growing public confidence inspired by transparent government policies and a level playing field for investors. In response to the global financial crisis, measures have been taken to recapitalize banks and financial institutions, improve audits, strengthen supervision, and ensure liquidity in the banking system. Beyond the crisis, the government's 10-year development plan for the financial sector (2006–2015) includes additional measures to improve the payment system, banking oversight, and capacity building for professional staff.

The global financial crisis had a minimal impact on Cambodia's banking sector:

- During 2008 and early 2009, there was no direct impact on the country's financial system. The principal reason is that the financial system is still developing and the degree of its involvement in global financial markets is still insignificant. Banks continue to perform traditional banking activities, relying on local deposits rather than external borrowing for their business. They also have no exposure to the securitized instruments that were at the root of the crisis.
- Based on capital adequacy, asset quality, earnings performance, and liquidity, the overall financial condition and performance of the banking industry during 2008 was satisfactory.
- The banking system expanded further, despite the crisis. In 2008, bank assets grew 30% over the previous year. The industry's net worth increased 76%, reflecting enhanced minimum capital requirements imposed by NBC and an increase in the number of operating banks. The sector also continued to be adequately capitalized. Although in recent years the growth rate of loans was relatively high, the capital adequacy ratio increased to 27.8% from

23.4% the previous year, well above the prudential requirement of 15%.

- The banking sector's liquidity position was satisfactory with the average liquidity ratio reaching 81% at the end of the year. All banks met the prudential minimum ratio of 50%.
- The ratio of nonperforming loans to total loans increased to 3.7% in December 2008 from 3.4% the previous year, a negligible rise. Nonetheless, the recent sluggishness in the real estate market may lead to deterioration in the quality of the assets of commercial banks and this could increase the risk of high nonperforming loans in the future.

3.2.3 Financial Structure

As of 2009, Cambodia's financial system consists of NBC, 24 commercial banks, 6 specialized banks, and 18 microfinance institutions (MFIs) (Figure 3.6). NBC is in charge of licensing, de-licensing and supervision of commercial banks, specialized banks, and MFIs, based on capital requirements, capital adequacy, asset quality, management, earnings, liquidity, and sensitivity to market risk rating systems.⁴

Because of market-oriented reforms, the financial system has been transformed. Financial liberalization has been introduced and foreign-funded commercial banks are permitted to operate in Cambodia. Since then, the number of commercial banks has significantly increased.

To obtain a license, commercial banks are required to have a minimum paid-up capital of KR50 billion (NBC 2004). When they are in full operation, they are required to place with NBC 10% of their minimum capital requirement as a capital guarantee, as well as 8% of their total deposits as reserves.

In general, commercial banks in Cambodia share some common characteristics. First, their total assets are very small and their management skills are weak. This results in high transaction costs in response to high fixed costs. Second, an insufficient information network leads to inefficiency in the economy. Third, services such as depositing and financing are provided only short-term and are concentrated only in urban areas, Phnom Penh in particular. With high transaction costs and high risks that banks apparently take, they must charge higher interest rates, which finally lead to inefficiencies in the allocation of funds.

Specialized banks concentrate on providing rural credit and loans to small and medium-sized enterprises. They are not allowed to take

⁴Law on Banking and Financial Institutions, adopted by the National Assembly on 18 November 1999.

Figure 3.6: Cambodia: Banking System (as of 30 April 2009)



Source: National Bank of Cambodia (2009).

deposits.⁵ Before obtaining a license, they must have a minimum paid-up capital of KR10 billion, according to NBC rules (NBC 2004). They are not yet required to place reserves at NBC.⁶

To meet its poverty reduction targets under the Millennium Development Goals, the Cambodia government allowed MFIs to be established to serve the needs of rural areas and the poor. Before obtaining a license, MFIs have to have a minimum paid-up capital of KR250 million (NBC 2004). Currently, it is estimated that MFIs provide approximately \$20 million in funds to 300,000 people in rural areas in what is believed to be an efficient means to reduce poverty in these communities. The biggest MFI in Cambodia was established in 1993 under the name ACLEDA (Association of Cambodian Local Economic Development Agencies). Sponsored by foreign-aid organizations, ACLEDA operates with more than 4,000 professional staff members in 24 provincial branches. Its domestic money transfer services rose from the equivalent of \$28.0 million in 2002 to \$68.5 million in 2003 to \$145.7 million in 2004. Most of these services were provided to rural areas. Since December 2004, ACLEDA has been licensed as a commercial bank.

3.3 Monetary Policy and the Multiple-currency Phenomenon

3.3.1 Monetary Policy: Aims and Objectives

According to the Law on the Organization and Conduct of NBC issued on 26 January 1996, “The principal mission of the central bank is to determine and direct monetary policy aimed at maintaining price stability in order to facilitate economic development within the framework of the country’s economic and financial policy” (Article 3). Price stability implies smooth fluctuations in the exchange and inflation rates, which is one of the core policies for stabilizing macroeconomic conditions. This clearly suggests that the ultimate goal of monetary policy is to stabilize the exchange rate, as well as lower the inflation rate. In fact, there exists a positive correlation between the exchange rate and the inflation rate in Cambodia. Experience shows very clearly that when the government has been able to control inflation, exchange rate fluctuations were minimized. To achieve the ultimate goal of price stability, NBC has first to ensure that exchange rate fluctuations are minimized, so that both the government and NBC can maintain a desirable level of inflation.

⁵These three main operations are receiving deposits from the public, loan making and services provided to clients.

⁶In the future, they may be required to hold 5% of their total deposits at NBC as a reserve requirement ratio, if pending new regulation comes into force.

3.3.2 Decision-making Process

POLICY INSTRUMENTS

Generally, there are at least three basic instruments for the conduct of monetary policy: open market operations (OMOs), the reserve requirement ratio (RRR), and the minimum capital requirement (MCR).

Unfortunately, OMOs, strictly speaking, do not exist in Cambodia due to a lack of government-backed securities such as treasury bills and government bonds. However, OMOs are defined by NBC as operations to purchase or sell dollars against the riel with the objective to stabilize the fluctuation of the exchange rate between the two currencies. NBC's function is to control the supply of dollars in circulation, but this is difficult to control because the economy is so highly dollarized. Nevertheless, NBC's operations can help adjust exchange rate fluctuations and thus maintain a stable and desirable level of inflation.

The RRR was applied in Cambodia for the first time in 2001, after the official launch of the Law on Banking and Financial Institutions in 2000. All commercial banks were required to keep 8% of their total deposits with NBC. Recently, to lessen the impact of the global financial crisis and strengthen domestic banking confidence, the central bank raised the reserve requirement for commercial banks to 12% of their total deposits. This instrument could also help NBC manipulate the money supply, but has so far not been employed efficiently. Specialized banks and MFIs have so far not yet been required to keep reserves at NBC.⁷

The MCR is the minimum capital required by NBC, as stipulated in the Law on Banking and Financial Institutions. All financial institutions have to hold some level of minimum capital according to their status. Article 1 of the *Prakas*⁸ on banks' minimum capital states that to "obtain a license, banks locally incorporated as companies, must have a paid-up minimum capital equal to at least 50,000,000,000 riels." This paid-up minimum capital has not been modified since 2000, but by 2012, it will be raised to KR150 billion for all commercial banks in Cambodia.

OMOs are the most effective monetary policy tools among the three available to the central bank. Since the application of the Law on Banking and Financial Institutions, NBC has used MCR and RRR primarily as a means to issue licenses to financial institutions.

⁷In the future, they may be required to hold 5% of their total deposits at NBC as an RRR, if pending new regulation comes into force.

⁸*Prakas* is a kind of official announcement (verbal or written) made by a ministry or equivalent institution to the public for use in a new law or regulation.

POLICY OPERATIONS

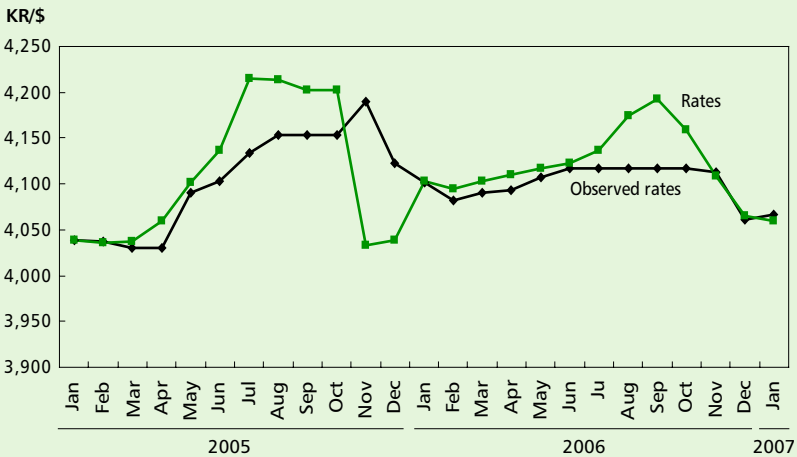
According to Article 7 of the Law on the Organization and Conduct of NBC, NBC enjoys independence in determining monetary policy objectives, in consultation with the government and in the context of the overall economic and financial policies of Cambodia. The law clearly says NBC can independently decide on its policies aimed at achieving price stability. It can decide on its own whether to increase or decrease the amount of money in the market through its OMOs. NBC is not obligated to monetize the budget deficit of the government. However, at the special request of the prime minister, NBC may be required to consult with relevant ministries about the possibility of using its foreign reserves to finance budget deficits. Article 9 on the Autonomy of the Central Bank states that “to accomplish its mission, the Central Bank shall be permanently empowered and shall have operating autonomy and shall submit reports of the implementation and results of its mission to the National Assembly and the RGC [Royal Government of Cambodia].” This clearly underscores the independence of NBC from the government in the conduct of monetary policy.

Since Cambodia’s economy is highly dollarized, NBC cannot effectively measure and control the dollar-denominated money supply in the economy. This implies that NBC is not completely independent, since any change in monetary policy by the US Federal Reserve can have an impact on Cambodia’s economy through foreign exchange rate effects.

The NBC governor may address meetings of the Council of Ministers at the invitation of the government. The minister or the state secretary of the Ministry of Economy and Finance (MEF) may address meetings of the board of directors of NBC at the invitation of the board. The governor or members of the board can appear before the National Assembly or any of its standing committees to explain the policies of the central bank or to comment on proposed legislation, at the request of the National Assembly.

Because both the government and NBC have the same final objective of ensuring sustainable economic development, they have to cooperate closely with one another. This means they have to establish common objectives and try to realize them through their respective policy instruments. NBC is in charge of monetary policy, while the government is in charge of fiscal policy. In this regard, NBC has to consult with the government from time to time to take effective and appropriate actions to stabilize the economy.

In the absence of a market for government treasuries or bonds, the central bank’s OMOs are mainly in the form of dollar auctions. The objective is to influence the dollar–riel exchange rate through purchases or sales of dollars or riels. NBC uses the dollar auctions to smooth exchange rate fluctuations, thereby helping to achieve price stability. For instance, when the fluctuation is in favor of the riel, NBC may inject dollars into the

Figure 3.7: Cambodia: Impact of Dollar Auctions on the Exchange Rate

KR = riel, \$ = US dollar.

Source: Elaborated by the authors based on the National Bank of Cambodia's data (2008).

market by purchasing excess riels until it achieves a stable exchange rate.

Foreign exchange auctions were introduced in September 1993. From then until April 2005, importers, money changers in the parallel foreign exchange market as well as commercial banks engaged actively in the auctions. However, starting in May 2005, all dollar auctions were conducted solely by NBC, because it was thought to be better able to manage the supply of dollars in the economy. NBC has since built a track record for being able to maintain the exchange rate at a level that contributes to price stability. Through its dollar auctions, it has been able to keep market exchange rates close to its targets (Figure 3.7).

With regard to interest rates, individual banks can freely set deposit and lending rates based on market competition. However, interest rates on the riel do not play a crucial role in monetary policy direction, because of the relatively small deposits in riels compared to dollars. The interest rate on deposits denominated in riels is normally higher than that in dollars. For example, the interest rate on 12-month fixed deposits in riels was 6.60% in December 2005 compared with 3.69% in dollars (Table 3.2). Despite this, deposits denominated in dollars accounted for more than 95% of total deposits. In the absence of bank refinancing, NBC is unable to direct interest rates, thereby limiting the scope for effective use of interest rate policy as a monetary instrument. The huge gap between deposits and loans denominated in dollars compared to riels reflects the high risk premium and high transaction costs.

Despite the weakness of riel interest rates as a monetary policy instrument, NBC has been able to achieve price stability. For instance, the

Table 3.2: Cambodia: Interest Rates on Deposits and Loans
(end of December, in %)

	2002	2003	2004	2005	2006	2007	2008
Interest rates on deposits in riel							
Saving deposits	2.41	2.19	2.13	2.13	2.13	2.14	2.05
Fixed deposit 1 month	5.60	5.85	5.85	5.85	5.85	5.05	4.48
Fixed deposit 3 months	5.04	4.82	4.68	4.68	4.42	4.78	5.20
Fixed deposit 6 months	6.00	6.00	5.60	5.60	5.40	5.75	6.46
Fixed deposit 12 months	7.20	7.00	6.60	6.60	6.40	6.75	7.65
Interest rate on deposits in \$							
Saving deposits	1.60	1.43	1.10	1.10	1.10	1.10	1.08
Fixed deposit 1 month	2.45	2.14	1.75	1.75	1.75	2.58	3.73
Fixed deposit 3 months	3.05	2.68	2.45	2.45	3.51	3.22	4.60
Fixed deposit 6 months	3.51	3.26	3.01	3.08	4.13	3.76	5.48
Fixed deposit 12 months	4.17	4.00	3.66	3.69	4.84	4.50	6.34
Interest rates on loans in riel							
Daily	24.00	24.00	24.00	24.00	24.00	24.00	24.00
1 month	21.00	21.00	21.00	21.00	21.00	21.00	18.77
3 months	21.20	21.20	21.20	21.20	23.02	21.20	18.77
6 months	21.00	21.00	21.00	21.00	23.04	21.00	18.77
12 months	21.00	21.10	18.70	18.60	23.07	20.25	22.36
Interest rates on loans in \$							
Daily	17.00	17.00	17.00	17.00	17.00	17.00	17.00
1 month	17.47	16.58	16.25	16.26	16.26	16.49	16.14
3 months	17.93	17.36	16.62	16.56	16.99	15.98	16.29
6 months	18.19	17.34	17.28	16.75	17.03	16.99	16.30
12 months	18.18	17.33	16.65	16.65	16.66	16.41	15.79

\$ = US dollar.

Source: Compiled by the authors based on Monthly Bulletins of Economic and Monetary Statistics, various years, National Bank of Cambodia.

annual inflation rate has been reduced from 170% during the early 1990s to less than 10% in the 2000s.

3.3.3 Status of the Reform Process

With respect to monetary policy, NBC has maintained a prudent monetary policy stance aimed at maintaining price stability. In 2005, M2 and bank deposits grew by 16.1% year-on-year, with the upward trend continuing into early 2006, reflecting robust economic activity and improved confidence in the banking system as a result of political stability. Credit

to the private sector grew by 29.4%, but this accounts for only around 10% of GDP. The low level of financial intermediation reflects the still inadequate legal framework. Efforts have been made to address this through the adoption of the Law on Negotiable Instruments and Payment Systems in 2005. The law provides an important legal framework for NBC to develop an effective money market, interbank market, and payment system (Hooi and May 2006).

The rapid pickup in the inflation rate from 2007 to mid-2008 was fundamentally triggered by external factors, reflecting rising oil and food prices globally. Meanwhile, core inflation also rose, accompanied by high monetary and credit growth and a real estate boom, indicating that demand and other domestic factors may also be exerting some influence on recent inflation rates.

In general, monetary policy seeks to respond to demand-side rather than supply-side inflationary pressures. In this context, in addition to the government's efforts to address supply side issues, monetary policy in 2008 was focused on mopping up excess liquidity from the economy, mainly emanating from continuous foreign exchange inflows over the past years, so as to achieve appropriate liquidity levels and dampen inflationary pressures in the economy.

Furthermore, learning from experiences elsewhere in the world with recent boom and bust cycles in real estate, NBC has also taken steps to avoid the overinvolvement of banks in real estate that could have adverse consequences for them. In this regard, regulatory policies have been used to supplement monetary measures.

In response to rising inflation and the need to strengthen the banking sector, NBC in recent years has introduced a package of the following monetary policy and financial stability measures:

- increasing the RRR from 8% to 16% for foreign currency deposits (the ratio has recently been reduced to 12% amid the risks to economic growth from the global financial crisis),
- introducing a 15% ceiling on commercial bank credit to the real estate sector (the requirement has been recently phased out and replaced by structural measures),
- enhancing the capital base of banks although an increase in minimum capital requirements,
- improving classification of bank assets and provisioning,
- improving the valuation of collateral used for bank lending,
- further strengthening the banking system through rigorous implementation of on-site and off-site inspections and supervision,
- strengthening the credit information-sharing system,
- strengthening the system for implementing reserve requirements,

- introducing internal and external auditing of banks,
- strengthening bank liquidity management, and
- strengthening corporate governance of banks and financial institutions.

3.3.4 Major Causes of Inflation and Inflation Targeting

Cambodia has performed quite well in managing inflation even though inflation in 2005 was the highest experienced in the post-1999 period. Tight fiscal policies followed by the government, as well as the independent monetary policy of NBC aimed at controlling money supply, have contributed to this stability.⁹ NBC's dollar auctions, in particular, have been used as an effective tool to control the money supply in either currency in the market.¹⁰ Exchange rate fluctuations have been minimized and inflation has been brought under control. To maintain price stability through smoothing out exchange rate fluctuations, both MEF and NBC have to cooperate closely in managing the money supply. The authorities, however, cannot stabilize the exchange rate and control the money supply at the same time. What they do is to control the money supply in the market first, then try to stabilize prices. They also need to limit the level of money in circulation at a certain level required by economic forces.

The spike in Cambodia's inflation in 2005 was more than a mere cost-push. Historically, there are several major causes of inflation, including exchange rates, fiscal policy, seasonal factors, oil shocks, and other external factors. Stabilized exchange rates, however, are crucial to managing the inflation rate. While the level of dollarization in the economy seems to have reached its maximum and is not in itself a major cause of inflation, controlling the dollar's exchange rate against the riel is critical. NBC and the government have defined the inflation target at less than 10%, in accordance with the advice of the IMF. The inflation target, however, is not the direct objective of monetary policy. It is the exchange rate. If a stable exchange rate is maintained, this will result in a steady and desired level of inflation.

Recent studies show that there appears to be a relationship between the exchange and inflation rates in Cambodia. The link can be explained by the fact that when the dollar strengthens against the riel, Cambodians sell their riel-denominated assets and try to buy dollar-denominated assets with the expectation of a further rise of the dollar. This provokes a

⁹Before 1996, NBC did not enjoy full independence in conducting its monetary policy. Most of the time, NBC had to follow what the government asked and was obligated to monetize the budget deficit of the government. The inflation rate was very high.

¹⁰The dollar auctions have succeeded in most cases in enabling NBC to control the money supply in either dollars or riels. Sometimes, NBC was required to use other tools or some kind of cooperation with the government.

depreciation of the riel, which in turn leads to an increase in the general level of prices in the market, pushing up the inflation rate. On the other hand, when the exchange rate moves against the dollar, the reverse happens: Cambodians sell dollar-denominated assets and buy assets in riels, leading to an appreciation in the riel, a decrease in the general price level, and a lower inflation rate. Hence, the exchange rate has a major influence on the inflation rate.

Fuel prices are also transmitted to the inflation rate, most obviously through transport and production costs. The structure of Cambodia's oil market, however, requires further study to understand price-setting mechanisms. Such an understanding could lead to alternatives to the government's current tax policies, which encourage oil smuggling. It would also enable the government to weigh the cost of smuggling against potential lost revenues under the current system.

While financing budget deficits by the government could have a significant impact on inflation, the tight fiscal policies pursued by the government in recent years shows no signs that this is likely to happen. The government should continue its prudent fiscal policies, because they contribute to a stable inflation rate.

Inflation rates in Cambodia are also susceptible to seasonal cycles, with prices tending to rise faster from June to October, but reaching their lowest rate in November and December, during the harvest season.

Since Cambodia is vulnerable to weather conditions that can deliver shocks to agriculture and other rural areas of the economy, it would be worthwhile for Cambodia to expand its production base in such a way as to shield its rural areas from weather conditions. Well-planned measures to mitigate or cope with unexpected disasters would be helpful in containing inflation.

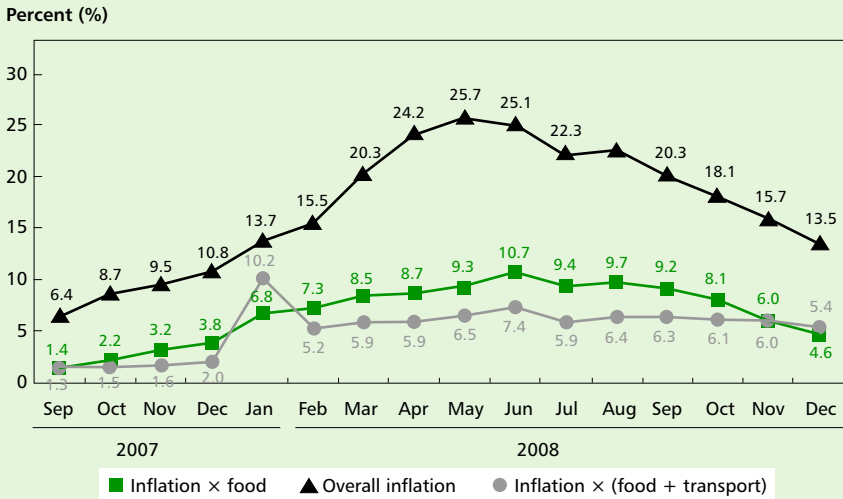
Finally, a trusted government is also important in building long-run expectations of stable inflation among various players in the economy.

3.3.5 Current Inflation Situation

The acceleration in inflation that was observed during 2007 continued into the first half of 2008. The inflation rate surged from 13.7% in January to a peak of 25.7% in May, the highest level recorded over the current decade (Figure 3.8). Higher prices for domestic agricultural commodities and international grain, coupled with the pass-through effects of increases in energy costs, all contributed to higher inflation.

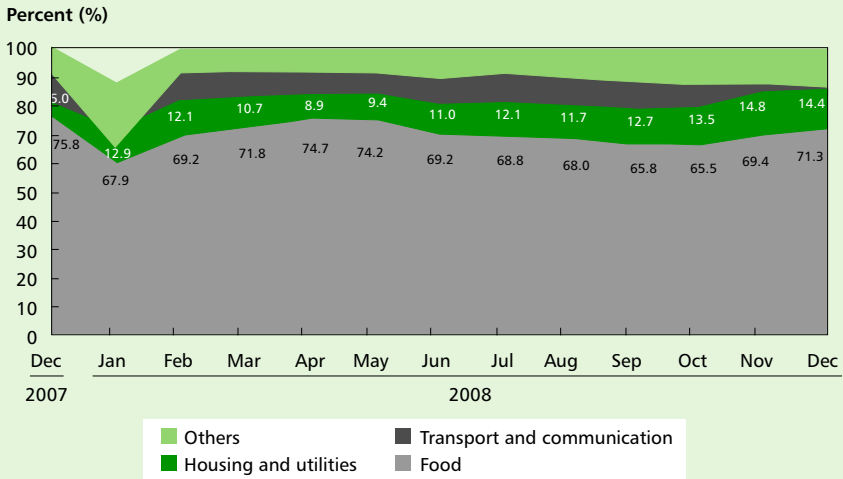
Nevertheless, the situation eased during the last half of the year following a downward trend in oil and food prices on the world market. Since July, the inflation rate experienced a steady decline, registering 18% in October, 15.7% in November and 13.5%, in December 2008. This was partly also an outcome of a package of policy measures adopted by the government to stabilize domestic prices.

Figure 3.8: Cambodia: Changes in the Consumer Price Index, Year-on-Year (%)



Source: National Bank of Cambodia. 2009. Quarterly Report.

Figure 3.9: Cambodia: Shares of Subgroups in Consumer Price Index's Changes



Source: National Bank of Cambodia. 2009. Quarterly Report.

An analysis of the consumer price index by sector shows that inflationary pressure was pronounced mainly in the category of “food beverages and tobacco” and “house furnishings and household operations,” which posted an increase of 23.2% and 26.1%, respectively, in December 2008 (Figure 3.9). “Domestic food” contributed 9.6% to the overall annual rate of inflation, i.e., 71% of the total observed price increases.

Core inflation, defined as excluding food and transport items from the consumer basket, increased to 5.4% at the end of December 2008 from 2.0% in the same period a year ago. In comparison with the rate of headline inflation, the figure indicates the enormous influence of global oil and food prices on the general price level. Moreover, it also points to the effects of domestic factors on the inflation. Overall inflation declined further to about 10.0% year-on-year in January 2009.

3.3.6 Emergence of the Multiple-currency Phenomenon

A striking feature of Cambodia's monetary system is that it is characterized not only by a high degree of dollarization, but also cash transactions. Although the dollar has not been adopted as legal tender, it has been widely used as a medium of payment, store of value, and unit of account in Cambodia (de Zamaróczy and Sa 2002). Dollarization significantly increased during the period 1991–1992, primarily because of massive inflows.

The dollar started entering Cambodia in the 1960s, when the country opened its doors to the rest of the world through its international transactions. The dollar was accepted merely as a means of payment for these transactions. During 1970–1975, the US government injected millions of dollars in medical, humanitarian, and military assistance to the Khmer Republic led by General Lon Nol. The inflow was considered very important to the economy. Between 1980 and 1990, the dollar entered the country through either remittances from Cambodian residents living in such developed countries as France, Canada, and the US to their families in Cambodia or through the financial assistance provided to Cambodian refugees by the United Nations High Commissioner for Refugees (Pum 2008).

The most significant dollar inflows, however, started in the early 1990s, in particular during the peacekeeping operations led by UNTAC. Authorities spent as much as \$2 billion in less than 18 months, a very significant sum of money for the economy at the time. After the UNTAC period, dollar inflows came through two main channels: foreign assistance (approximately \$500 million per year) and FDI, which up to now totals more than \$2 billion.

Very high dollarization in Cambodia was therefore principally an exogenous shock and has resulted in low inflation and economic stability. Yet dollarization has been persistent, despite increased economic and political stability. The high degree of dollarization limits the flexibility of exchange rate policy to deal with external shocks.

For example, in August 2005, the increase in world oil prices rapidly affected domestic consumption. Most prices increased quickly and the inflation rate rose between 9% and 10% in just a few months. There are empirical studies suggesting that currency substitution has had an impact

on inflation via what is commonly referred to as “monetary growth-induced inflation” and “speculative bubble-induced inflation.”

In monetary growth-induced inflation, the rate of inflation is expected to rise when money growth increases. The government has so far used an inflation tax to partly finance its budget deficit. But, since residents have been holding both dollars and riels, some amount of that inflation tax has been lost. As a result, a certain amount of inflation tax creation has to be followed by a rapid increase in riel supply, which, in turn, contributes to domestic inflation. As far as speculative bubble-induced inflation is concerned, an increase in inflationary pressure due to the rational expectation of a rise in the money supply threatens those who are holding riel-denominated assets, thereby forcing them to shift to dollar-denominated assets to avoid the inflation tax. This tends to weaken the riel against the dollar, and a depreciation of the riel, in fact, implies higher prices for riel-denominated goods.

3.3.7 Costs and Benefits of High Dollarization

As a cash-based economy, Cambodia sought to open its doors to the world by introducing dollarization in the country. However, there are some costs and benefits to be considered. First, in terms of costs, dollarization undermines the effective conduct of monetary policy. NBC cannot develop effective instruments of monetary policy under such circumstances and its role as lender of last resort for banks facing liquidity problems is greatly constrained. Second, the riel may appear as a mere symbol of sovereignty and national identity and does not play a full role in the economy. Finally, income from seigniorage is minimized. The US government gains seigniorage benefits from Cambodia, since the dollar-denominated money stock held by Cambodians does not earn interest. The net annual income forgone is estimated to be in the range of \$20 million to \$90 million.

As for the benefits, the introduction of large quantities of dollar banknotes at the beginning of the 1990s, firstly allowed the public to switch from using gold to banknotes for transactions and to store wealth. Until then, using unproductive physical assets such as gold was common practice in Cambodia. Subsequently, the progress of monetization has encouraged savings within the middle class. Second, dollarization prevented capital flight and promoted financial deepening. The elimination of incentives to place savings abroad encouraged domestic financial intermediation, which resulted in the growth of the financial system. Over the past 3 years alone, the volume of bank activity has roughly doubled, and the loan-to-deposit ratio has grown steadily. Third, dollarization lowered the risk of currency devaluation. The demand for riels remained low and the market very small. Hence, there was little incentive for speculators to try to gain from short-term changes in the price of the riel. Dollarization protected Cambodia against contagion in the face of the Asian financial crisis of

1997–1998. It sustained the confidence of investors in their operations in Cambodia. Finally, dollarization promoted awareness by policy makers of the need to avoid bank financing of public deficits. Eventually, the use of the dollar facilitated the integration process of Cambodia's trade in the international economy. Currency stability promoted macroeconomic stability and a predictable business environment. It reduced the transaction costs (avoiding currency conversions). It also enabled the boom in the garment industry in Cambodia.

3.3.8 Policy Implication of High Dollarization

According to an IMF working paper (de Zamaróczy and Sa 2002), in the face of high dollarization, NBC's monetary and exchange rate policies and MEF's budget policy have served Cambodia well since 1999. By refraining from budget financing and from refinancing commercial banks, on the one hand, and by establishing a current budget surplus and an overall budget deficit partly backed by foreign financing, on the other, both institutions have been conducting mutually reinforcing macroeconomic policies. This policy mix has proven to be effective in providing a stable supply of riels, which in turn has resulted in a relatively stable exchange rate, leaving the dollar supply to be absorbed by large idle cash balances held by residents and the export of excess dollar banknotes by commercial banks for better returns in offshore investments, which is allowed by the government. The reason behind this phenomenon is that there was a sizable amount of dollars circulating in the economy in early 1995, as residents kept a substantial amount of dollars in cash as a store of value, probably owing to limited public confidence in the banking system and shallow financial intermediation. These dollars circulated very slowly in the economy, which remained relatively little monetized and operated predominantly on a cash basis, in particular as regards the national budget. In this respect, the most important policy measure for NBC was to eliminate financing of the government's budget deficit after mid-1998.

High dollarization, together with prudent macroeconomic policies, has largely sheltered Cambodia's economy from international economic turmoil, while providing a propitious environment for growth and poverty reduction as structural reforms continue to take place in the country.

Dollarization in Cambodia may contribute to greater economic and financial integration with the rest of the world through reduced transaction costs for purchasing international currency. However, with its high level of dollarization, NBC faces great difficulty in conducting effective monetary policy, which hinders price–wage flexibility and therefore requires sufficient productivity gains in the export sector to keep abreast of competitors in the region and the world. Therefore, monetary authorities face great pressure to develop an effective monetary policy to maintain a currency value favorable for exports. A lack of such monetary instruments makes

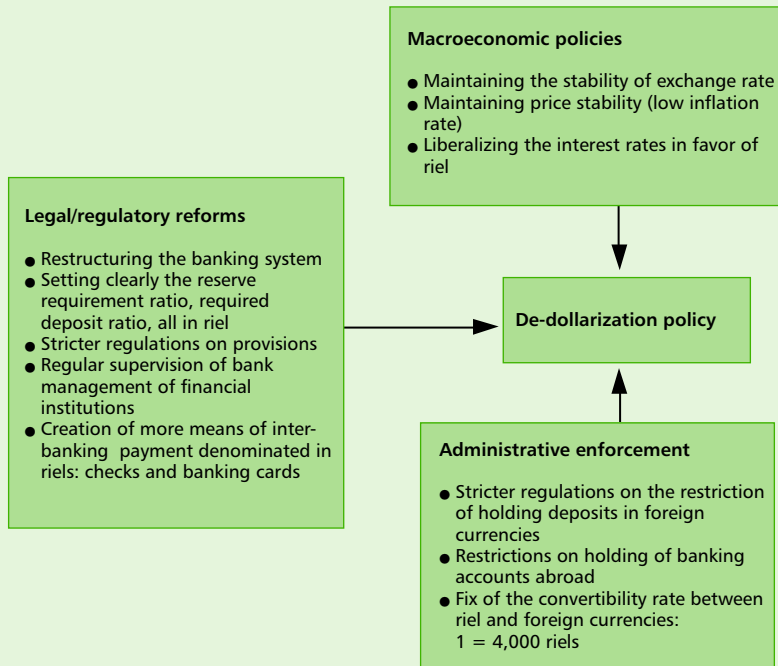
it hard for NBC to control the value of the riel, but as a member of the World Trade Organization (WTO) and ASEAN, Cambodia is in real need of powerful monetary policy tools help its exporters. On top of the existing difficulties, Cambodia may find that its trading partners in ASEAN and the WTO might put further pressure on the country to maintain a fair and competitive currency value. Since Cambodia has no capital controls, large private investment inflows that are expected to intensify from the WTO and ASEAN will make it even more difficult for monetary authorities to implement monetary policy and achieve its national goals with respect to the value of the riel.

Let us now examine why Cambodia was blessed during the Asian financial crisis in 1997. Okonjo-Iweala et al. (1999) argue that both Cambodia and the Lao PDR were insulated from the sharp credit crunches and rapid flight of portfolio investment observed elsewhere in the region because they were not well integrated into global financial markets and received virtually no volatile, short-term capital inflows. The impact of the regional financial crisis and domestic political unrest on Cambodia's external balance was also tempered by the strong increase in 1997 in the country's garment exports, which went primarily to markets outside the region, mainly Europe and the US.

This increase allowed Cambodia to boost its foreign reserves to 2.5 months of imports and offset a 14% reduction in tourism receipts caused by security concerns in the midst of political unrest. Perhaps most important was the extensive dollarization of Cambodia's economy—as much as 70% to 90% of all transactions are carried out in dollars, and commercial bank assets and liabilities are denominated almost exclusively in foreign currencies. This helped limit the exchange rate impact of the external shock and inflationary pressures.

This current policy stance is not a “silver bullet,” however, and developments will need to be constantly monitored to determine whether the domestic and international macroeconomic environment remains suitable for a continuation of these policies. Among the developments to watch for are increased dollar inflows stemming from renewed investments and higher tourism receipts, coupled with improved financial intermediation and the launching of financial markets. Similarly, large amounts of idle cash dollar balances could flow into the banking system as confidence improves. Heightened bank capital requirements, coupled with excess liquidity, constitute a strong incentive for increased lending in the future. Such developments could then result in higher inflation, because NBC currently has no means to sterilize dollar inflows or the release of dollar cash balances into the banking system. Enhanced financial intermediation could lead to increased velocity of money circulation. These likely developments call for improved policy tools capable of handling a more complex economy that will come from higher development. Fiscal

Figure 3.10: Cambodia: De-dollarization Process



Source: Compiled and elaborated by the authors (2007).

discipline will need to remain a cornerstone of the government's policy mix, and NBC will need to strengthen drastically its supervisory capacity and its ability to influence bank liquidity, presumably through the eventual development of some type of financial instrument.

The de-dollarization of Cambodia's economy is a long-term objective. Experiences in other countries have shown that de-dollarization is a long-term process that requires restoring confidence in the national currency. That confidence can only be restored in Cambodia if, and only if, the private sector is sure that it will not be financially penalized for holding riel-denominated assets. Accordingly, only when continued macroeconomic stability and exchange rate stability are maintained will financial deepening be brought about by an increase in the use of the riel (Figure 3.10).

3.3.9 Measures to Stem the Use of Foreign Currency

The government is taking measures eventually to de-dollarize the economy and increase the central bank's power over monetary policy. One of the main reasons to de-dollarize the economy is to have a meaningful national

currency, but also to have powerful and effective monetary policy tools to influence the economy.

The establishment of a modern payment system will help foster financial intermediation, but the contemplated financial laws and payment facilities will be neutral with regard to the currency used, and therefore will have no direct bearing on the issue of dollarization.

In principle, the central bank could promote de-dollarization through the banking system. The first and most dramatic move would be for NBC to provide bank refinancing in riels for operations conducted in riels, while refraining from refinancing banks in dollars. This could encourage banks to operate in riels and help foster lending in the national currency. A second way to promote de-dollarization through the banking system would be to make operations in riels more attractive in terms of security and cost. However, under the current situation of almost full dollarization, and moves to create an efficient, largely electronic payment system that is currency neutral, there seems to be no immediate scope for achieving such a result.

Another approach to de-dollarization would be to develop financial instruments denominated in riels, such as treasury bills. Such instruments would likely need to offer higher yields than deposits with strengthened commercial banks (both in riels and dollars), given the need for the government to gain greater public confidence. However, we note that deposits in riels already carry higher interest rates than deposits in dollars, yet they remain modest compared with dollar deposits.¹¹ Hence, for treasury bills to become attractive, they would have to offer returns that compensate both for perceived sovereign default and exchange rate risks. This in turn could jeopardize the government's fragile budget stance. Such instruments would also require the establishment of an active financial market with sufficient liquidity, but this is not likely to happen anytime soon, because the required legislation is only at an early stage of preparation.

Finally, another more radical move toward de-dollarization and restored confidence in the riel, as suggested by de Zamaróczy and Sa (2002), would be the adoption of a currency board arrangement (CBA) for Cambodia. A CBA is the strongest form of a pegged exchange rate system. This monetary institution would only issue currency that is fully backed by foreign assets at a fixed exchange rate. In Cambodia, the natural choice for the "anchor" currency would be the dollar. The country already

¹¹Most depositors still hesitate to make their deposit decisions based on riel-interest rate yields. They anticipate that there will be exchange rate fluctuations in favor of the dollar in the future. Dollars remain the dominant currency for deposits in the country's banking system. NBC has to prove its ability to ensure a stable dollar-riel exchange rate for this mentality to change.

meets a number of the necessary conditions for entering into a successful CBA. It is a small and open economy, with the sum of exports and imports representing 90% of GDP. As a member of ASEAN and the WTO, Cambodia is well integrated into the regional and global economy. In addition, the authorities have a liberal investment law and are in the process of lowering tariff and trade barriers. Moving away from high dollarization toward a CBA would be conceivable. Two possible CBAs could be envisaged: a CBA with a single legal tender (the riel), and the obligation to quote all prices and conduct all transactions in that currency; or a CBA where there would be two legal tenders, the riel and the dollar. A successful riel-based CBA would allow Cambodia to revitalize its marginalized domestic currency, while ensuring continued economic stability.

3.4 Exchange Rate Policy and External Equilibrium

3.4.1 Exchange Rate Policy: Aims and Objectives

Cambodia has adopted a flexible, but administered exchange rate regime¹² since the mid-1990s. NBC is authorized to intervene in the market if, and only if, it deems this necessary to ensure price stability. There is a clear link between the fluctuation of exchange rates and that of inflation rates in Cambodia. As a result, NBC has to maintain the stability of the exchange rate to achieve its goal of price stability.

The managed-float exchange rate regime is the most suitable regime for Cambodia at the time being. The main reason is that the only measure to control exchange rate fluctuations is through manipulation of the money supply by NBC. The exchange rate regime helps NBC to control the money supply, and thus minimize exchange rate fluctuations. In other words, the instrument NBC uses to conduct monetary policy and exchange rate policy is quite similar.

As mentioned earlier, there are two types of exchange rate arrangements in Cambodia: the official and market exchange rates. The official exchange rate is calculated based on the fluctuation of the market exchange rate. NBC's Department of Foreign Exchange is in charge of determining the official exchange rate. The market exchange rate is calculated on a daily basis through three main markets in Phnom Penh: Olympic Market, Orussey Market, and the Central Market.¹³

¹²It is also called "managed-float exchange rate regime."

¹³These three markets are the markets of goods and services, but there are very remarkable movements of capital flows in these markets, which lead to the determination of the exchange rates between the domestic and the foreign currencies. The capital flows through these markets are the most important in the country. That is the reason why these markets are chosen to determine the market rate. In fact, there is no an organized exchange market in Cambodia.

Table 3.3: Cambodia: Riel–Dollar Market Exchange Rates

	Central market		Orussey market		Olympic market		Periodic rates	
	Buying	Selling	Buying	Selling	Buying	Selling	Buying	Selling
Opening hours: 7–8 a.m.	4,200.00	4,210.00	4,210.00	4,220.00	4,215.00	4,220.00	4,208.33	4,215.00
Mid-day: 1–2 p.m.	4,210.00	4,215.00	4,215.00	4,215.00	4,210.00	4,215.00	4,211.67	4,216.67
Closing hours: 4:30–5:30 p.m.	4,205.00	4,210.00	4,210.00	4,220.00	4,210.00	4,220.00	4,208.33	4,215.00
Exchange rate of the day	4,205.00	4,211.70	4,211.70	4,218.33	4,211.70	4,218.33	4,209.44	4,215.56

Source: On-site observations by the authors (25 October 2006).

The final daily market exchange rate is determined by the average of exchange rates at these markets at three different times of the day: the opening (7:00 to 8:00 a.m.), midday (1:00 to 2:00 p.m.), and closing (4:30 to 5:30 p.m.). Each average rate consists of a selling rate and a buying rate (Table 3.3).

The official rate is often adjusted so as to limit the spread between the official rate and market rate to no more than 1% (official rate = market exchange rate \pm 1%). Generally, the official exchange rate is lower than the market rate. The official rate is used only for transactions between the government and state-owned companies or among state-owned companies.

3.4.2 Decision-making Process

Monetary policy in Cambodia is not like that conducted in developed countries. In fact, it is correct to say that monetary policy, strictly speaking, does not exist in Cambodia. Instead, NBC uses its dollar auction to achieve and maintain both exchange rate and price stability.

NBC decides to intervene in the market depending on exchange rate fluctuations. For instance, when there is a huge fluctuation in dollar–riel exchange rate, NBC will intervene by buying or selling dollars against the riel or vice versa, to manipulate the money supply and smooth out the exchange rate.

The money supply is divided into two parts: money outside of banks (money in circulation) and money in banks (money held by financial institutions). NBC uses the dollar auction as a means to manipulate the money outside banks in both currencies to match the demand for money

Table 3.4: Cambodia: Riel Net Value and Foreign Exchange Market

Net value (NV) = Purchase of USD – Sales of USD	If NV	Consequences on the money supply	Consequences on the exchange market
	> 0	- $MM_{(USD)} \searrow$ - $MM_{(riel)} \nearrow$	Fluctuation of exchange rate in favor of USD: Depreciation of riel
< 0	- $MM_{(USD)} \nearrow$ - $MM_{(riel)} \searrow$	Fluctuation of exchange rate in favor of riel: Appreciation of riel	

$MM_{(USD)}$ = money supply in dollars in circulation, $MM_{(riel)}$ = money supply in riels in circulation.
Source: Authors' elaborations.

in the domestic economy. Here are the most common cases in which NBC intervenes in the market through its dollar auctions:

- **Depreciation of the riel.** When the amount of riels in circulation increases to a level where it causes the dollar to strengthen, NBC sells dollars into the market in exchange for riels, causing the riel to strengthen. This will continue until the exchange rate is stabilized.
- **Appreciation of the riel.** Whenever dollars in circulation increase more than necessary to maintain exchange rate stability, NBC will sell riels into the market for dollars until the rate fluctuation smoothes out.

Thus, the objective of NBC is to stabilize the exchange rates first, then maintain price stability in the market.

In this context, the net value is the difference between the amount of purchases and sales of dollars against riels in the market (Table 3.4). If the net value is positive, it means that NBC is injecting riels into the market and consequently decreasing the amount of dollars by buying them back from the market. This means that there are more riels and fewer dollars in circulation. In effect, this will move the exchange rate in favor of the dollar.

On the other hand, when the net value is negative, NBC injects more dollars into the market and at the same time decreases the amount of riels. These operations push the exchange rate in favor of the riel (Table 3.4).

Let us now measure the degree of effectiveness of NBC's intervention in the exchange market through these operations. The intervention is considered effective if it can modify the fluctuation of the exchange rate in a way that leads to stability. Implicitly, it is effective if it can provoke the exchange rate fluctuation in favor of the riel, because the main objective of the intervention is to ensure the appreciation of the riel against the dollar. This will signal to the domestic market that NBC is capable of ensuring the

Table 3.5: Cambodia: Purchases and Sales of Dollars (\$ million)

Study periods	Purchases of dollars			Sales of dollars			Net value of operations	Exchange rates
	Com. banks	NBC	Total	Com. banks	NBC	Total		
2000	0.03	14.89	14.92	16.04	0	16.04	(1.12)	3,918.5
2001	15.50	17.09	32.59	9.91	0.90	10.81	21.78	3,904.5
2002	75.99	24.49	100.48	39.39	0	39.39	61.09	3,941.5
2003	7.05	21.66	28.71	11.70	8.30	20.00	8.71	3,983.5
2004	2.55	12.33	14.88	12.00	8.10	20.10	(5.22)	4,047.0
2005	1.77	21.03	22.80	8.50	14.90	23.40	(0.60)	4,109.5
2006	0	46.62	46.62	0	0	0	46.62	4,123.8
2007								
Jan	0	8.25	8.25	0	0	0	8.25	4,060.0
Feb	0	18.81	18.81	0	0	0	18.81	4,060.0
Mar	0	36.42	36.42	0	0	0	36.42	4,061.0
Apr	0	24.06	24.06	0	0	0	24.06	4,056.0
May	0	2.65	2.65	0	0	0	2.65	4,069.0

Com. = commercial, NBC = National Bank of Cambodia, () = negative.
Source: Compiled by the authors from NBC data (June 2007).

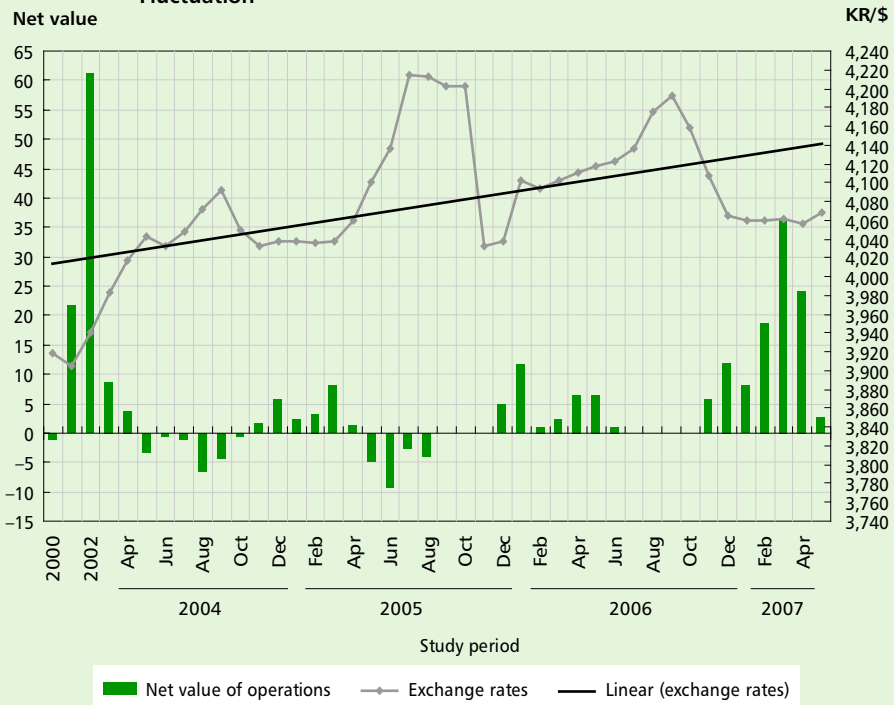
stability of the national currency and keeping the inflation rate as stable and low as possible.

Table 3.5 shows that NBC bought more dollars than it sold in the market. Only in 2000, 2004, and 2005 did NBC sell more dollars than it bought, but the quantity was much smaller than in other years. Figure 3.11 analyzes in more detail the effectiveness of these operations on a monthly basis. For the time being, this type of analysis can be used as a means to measure the effectiveness of the interventions conducted by NBC. The principal aim is to determine whether NBC's objectives will be realized or not.

From January 2001 to April 2004, NBC bought more dollars and injected more riels into the market. The objective of these operations was to appreciate the dollar against the riel. These operations were effective. From May to October 2004, NBC bought more riels by selling dollars back into the market. The objective was to have the riel appreciate against the dollar, but the riel kept depreciating during this period. Thus, the intervention was judged ineffective.

From November 2004 to April 2005, NBC bought more dollars from the market and injected more riels with the aim of depreciating the riel.

Figure 3.11: Cambodia: Purchases and Sales of Dollars and Exchange Rate Fluctuation



Source: Elaborated by the authors based on National Bank of Cambodia's data (2007).

The exchange rate was stable during that period. It was a good opportunity for NBC to hold more dollars to help increase international reserves.

From May to November 2005, NBC sold more dollars into the market by buying back more riels, to have the riel appreciate against the dollar. For the first few months (May and June), the riel continued depreciating, but later, it reversed direction, so the intervention overall was judged effective.

From December 2005 to October 2006, NBC bought more dollars and injected riels, causing the dollar to rise against the riel. The intervention was thus considered effective. From November 2006 to May 2007, NBC continued buying more dollars to achieve a depreciation of the riel, and again, the intervention was effective (Table 3.6).

It seems that between the two types of operations in the domestic exchange market, the selling of dollars is more important in adjusting fluctuations in the exchange rate. Two exceptions appear to be the periods May 2004–October 2004 and May 2005–June 2005. During both periods, the exchange rate continued fluctuating in favor of the dollar.

Table 3.6: Cambodia: Summary of Dollar Operations Exchange Rates

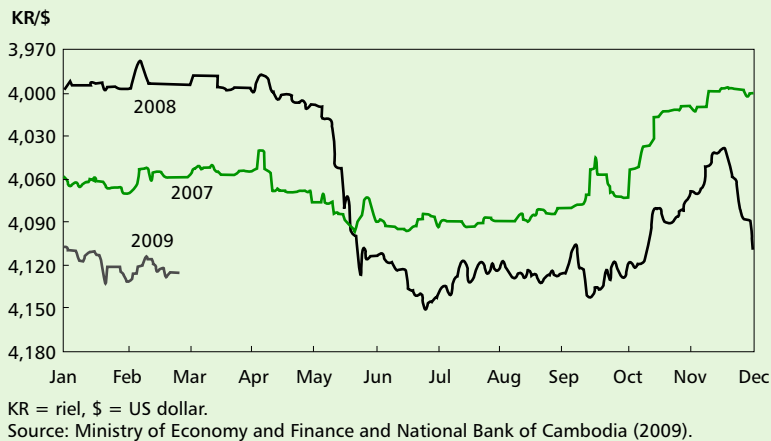
Net Value	Periods	Phenomenon of the exchange market	Consequences on the exchange rates	Effectiveness of the exchange rate policy
NV > 0	2001–Apr 2004	NBC injects more riels to the market through the purchase of dollars from the market.	Appreciation for the dollar and depreciation for riel	Effective
NV < 0	May–Oct 2004	More dollars were sold to the market, less riels in circulation	Continuing depreciation of riel against the dollar	Non-effective
NV > 0	Dec 2004–Apr 2005	More riels, less dollars in circulation	Stability of the exchange rate (riel–dollar)	Opportunity to increase international reserves
NV < 0	May–Nov 2005	More dollars and less riel, in circulation	Depreciation for May and Jun 2005, but appreciation from Jul to Nov 2005 of riel against the dollar	Effective
NV > 0	Dec 2005–Oct 2006	Dollars, more riels in circulation	Continuing depreciation of the riel against the dollar	Effective
NV > 0	Nov 2006–May 2007	Less dollars, more riel in circulation	Stability of the exchange rate (riel–dollar)	Effective

NBC = National Bank of Cambodia, NV = net value.

Source: Authors' elaborations.

These operations did not help NBC either to maintain the stability of the exchange rate or ensure fluctuation in favor of the riel. Hence, the exchange rate policy conducted by NBC proved to be ineffective during these two periods.

NBC will continue with its managed-float exchange rate policy and no interventions have been nor will be made to target a specific exchange rate. Interventions are only carried out to limit exchange rate volatility. In fact, the exchange rate has remained stable for many years. The share of riels in M2 was as low as 29% during last 5 years, reflecting the highly dollarized nature of the economy. While the monetary authorities would like to encourage greater use of the riel, they have emphasized that they have no intention whatsoever to impose restrictions on the use of foreign

Figure 3.12: Cambodia: Riel–Dollar Exchange Rates

currency. They envisage that greater use of the riel will develop as an outcome of economic development.

3.4.3 The Current Exchange Rate Situation

Despite the recent global financial turbulence, the riel has remained broadly stable. The average exchange rate for 2008 was KR4,065 to the dollar compared with KR4,068 in 2007. Nevertheless, there were large fluctuations in daily exchange rates during 2008, ranging from KR3,978 to the dollar to KR4,151 to the dollar. Seasonal influences led to a weakening of the riel in the middle of the year, but it rebounded somewhat thereafter to close the year at KR4,130. This represented a depreciation of 2.7% compared with the year-end exchange rate in 2007. In contrast, the year-end rate in 2007 was 1.4% higher than at the end of 2006. The drop in the value of the riel in 2008 reflected the slowdown of capital inflows into the country as a result of the worldwide liquidity crunch (Figure 3.12).

3.5 Regional and Subregional Integration

Dollarization in Cambodia may contribute to greater economic and financial integration with the rest of the world through reduced transaction costs to purchase international currency. The more a country's trade and financial flows are integrated with countries using the dollar, the greater will be the gain from reduced exchange rate risks.

3.5.1 Market Integration with Asia

Since the mid-1980s, Cambodia has gradually moved away from a planned economy to a market-based economy supported by a wide range of economic reforms and increasing involvement in regional and global integration activities. Cambodia is a small economy, so to benefit from economies of scale it has to be competitive in export markets. After many years of effort, Cambodia has succeeded in becoming a member of ASEAN and the WTO. Despite its narrow economic base, the country is carrying out major structural adjustments to its economy required by these affiliations (Moniroth 2006).

Since liberation day on 7 January 1979, the government has been strenuously involved in rebuilding the economy. In the early 1980s, Cambodia experimented with a centrally planned economy. But by the mid-1980s, realizing the vast potential provided by the world community and FDI, Cambodia embraced a market-based economic system. It also embraced regional and global communities. It has become a member not only of ASEAN and the WTO, but also the Greater Mekong Subregion. All these initiatives have meant considerable structural adjustment and reform on Cambodia's part.

Cambodia's trade with the world has also increased substantially in the last decade. Trade has been the main source of economic growth in Cambodia. The normalization of relationships with the European Union (EU) and the US that culminated in trade agreements has been widely hailed as a success. Cambodia has gained jobs and investment, along with better working conditions. After gaining access to the EU and US markets, Cambodia's garment exports increased in value from around \$20 million in 1995 to almost \$2 billion in 2005. Growing employment in the garment and textile sectors has been a major factor in stabilizing the economy. These sectors currently employ 280,000 skilled and unskilled workers.

Economic growth has averaged 8% in the last decade. This spectacular growth was made possible by sharp increases in trade and investment. Economic growth rose to 9.5% in 2004 and accelerated to 13.4% in 2005 despite negative external developments such as higher oil prices, terrorism, and the spread of epidemic diseases. Political stability, accompanied by greater investor confidence, has provided the basis for the robust growth performance, which has been driven mainly by agriculture, tourism, garment exports, and increased construction activities. The growth rates in agriculture, industry, and services have generally been quite robust, from 11.7%, 12.1%, and 2%, respectively, in 2003; to 13.1%, 16.7%, and 10.1% in 2004; and 17.3%, 13.3%, and 9.4% in 2005, respectively.

The value of total trade has also risen significantly. The value of exports reached almost \$3 billion in 2005, while the value of imports reached almost \$4 billion. Cambodia has established trading relationships with a wide range of partners, including the EU, Japan, many other Asian

countries, and the US. At the same time, Cambodia has also received considerable FDI from several sources. The value of FDI rose substantially from \$74 million in 2003 to \$381 million in 2005. The increase in trade and investment reflects the growing integration of Cambodia in the world trading system. With around 75% of the population still living in the countryside and an economy heavily dependent on tourism and garment exports, the integration of Cambodia into regional and global communities, especially the WTO, is fraught with opportunities and challenges. Some skeptics have questioned the merits of Cambodia, with its vulnerable economic structure, joining the WTO. They point to the experiences of some less-developed countries in the WTO that have been unable to secure trading opportunities commensurate with their development needs. However, from its past experience, Cambodia remains hopeful of gaining substantial benefits from its accession to the WTO. Nevertheless, it realizes that the risks inherent in this initiative will need to be carefully managed.

In summary, Cambodia has actively participated on an equal footing and with equal rights in ASEAN, the WTO, as well as in other subregional, regional, and global cooperation initiatives such as the Greater Mekong Subregion, Ayeyawady–Chao Phraya Mekong Economic Cooperation Strategy, the Asia–Europe Meeting, and others. Cambodia’s integration into the region and the world, as well as the linking of trade to labor standards, have created a favorable environment for the development of agriculture, tourism, and industry, especially the garment industry. The changes have enabled its farmers to export their products to regional and world markets. Also, the WTO membership has accelerated internal reforms, attracted both domestic and foreign investments, and strengthened the foundation for socioeconomic development.

Currently, the government is giving priority to the further integration of Cambodia into the region and the international community by pursuing membership in the Asia–Pacific Economic Cooperation forum and participating in the building of the ASEAN Community. In this context, it is necessary for all ministries and agencies to fulfill Cambodia’s obligations within the WTO by adopting laws and regulations that ensure effective enforcement of WTO requirements.

3.5.2 Participation in Regional Cooperation Initiatives

While East Asian countries have so far been unable to coordinate their institutional reforms at a regional level, they have been pressured to adopt the codes and standards for financial sector regulation, accounting, and corporate governance developed by advanced countries. Whatever its rationale, the effort of the advanced countries to graft the Western systems and standards onto East Asia has not been successful (Park 2004). East Asia has recently recognized the need to have a regional consensus on

this issue, and meetings of the ASEAN+3¹⁴ finance ministers have taken it up as a high priority. In other areas, East Asia has made significant progress in monetary and financial cooperation. This process has been led by the ASEAN+3 in response to the 1997/98 financial crisis and has been assisted in various ways by the Asian Development Bank (ADB). In its efforts to integrate their financial markets, ASEAN+3 countries have created two important initiatives: the Chiang Mai Initiative (CMI) and the Asian Bond Markets Initiative (ABMI). These two initiatives have been progressing well and provide major benefits to member countries.

A salient feature of the CMI is the provision of liquidity support to participating countries through a network of bilateral currency swap agreements. ASEAN+3 has implemented the ABMI to mobilize the region's vast pool of savings for direct, efficient use in the region's long-term investments. During this period, the following have been achieved:

- Various international and foreign institutions have issued bonds denominated in local currencies. Malaysia (May 2005), Thailand (September 2005), the PRC (October 2005) and the Philippines (October 2005). Cambodia has been working closely with technical experts of the Republic of Korea to develop its own riel-denominated bond market.
- Bonds denominated in local currencies have also been issued through securitization. For instance, in late 2005 in the PRC, the People's Republic of China Development Bank and People's Republic of China Construction Bank issued asset-backed securities with trust investment companies as special purpose vehicles.

It would be beneficial for Cambodia to participate in these regional cooperation initiatives as a way to catch up with regional progress in the financial field and learn from the success stories of neighboring countries.

3.5.3 Benefits of Economic Integration

As stated in Cambodia's Millennium Development Goals, the government's first and foremost objective is to reduce extreme poverty by 2015. To help achieve this, the government aims to promote and maintain economic growth through enhanced economic integration with other countries, from immediate neighbors to the rest of the region and the world. One path to economic integration is through monetary and exchange rate cooperation with neighboring countries such as Viet Nam and the Lao PDR.

¹⁴The 10 ASEAN countries plus the PRC, Japan, and the Republic of Korea.

When it comes to poverty reduction, there are two key factors that are complementary—namely, development and economic integration. For instance, as societies grow and the economy expands, the processes of development and economic integration will change but their fundamentals and objectives remain essentially the same as they have been for years. Economic integration is meant to bring people and societies closer together through shared markets and economic growth, FDI, employment generation, and, of course, improvements in the quality of life. Development, on the other hand, is meant to expand the economic space and opportunities for people and nations. Therefore, the process of accelerating development through economic integration not only affects our own individual lives but also how societies interact with each other and how they coexist.

The perceived benefits of integration range from building a new national image within the world community to improving exports, investment, and governance. In the case of a poor country such as Cambodia, integration is seen as a necessary means to achieve economic growth. To survive in the harsh and fierce environment of global competition, Cambodia must grasp all available opportunities. Integration represents one way to guarantee and seize these opportunities. Economic integration will afford Cambodia access to markets in other countries. Integration will also intensify competition between foreign and local producers. The resulting market environment will be more efficient and better positioned to cope with global competition. This, in turn, will attract more investment, creating a virtuous cycle of higher productivity, higher incomes, and higher growth. Cambodia's industrial environment will eventually converge toward international norms through a reduction of impediments to export competitiveness.

Integration will also provide exporters with access to raw materials and intermediate inputs at world market prices. Cambodia has always recognized this, and under the country's Law on Investment, export industries have duty-free access to imported capital and intermediate goods and raw materials. For example, ASEAN membership allows Cambodia to import fabric from ASEAN countries to produce garments for the EU market. When Cambodia was not an ASEAN member, it could not do this without having to ask the EU each year for derogation from its "rules of origin" under the EU's generalized system of preferences scheme.

3.5.4 Costs and Benefits of an Asian Currency Unit

According to the theory of an optimal currency area, one of the greatest benefits of introducing a single currency like the euro is the elimination of foreign exchange risk in intra-regional trade. When the benefits and costs of a single currency are plotted against ratios of trade to the GDP of trading partners, the benefits would be depicted as an upward-sloping

curve. Then, what about the downward-sloping cost curve? Economic fluctuations or shocks that are unique to a certain economy are less likely to occur as its goods and services increasingly penetrate the markets of its partners through trade and vice versa, and those economies generally show a higher tendency to move together (Takeuchi 2006). For any country, the principal benefit of maintaining its own foreign exchange rate mechanism is the ability to adjust exchange rates in response to unique shocks and keep the economy from fluctuating too widely. The introduction of a regional single currency would mean the loss of this means of stabilizing the economy. It would cost the economy less, however, if trade promotion could reduce the occurrence of isolated shocks in the first place. These considerations should help interpret the negative relationship between the costs of a single currency and levels of trade.

The costs of a single currency may also be influenced by other factors including differences in industrial structure and the flexibility of labor and capital markets. That is to say, the more similar the industrial structure of a specific country is to that of the overall region, the less prone it is to unique shocks, while higher flexibility of factor markets enables a country to better absorb the shocks, which will lead to a decrease in the costs. These influences will be represented by downward shifts in the negatively sloped cost curve.

Hence, these are issues that have to be considered very carefully. The expected benefits of an Asian currency unit (ACU)—or even more dramatically, a single regional currency—need to be weighed very carefully by individual countries against the resulting loss in domestic macroeconomic policy independence.

From Cambodia's perspective, although establishing a regional currency index is a long way from adopting a single regional currency, it can as easily raise a number of contentious issues. There are, however, certainly substantial benefits to be gained from introducing a regional currency index among Cambodia, the Lao PDR, and Viet Nam. The overall idea of a subregional ACU is to promote financial cooperation and integration among the three countries, and thus facilitate trade, investment, and economic exchange in general. This would boost the entire region's competitiveness as a whole. One of the basic benefits is that the countries involved would be able to monitor how their individual currencies are faring against each other and how the region's currencies are faring against major international currencies and currency blocs (e.g., the dollar and the euro). Such monitoring facilitated by this index would help in raising alarm bells early enough and preventing the sort of currency crises that took place in 1997/98.

Moreover, the establishment of a subregional ACU would also help facilitate financial exchanges among the countries in the region and provide an alternative to hard international currencies such as the dollar

as a form of reserves. Hence, it would help keep surplus funds within the region and reduce current global financial imbalances.

3.5.5 Joining the Chiang Mai Initiative

Over the last few years, ASEAN+3 countries have made considerable progress in constructing a regional cooperative arrangement for liquidity support and developing regional bond markets.

While ASEAN+3 members have amassed large amounts of foreign reserves in recent years as a war chest, the fear of another round of financial turmoil has receded considerably in East Asia. Because of this, there appears to be less enthusiasm than before for creating institutions vital for improving the effectiveness of the CMI and the ABMI, although ASEAN+3 members still recognize the importance of strengthening regional financial cooperation.

Park (2004) argues that at this stage of development the degree of capital control varies a great deal from country to country in Asia and prospects for further capital account liberalization are not promising. Domestic bond markets in many Asian countries are also too small and underdeveloped to be opened to foreign investors. Under these circumstances, proponents of the ABMI argue that the initiative will produce peer pressure and give incentives to countries to step up financial reform and develop their capital markets. It will also pave the way for an orderly liberalization of cross-border investment in Asia. Regional bond markets in East Asia, if they achieve the necessary level of efficiency, will be able to cater to capital market financing needs of smaller Asian countries that cannot support efficient domestic bond markets.

Supporters of the ABMI are beginning to find out how difficult it is to construct regional financial infrastructure, including a regional clearing and settlement system, a regional credit rating agency, and credit guarantee institutions. There are also difficulties in how to harmonize withholding taxes and different market practices in different countries, as well as the problem of coordinating activities of different regional and multinational institutions involved in Asian bond market development. Even if these problems are manageable, there is still the question of whether ASEAN+3 and other Asian countries are prepared to open their capital markets. In this regard, ASEAN+3 holds the key to the success of the ABMI. If ASEAN+3 members remain united in pushing forward their plan to restructure the CMI into an effective liquidity support system, then it will be easier for ASEAN+3 to promote region-wide capital account liberalization in East Asia.

3.5.6 Enhancing Regional Monetary and Exchange Rate Cooperation

There are four possible steps to achieving deeper regional financial and monetary cooperation:

- **Policy dialogue and surveillance.** These are necessary conditions for prompt financial cooperation and assistance extended by regional neighbors during a financial crisis in one country. There should be open and frank sharing of information as well as discussion of policy issues and options among policy makers, possibly including academics.
- **Regional financial and capital markets.** Developing bond markets at the regional level as well as the national level enhances regional financial stability by helping avoid the double mismatches, reducing over-reliance on bank financing, and enabling access to regional savings.
- **Regional financial arrangements.** A regional system of liquidity support for the prevention and management of financial crises should be developed, consisting of instruments, techniques, and institutions.
- **Monetary policy and exchange-rate systems.** There should be cooperation to ensure monetary policy and exchange-rate regimes that are consistent among economies.

This agenda contains a progressive pattern of sequencing. At the early stages, deepening policy dialogue and surveillance is an immediate priority.

Given the high and increasing demand for regional economic interdependence achieved through market-driven trade, investment, and financial flows, it is crucial for countries in East Asia to maintain a relatively stable intra-regional exchange rate regime. It is especially important for countries such as Cambodia, the Lao PDR, and Viet Nam, which share similar economic and financial structures. With the present conditions of sudden movements in the currency markets, faster-than-expected dollar depreciation may unevenly affect East Asian currencies and seriously undermine the regional economic and financial stability that has been achieved in the years after the crisis. Hence, there is a pressing need for East Asian countries to strengthen their capacity to monitor exchange rate movements and provide a collective response to regional challenges through increased information exchange and policy coordination.

3.6 Conclusion

A high level of dollarization and the absence of monetary policy instruments such as interest rates, reserve requirements, and refinancing facilities make it difficult or even impossible for Cambodia's authorities to achieve price and exchange rate stability. The scope for the conduct of monetary policy aimed at achieving price stability is limited by a lack of effective monetary policy instruments. The nature of a highly dollarized economy hinders the effective implementation of monetary policy since total broad money can only partially be controlled by the central bank. Moreover, currency substitution affects future inflation in two ways, namely, monetary growth-induced inflation and speculative bubble-induced inflation. Recent studies show that currency substitution affects inflation through fiscal and monetary policies. Hence, NBC still faces many challenges and obstacles in implementing and formulating monetary policy.

It seems that the only possible way for NBC to intervene in the exchange rate market to achieve and maintain price stability is through its dollar auctions. When large fluctuations occur in the dollar-riel exchange rate, NBC either sells or buys dollars for riels to manipulate the money supply in the market.

For any central bank to adopt a successful inflation targeting policy, at least three prerequisites need to be fulfilled: monetary independence, absence of other policy goals, and a strong relationship between monetary instruments and inflation. It seems a bit too early for Cambodia to consider inflation targeting as an anchor of monetary policy. The reason is that the conduct of monetary policy in Cambodia is crippled by a lack of institutional frameworks and market-based instruments, and the existing dollarization of the economy. For the time being, Cambodia is still indecisive as to which policy option should be pursued. If NBC decides to fully dollarize the economy, inflation targeting would not be necessary since domestic inflation would eventually be tied to the dollar. However, NBC has recently identified de-dollarization as one of its long-term policy objectives. In Cambodia, perhaps dollarization could be marginally reduced by implementing the budget entirely in riels, and by issuing treasury bills denominated in riels. The operations of the Treasury, after all, have an impact on the level of dollarization. The more the Treasury injects riels into the private sector through its expenditures, the more it contributes to the stabilization of dollarization or even to de-dollarization. Conversely, the more public spending is made in dollars, the more dollarization is boosted. However, in the absence of other instruments, if the central bank adopts inflation targeting by using only exchange rate intervention, large amounts of international reserves are required. In addition, attempts

to keep the exchange rate stable may leave the country vulnerable to speculative attacks, threatening financial and price stability.

Currently, NBC is on the right track in pursuing monetary policy aimed at building its credibility—such as restructuring the banking system. The process of strengthening the banking and financial sectors has to be coupled with appropriate fiscal policies and the political will crucial to bringing about both economic and political stability in the country. Fiscal discipline will need to remain a cornerstone of the government's policy mix, and NBC will need to strengthen drastically its supervisory capacity and its ability to influence bank liquidity, presumably via the gradual development of some types of financial instruments.

NBC and the government are currently constrained in their ability to reintroduce the riel on a massive scale or enforce the exclusive use of the riel. Furthermore, the level of net international reserves, compared with the amount of trade-related transactions and capital flows, is insufficient to offer credible support for an unconditional peg. Hence, a sweeping policy such as establishing a currency board arrangement for Cambodia could have a negative impact on foreign investors, who appreciate the fact that they can currently operate entirely in dollars without exchange rate risk. All these reasons argue against considering a single-currency board arrangement in Cambodia, because the benefits would not exceed those enjoyed under the present system and would entail major risks.

With regard to the establishment of an ACU, this could eventually be achieved in the long term, when the so-called convergence criteria have been met. At such a time, the ACU could be used in a regional payments settlement mechanism and as a form of international reserves, or even eventually as a full-fledged single currency system. Broadly, for this to happen, the markets for goods and services in the region would have to be fully free and integrated, human resources would have to be able to move relatively freely within the region, capital markets would need to be developed and integrated, and economic structures and levels of development of countries in the region would have to be closely comparable. Until then, however, the costs of such a system in terms of a loss of domestic policy control may be too difficult for certain countries to swallow.

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Lao People's Democratic Republic: Dealing with Multiple Currencies

Phouphet Kyophilavong

In 1986, the Lao People's Democratic Republic (Lao PDR) embarked on an ambitious program of economic reform called the New Economic Mechanism (NEM), which transformed the centrally planned economy into a market-oriented one. The reform program has significantly contributed to economic growth and poverty reduction.

However, structural reforms in some areas such as state-owned enterprises (SOEs) and the fiscal and financial sectors have lagged. The reform of the financial sector began in the 1990s with the move from mono-banking to a two-tier banking system consisting of the central bank and state-owned commercial banks (SOCBs). Because of the slow pace of reform, however, SOCBs are suffering from high amounts of nonperforming loans (NPLs), a significant portion of which are accounted for by SOEs. In addition, the Lao PDR is facing chronic government budget deficits (Table 4.1). So far, foreign aid and loans have financed the budget deficits, leading to a continuously high ratio of external debt to gross domestic product (GDP). For example, external debt stood at 101% of GDP in 1998, 70% in 2002, and 78% in 2005.

Apart from macroeconomic vulnerability, the Lao PDR economy is also highly dollarized. Foreign currency deposits have accounted for more than 60% of broad money (M2) since 1999. Several factors have contributed to dollarization in the country. One of the most important was macroeconomic instability in the form of high inflation and rapid exchange rate depreciation (Keovongvichith 2004). This posed a serious challenge to the Bank of the Lao PDR (BOL), the central bank, over the conduct of effective monetary and exchange rate policy. While dollarization has several advantages and disadvantages for the country, the negatives seem to outweigh the positives, given the high degree of dollarization (Menon 2006). Thus, monetary authorities have tried hard to de-dollarize the economy.

To formulate effective policies for de-dollarizing the economy, it is important to study the current financial situation, the degree of

Table 4.1: Lao PDR: Macroeconomic and Financial Indicators

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 ¹	2006 ²	2007	2008
1. Macroeconomic indicators														
GDP (KN billion)	1,430.4	1,725.7	2,201.0	4,240.0	10,329.0	13,669.5	15,701.8	18,390.0	20,307.1	26,590.1	30,599.9	35,983.0	39,874.0	46,700.0
GDP growth (real)	7.0	6.9	7.2	4.0	5.2	5.8	5.8	5.9	5.8	6.9	7.3	8.4	7.5	7.2
GDP per capita (\$)	381.8	394.3	360.6	198.6	285.5	333.8	332.5	338.9	384.6	443.1	478.7	594.0	679.0	856.0
Government deficit/GDP (%)	(6.0)	(5.5)	(7.5)	(2.9)	(4.6)	(4.4)	(3.4)	(5.7)	(8.2)	(6.5)	(8.3)	(2.9)	(2.0)	(3.4)
Outstanding debt/GDP (%)	38.0	41.3	52.2	101.0	73.4	64.4	68.1	70.2	65.0	78.4	78.2	97.1	104.5	97.6
2. Monetary aggregate														
Base money (KN billion)	na	104.4	150.1	281.8	481.8	766.7	822.5	1,079.1	1,369.1	1,545.3	1,823.2	1,998.0	3,065.0	3,215.0
M2 (KN billion)	na	244.9	406.0	865.9	1,544.0	2,252.1	2,704.1	3,435.5	4,094.7	4,999.9	5,416.3	7,046.0	9,774.0	11,181.0
Central bank discount rate (%)	na	na	na	na	0.4	0.4	0.4	0.2	0.3	0.3	0.3	na	na	na
Deposit rates (%)	17.5	17.5	18.0	22.0	20.0	20.0	15.0	15.5	15.5	13.0	12.5	6.8	6.8	6.8
Prime lending rate ^d (%)	21.5	18.5	19.0	23.0	27.0	21.0	22.0	21.0	22.0	20.0	19.8	13.0	12.5	12.5
Inflation rate (%)	19.6	15.8	19.5	90.1	128.4	23.1	7.8	10.6	15.5	10.5	7.2	6.8	4.5	7.6
Dollarization ratio ^e (%)	na	na	na	na	83.7	78.4	78.0	75.5	68.7	68.0	68.5	58.2	54.5	50.4
3. Exchange rates														
Nominal exchange rate ^f (KN/\$)	834.2	938.7	1,304.8	3,422.0	7,437.7	7,935.0	8,938.0	10,111.2	10,609.4	10,644.5	10,672.9	9,695.0	9,423.0	8,797.0
Real exchange rate (KN/\$)	na	na	na	na	na	na	100.8	96.9	97.5	100.2	104.0	105.5	104.3	123.5
Balance of payments/GDP (%)	1.8	4.1	(3.4)	0.2	(0.4)	2.0	(0.4)	3.4	0.9	0.5	0.4	2.8	4.8	1.9
Current account balance/GDP (%)	(7.6)	(12.5)	(10.0)	(3.0)	(5.1)	(0.3)	(3.9)	0.2	(2.0)	(7.6)	(6.8)	(10.3)	(15.8)	(16.5)
Exchange reserves/GDP (%)	5.3	9.1	6.31	1.4	7.3	8.1	7.5	10.7	10.1	9.1	8.4	9.4	12.9	11.8
Exchange market interventions	na	na	na	na	12.2	11.1	0.2	19.2	(25.9)	17.1	(9.0)	na	na	na

GDP = gross domestic product, KN = kip, M2 = broad money, \$ = US dollar, () = negative value, na = not available.

¹1995–2005 data are from the Bank of the Lao People's Democratic Republic (Lao PDR). ²2006–2008 data are from the International Monetary Fund (IMF Country Report No. 08/340).

³Average of the deposit rates used by local banks. ⁴Average of the deposit rates used by local banks. ⁵Ratio of total foreign currency deposits to total deposits. ⁶Exchange rate at the end of the period.

Source: Bank of the Lao PDR and the IMF.

dollarization, present monetary policy, and possible de-dollarization options.

However, there are very few studies on monetary and exchange rate policy in the highly dollarized context of the Lao PDR economy.¹

This chapter will review the financial and banking reforms in the Lao PDR; discuss the issues arising from the implementation of monetary and exchange rate policies under dollarization; and explore the possibilities for financial sector cooperation among Cambodia, the Lao PDR, and Viet Nam (the CLV countries).

4.1 Recent Economic Developments

4.1.1 Structural Reforms

After the 1975 Communist revolution, the Lao PDR established a centrally planned economy in which domestic prices, as well as domestic and foreign trade, were strictly controlled by the state. In this system, the government was allowed to establish and operate SOEs, but the government and SOCBs heavily subsidized the enterprises (Bourdet 1992; Ljunggren 1993).

Since 1986, the Lao PDR has implemented reforms under NEM, including the promotion of private production through better incentives; the establishment of institutional infrastructure to improve the functioning of the market economy; trade liberalization and specialization to improve the Lao PDR's comparative advantages; and price stabilization through macroeconomic policy measures (Bourdet 1992; Ljunggren 1993).

The adoption of NEM was followed by robust economic growth and the steady accumulation of international reserves. The reforms gradually stabilized the economy. Table 4.1 shows that the inflation rate moved from double digits in 1995 to single digits in 2005, with the value of the kip remaining relatively stable.

However, fiscal and financial sector reforms, as well as efforts to restructure SOEs, have not lived up to expectations (Pham 2005). The lengthy fiscal reform process has caused large budget deficits and also slowed down the reform of the banking sector. High NPLs have left banks unable to perform their expected role in the economy (BOL et al. 2002).

The national development vision for 2020 is to have the country graduate from its status of least-developed country and into sustainable development that balances the needs of society and those of the environment. The initial development objectives have been: first, to reduce

¹See more details in Sinxayvoravong (2003), Sengsourivong (2005), Kyophilavong and Toyoda (2005), and Toyoda and Kyophilavong (2007).

poverty by more than half by 2005 and to fundamentally eradicate it by 2010; second, to totally eliminate opium production by 2005; and third, to stop slash-and-burn cultivation by 2010 (Government of the Lao PDR [GOL] 2004, 2006).

To achieve its goals, the government has drawn up the National Economic Development Plan (NEDP) and the National Poverty Eradication Program (NPEP). BOL, meanwhile, has been structuring monetary policy in line with the NEDP. The overall direction of the Sixth NEDP includes transforming the economy from one where the sectors perform unevenly to one with faster, stable growth across all segments within a market mechanism guided by the state. The NEDP focuses on economic development, with human development as a key vehicle; increased competitiveness and use of comparative advantage to meet international economic commitments; and strengthened positive links between economic growth and social development to address issues, such as poverty and other social evils, and help maintain sociopolitical stability. The plan's indicators and targets coincide with most of those in the United Nations Millennium Development Goals (GOL 2006).

4.1.2 Macroeconomic Situation

The shift from a centrally planned to a market-oriented economy with the introduction of NEM in 1986 brought high economic growth with exchange rate and price stability, until the Asian financial crisis of 1997/98.

The macroeconomic situation deteriorated sharply during the financial crisis. The steep depreciation of the kip led to high inflation, with serious impact on the Lao PDR economy.² In 1997, the kip depreciated 70% against the dollar, leading to a rapid increase in inflation to 150% in early 1999 (Table 4.1). The value of agricultural products decreased 3.5% in 1998 while foreign direct investment (FDI) plunged 48% below its 1997 level.³ But the economic instability in the Lao PDR during the crisis was not due to external shocks alone. Weak macroeconomic management was compounded by lengthy consensus building in the decision-making process, making it more difficult for the country to recover at a time when swift action was needed (Okonjo-Iweala et al. 1999).

The macroeconomic situation, however, has recovered since 2000. Table 4.1 shows that real GDP growth climbed 5.8% in 2003, 6.9% in

²Hara (2002) points out that during the Asian financial crisis, the central bank compensated for the budget deficits with an increase in the money supply, which led to high inflation and a depreciation of the kip. Such incongruous macroeconomic management should be reconsidered.

³For details on the implementation of monetary and exchange rate policy during the Asian financial crisis, see Furukawa (2002) and Development Analysis Network (1999).

2004, and 7.3% in 2005. By government estimates, GDP grew 7.1% in 2006, 7.5% in 2007, and 7.2% in 2008. Recent growth has been mainly due to an increase in foreign investment in hydropower, agriculture, and mining (Kyophilavong 2009; Kyophilavong and Toyoda 2008).

The exchange rate has also stabilized since 2000. The kip depreciated against the dollar by 4.9% in 2003 but experienced only marginal depreciation in the next 2 years. In 2006, the kip began to strengthen against the dollar, rising 9.2% in 2006, 2.8% in 2007, and 6.6% in 2008 (Table 4.1). The appreciation was mainly due to massive foreign capital inflows, the general weakness of the dollar against other Asian currencies, and the prudent monetary and exchange rate policy pursued by BOL.

Exchange rate stability has pushed down inflation,⁴ from 10.5% in 2004 to 7.2% in 2005, 6.8% in 2006, and 4.5% in 2007, although it went up slightly to 7.6% in 2008. Moreover, recent economic growth has also contributed to a decline in the poverty rate, from 45.0% in 1997–1998 to 33.5% in 2002–2003.

The Lao PDR's recent economic indicators are shown in Table 4.1. Economic growth has been high, the exchange rate and prices have been relatively stable, and poverty has been significantly reduced. However, the macroeconomic situation remains fragile because of the government's weak fiscal position and the underdeveloped state of the financial system. The Lao PDR has had chronic budget deficits because of weak revenue collection and a lack of credible revenue projections. The government deficit as a percentage of GDP stood at 6.5% in 2004 and increased to 8.3% in 2005. However, it declined to about 2.0% from 2006 to 2008 as revenues from mining increased and fiscal management strengthened.

Under these circumstances, domestic savings cannot be mobilized more effectively. The budget deficit is financed with foreign aid and loans. If the Lao PDR continues to depend excessively on foreign resources, especially external debt, it will face risks in managing its debt (Kochhar et al. 2009).

Another problem is a lack of domestic savings, which is partially related to the early state of development of the banking and financial system. Banking is dominated by SOCBs, which are unable to perform effectively the functions expected of them. They are especially unable to mobilize

⁴The Lao PDR government has had zero-monetized budget deficits since 2000. The budget deficit is financed from foreign savings and government revenues. Therefore, recent fiscal deficits have not been inflationary. The main reason for the lower inflation since 2004 has been exchange rate stability. FDI flows into mining and hydropower have increased since 2001 and this increase, coupled with a weak dollar, has stabilized the exchange rate.

savings from people in the rural areas.⁵ However, BOL recently liberalized regulations to encourage the private sector to establish banks. This is an important step to increase competition in the banking sector.

4.2 Financial Markets and the Banking Sector

4.2.1 Financial Reforms

Before 1988, the State Bank conducted both central and commercial banking activities. It accepted deposits from SOEs and provided credit to them under the central government's economic plan, acted as the government's treasury, and managed the supply of currency.

During this period, the Lao PDR went through an era of financial repression because the monetary policy framework operated through direct monetary instruments.⁶ The mono-banking sector and its policy framework were influenced by fiscal needs. Because the principal aim of monetary policy was to fulfill the government's development plan, state enterprises often sought credit.⁷

In March 1988, the government began major reforms to transform the financial system in line with the objectives of NEM. To make the banking sector more market oriented and improve resource mobilization and allocation, the State Bank was reorganized into a two-tier system, with central banking separated from commercial banking.

The Central Bank Law of June 1990 formally separated the central banking activities of the State Bank. It established BOL as the central bank, defined its role and functions, granted it the necessary powers, and made it primarily responsible for controlling monetary and financial developments and developing indirect policy instruments.⁸ In September 1991, a centralized system of international reserve management was put in place and assets from the Banque pour le Commerce Extérieur

⁵People in the rural areas who have no access to the financial system mostly save in the form of gold and silver (Toyoda and Kyophilavong 2005).

⁶Such as credit ceilings, interest rate controls from 1979 to 1985, and directed credit.

⁷Many of these loans were nonperforming or past due. A technical review of commercial bank portfolios undertaken with support from the Asian Development Bank (ADB) in 1992 found that, on average, 47% of total loans were past due and an additional 34% were nonperforming (ADB 1992).

⁸BOL introduced a reserve requirement ratio in October 1990, opened a formal credit window in 1992–1994, began regular Treasury bill auctions in March 1994, opened a discount window for T-bills in May 1994, removed all interest rate ceilings in 1991, and eliminated rate guidelines on deposit and lending rates in 1992–1993 (Otani and Pham 1996).

Lao (BCEL), which had held most of the country's official international reserves, were transferred to BOL.

Under the two-tier banking system, commercial banks have been providing banking services to the public such as taking deposits and allocating credit. During the reform period (1988–2005), the functions of commercial banks were expanded and diversified:

- Decree No. 11 (3/1988) transformed all of the State Bank's branches into autonomous SOCBs in 1988–1991,⁹ and the Law on Commercial Banks No. 02/PR (2000),¹⁰ requiring headquarters in the capital city, and banking sector reform under an ADB-supported project loan¹¹ (2003–2005), consolidated SOCBs.
- Ownership of banks has also been diversified to include such banks as Vientiane Commercial Bank¹² and joint-venture banks.¹³
- Several foreign banks¹⁴ have been licensed to open branches, which started operating in the Lao PDR in 1992.
- In 1993, the government also set up the Agricultural Promotion Bank (APB), a development bank, to assist agricultural borrowers (World Bank 1994).

At the end of 2008 (Figure 4.1), the banking sector consisted of four SOCBs,¹⁵ two banking joint ventures between the private sector and the government, five private banks (including joint ventures), nine branches of foreign banks, and three representative offices of foreign banks.

⁹First, two branches of the old State Bank, Nakhoneluang Bank and Sethathirath Bank, were turned into autonomous SOCBs. Then BOE's largest branch, BCEL, was granted autonomy in November 1989, and three more branches (Pak Tai Bank, Lao May Bank, and Lane Xang Bank) became independent state-owned banks in 1990. Lastly, Aroun May Bank, the last of the original four branches of the old State Bank, was turned into a commercial bank in September 1991.

¹⁰Eight SOCBs were merged, with only four SOCBs remaining. Phak Tai Bank and Nakhone Luang became branches of Lao May Bank, and Setthathirath Bank and Aroun Mai Bank were merged with Lane Xang Bank. BCEL and APB continue operations as mandated by law.

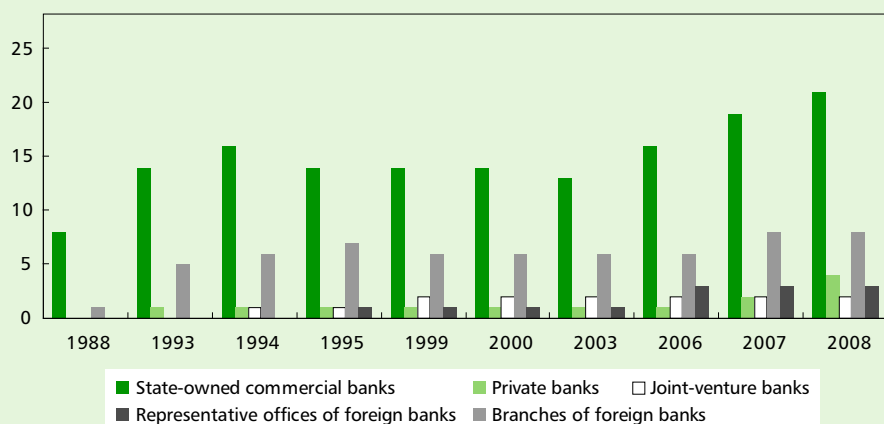
¹¹Lao May Bank and Lane Xang Bank were combined into the new Lao Development Bank (LDB) in 2003.

¹²Established in 1993, with 25% of its capital provided by Lao PDR's private investors and 75% by foreign investors.

¹³The joint-venture banks: (i) the Joint Development Bank (JDB), established in October 1989, with 70% of its equity capital provided by Thai investors and 30% by BOL; and (ii) the Lao–Viet Bank (LVB), established in June 1999, with capital provided by BCEL, the Bank for Investment, and the Development Bank of Viet Nam.

¹⁴Siam Commercial Bank (December 1992), Thai Military Bank (1993), Krungthai Bank (1993), Bangkok Bank (1993), Ayoudya Bank (1994), and Public Bank (1995).

¹⁵BCEL, LDB, APB, and Nayobay Bank (established in 2006).

Figure 4.1: Lao PDR: Number of Banks, 1988–2008

Lao PDR = Lao People's Democratic Republic.

Source: Bank of the Lao PDR.

Table 4.2: Lao PDR: Market Share of Banking Institutions

Financial institutions types	Number	Assets		Deposit		Loan	
		KN billion	%	KN billion	%	KN billion	%
State-owned commercial banks	4	7,704	61	6,542	69	2,912	74
Joint-venture banks + Private banks	6	2,971	24	1,854	20	5,211	3
Branches of foreign banks*	11	1,942	15	1,050	11	521	13
Total	21	12,617	100	9,445	100	3,955	100

Lao PDR = Lao People's Democratic Republic, KN = kip.

*Including representative offices of foreign banks.

Source: Bank of the Lao PDR.

However, only SOCBs are allowed to establish and operate branches in other provinces.

4.2.2 Structure of the Banking Sector

At the end of 2008, the financial sector in the Lao PDR consisted of 21 commercial banks (Figure 4.1) and 37 nonbanks and financial institutions.¹⁶ SOCBs dominate the market with more than half of total assets and loans and more than two-thirds of total deposits (Table 4.2). The government wholly owns the two largest banks (BCEL and the Lao Development Bank [LDB]). BCEL maintains a dominant position, accounting for about half of

¹⁶Nineteen pawnshops, 16 microfinance institutions, one postal savings institution, and one general insurance company (data were available only until 2006). However, no financial data on nonbank and financial institutions could be obtained.

Table 4.3: Lao PDR: Banking Sector's Contribution

GDP share (%)	2005	2006	2007	2008*
Total assets	22.40	25.80	28.49	27.02
Total deposits	17.40	19.10	22.08	20.23
Total loans	8.30	8.80	8.79	8.47
T-bills	0.68	0.74*	na	na

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, na = data not available.

*As of June.

Source: Bank of the Lao PDR.

total deposits and loans, underscoring SOCBs' dominance of the banking sector.

The Lao PDR financial market is relatively small at this early stage of its development, and neither the bond nor the stock market is fully developed. Table 4.3 shows that although T-bills exist in the money market, the market is relatively small in relation to the size of the economy.

Only the banking sector supplies credit to the economy,¹⁷ but it too is still small compared with the size of the economy. For instance, the total assets of the banking system are only about 27% of GDP (Table 4.3). This ratio is particularly low for an economy with a nondiversified financial system that relies on banks as almost the only source of funding.

Table 4.3 also shows the low mobilization of savings in the Lao PDR. There are fundamental reasons for this. First, the banking sector has limited reach in the rural areas and is therefore overwhelmingly urban. Second, noncash payment modes such as checks are in limited use in this cash-based economy. Also, incomes are low (BOL et al. 2002). Finally, people in the rural areas mostly save in the form of gold and silver (Toyoda and Kyophilavong 2005).

The low ratio of credit to GDP shown in Table 4.3 has three main causes: lack of skilled human resources in the banking sector, distorting price signals that discourage corporate access to banking services, and weak legal enforcement of NPLs that heightens credit risk.

The shallowness of the Lao PDR financial sector compared with the size of the economy makes funding less accessible to the private sector. For instance, credit from the banking sector, the primary source of funding, is less than 9% of GDP (Table 4.3). In addition, even though there is an official alternative financial market, only T-bills—in other words, only a

¹⁷The reference here is to formal banking data; informal financial data are not included.

government financial product—are traded there and only commercial banks and a few enterprises participate. Corporate bonds have not yet been developed, despite the passage of the Business Law in 2005.

Moreover, there is no capital market—neither a stock exchange nor a bond market—to provide alternative funding.¹⁸ However, there are informal sources such as lending through traditional Lao *houay*¹⁹ and loans from friends or family. Evidence from surveys on rural finance shows that people, wealthy or poor, mainly borrow from informal sources including friends, family, moneylenders, and *houay*, with about 33% of the well-to-do and 40% of the poor making use of such informal funding sources.

4.3 Multiple-currency Phenomenon and Monetary Policy

4.3.1 Monetary Policy

FRAMEWORK AND DECISION-MAKING PROCESS

Since 1990, the Lao PDR banking sector has operated under a two-tier system, with BOL as the central bank. At first, the monetary policy framework was unclear as to whether the sector would operate under an exchange rate regime or adopt monetary targeting. Also, monetary policy instruments were a mix of direct and indirect tools without clear monetary channels and objectives.

To limit and target credit expansion, BOL relied on direct instruments, including interest rate control on both lending and deposit rates during the 1990s, and on credit ceilings from 1995 to 1996. However, indirect instruments such as reserve requirements and market operations, which were introduced in 1999, have been developed since then.²⁰ Open market operations include both BOL bills and Treasury bills.

BOL's monetary policy framework was adopted under an International Monetary Fund (IMF) program (Poverty Reduction and Growth Facility 2001–2005). According to the framework, price stability is BOL's main policy goal, along with economic growth and poverty reduction.

¹⁸The Lao PDR plans to establish a stock market by 2010.

¹⁹Collecting from and lending money to their members at relatively high interest rates.

²⁰According to Dalaloy (2006), before 1995, the reserve requirement ratio did not distinguish between the kip and foreign currency. The ratio was 5% in 1985, 10% in 1994, and 12% in 1995. Separate reserve requirement ratios for the kip and foreign currency were introduced in 2000. They stood at 6% (kip) and 12% (foreign currency) in 2000, 8% (kip) and 15% (foreign currency) in 2002, and 5% (kip) and 10% (foreign currency) in 2006.

Table 4.4: Lao PDR: Monetary Policy Instruments

Instruments	Operating targets	Intermediate targets	Objectives
Direct			
Interest rate control (1988–1990)	Reserve money	Credit	Economic growth
Credit ceiling (1995–1996)	Interest rate	Money supply	Inflation
		Net domestic asset	Exchange rate
Indirect			
Reserve requirement (1990–)			
Open market operation			
BOL bills (1991–)			
Treasury bills (1994–)			
Overdraft facility (1990–)			
Bank rate			

Lao PDR = Lao People's Democratic Republic.
Source: Bank of the Lao PDR.

This policy framework involves the implementation of monetary and exchange rate policies that establish floors for international reserves and ceilings for net domestic assets of the central bank.

BOL conducts monetary policy by setting the annual growth rate of money supply as an intermediate target (Table 4.4), in line with the rate of growth and price stability, by using the theoretical framework of the Quantity Theory of Money.²¹ Reserve money and interest rates are closely monitored as an operational target to attain the intermediate target. Reserve requirement ratios, foreign exchange, discount rates, bank rates, and refinancing facilities are the BOL's main monetary tools for smoothening the monetary base and interest rates.

Under the BOL Law No. 5 and governance structure,²² all key monetary and exchange rate policies, including the BOL's action plans, must be approved by the government.

²¹De Grauwe and Polan (2005) used a sample of about 160 countries over the last 30 years to test the quantity theory relationship between money and inflation. The result shows that there are strong links between inflation and money growth especially in countries with hyperinflation.

²²The highest authority of BOL is the BOL executive board, which consists of seven to nine members who are appointed and can be removed by the prime minister as proposed by the BOL governor. The deputy prime minister chairs the board, and the governor and the minister of finance are the vice-chairmen. Board members have a 5-year term of office. Similarly, the "Governor shall be appointed or removed from office by the President of the country upon proposal of the Prime Minister, then proposed to the National Assembly for approval" (Articles 12 and 17). Finally, the prime minister appoints the directors of BOL's departments (Article 19).

BOIs action plans have to be approved by the government, while the instruments it uses have to be approved by the BOL governor. BOIs monetary policy department monitors and adjusts the tools mentioned above to achieve the policy target, while BOIs banking operations department operates the tools together with the financial institutions.

PRESENT AND PROSPECTIVE STRATEGIES

Under the IMF support program, Lao PDR policies proved to be effective in reducing inflation while avoiding the significant output declines that transition economies often experience. The economy grew by an annual average of about 6.5% throughout 1992–2005 and largely achieved macroeconomic stability. Inflation was reduced to single digits in 2001, but returned to double digits in 2002–2004 before slowing to an average of 7.3% in 2005, 8.4% in 2006, and about 7.0% in 2007 and 2008. This shows that the program has been successful in maintaining exchange rate and price stability.

Nevertheless, the implementation of monetary policy in the Lao PDR still has a great deal of shortcomings. There are four main reasons for the constraints on monetary policy.

The Lao PDR economy is highly dollarized. More than 60% of bank deposits are in foreign currencies, mainly dollars. Therefore, the monetary authority cannot conduct policy effectively for reasons that are discussed in more detail below. The various options for overcoming this, such as a currency board or a crawling peg, need to be studied carefully (BOL et al. 2002).

Another cause of the limited implementation of monetary policy is the lengthy and opaque decision-making process. By law, the government approves all key monetary policies and action plans (BOL et al. 2002)—a time-consuming process. BOL must first explain the objectives, mechanisms, and consequences of its policies and measures to the Board of Governors. Only then can decisions be finally made. The negative consequences of this decision-making process were an important factor for the Lao PDR during the Asian financial crisis (Okonjo-Iweala et al. 1999). Also, BOIs efforts to maintain the value of the kip or keep inflation under control may sometimes conflict with government priorities (BOL et al. 2002).

Underdeveloped financial markets limit the effective implementation of monetary policies, because BOL has very limited instruments available for conducting monetary policy. The bond market is still at an early stage of development, and the volume too small to enable effective open market operations. Another issue is the fact that BOL lacks business expansion funds and a general reserve account to compensate for losses from the implementation of monetary policies (BOL et al. 2002).

4.3.2 Multiple-currency Phenomenon

The Lao PDR economy is highly dollarized. People use foreign currencies widely as a means of payment, a unit of account, and a store of value. The use of foreign currencies is not new in the Lao PDR, a country with long borders that abut major trading routes of relatively large countries. The use of foreign currency was prompted by a massive foreign presence in the late 1960s and early 1970s during the Indochina War, and some households retained the cash balances acquired during those years as a precautionary store of value. In the late 1980s, foreign currency deposits (FCD) in the banking system were legalized in the Lao PDR, which encouraged the repatriation of balances kept in foreign banks, mainly in Thailand, to be deposited in domestic banks. The extent of dollarization is usually measured by the ratio of FCD held by residents to the broad monetary aggregate. The amount of FCD as a percentage of M2 was about 20% in 1991 and 1992, and rose to between 30% and 35% in mid-1996, before increasing sharply to around 80% in 1999 during the Asian financial crisis. The ratio of FCD to M2 declined consistently from 2001 to 2008. FCD were about 50% of M2 in 2005 and declined to about 40% in 2008 (Figure 4.2).

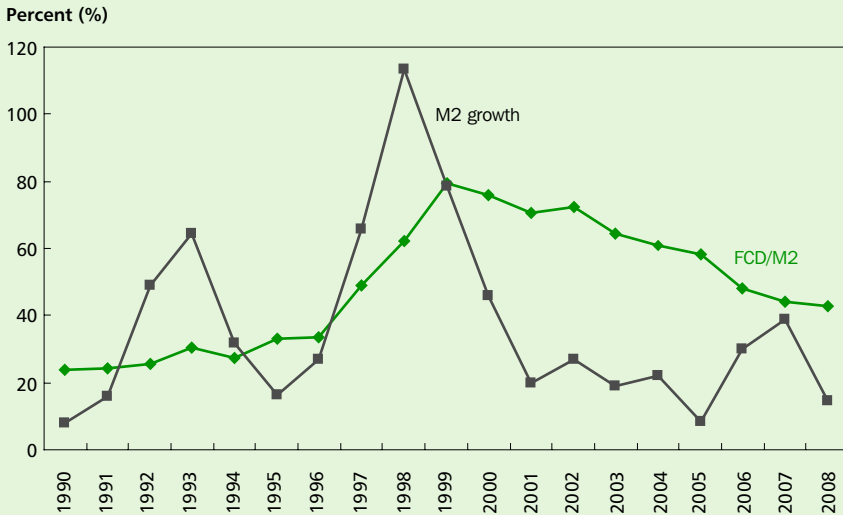
The initial cause of the dollarization of the Lao PDR economy appears to be twofold. First, there was a low level of confidence in the domestic currency. When the Lao PDR was established in December 1975, a new currency was also created (new units of the domestic currency, the kip),²³ but it underwent rapid reductions in value, in 1975 and again in 1979. A second reason was the country's geographic and cultural proximity to Thailand.²⁴ This has led to huge cross-border trade, both legal and illegal.²⁵ In the late 1980s and early 1990s, the Thai baht was very stable against the dollar, so Lao PDR household savings were often made in baht.

The rapid surge in dollarization was caused by the instability of the domestic currency in the second half of the 1990s. The sharp depreciation of the kip between 1995 and 1999 caused households and other agents in the economy to prefer foreign currencies to the national currency. The exchange rate depreciated from 834 kips (KN) to the dollar in 1995 to

²³In December 1975, when the Lao PDR was established, the new government issued new currency to replace the old to symbolize independence and sovereignty. However, the value of the new kip rapidly decreased because of the weak economy. In 1979, the government again issued a new kip, equal to 100 old kip, to strengthen the value of the domestic currency.

²⁴Most main cities are located along the Mekong River border with Thailand and the two countries have very similar cultures and languages. People who live along the banks of the Mekong River speak the same language (Lao).

²⁵According to a Bank of Thailand survey in 1994, illegal cross-border trade amounted to 50% of the legal trade between the two countries.

Figure 4.2: Lao PDR: FCD/M2 and M2 Growth Rates

FCD = foreign direct deposits, Lao PDR = Lao People's Democratic Republic, M2 = broad money.
Source: Bank of the Lao PDR.

KN7,437 in 1999, and to KN10,672 in 2005. Inflation surged during 1999 from 19.6% to 128.38%, but eventually declined to 23.1% in 2000 and 7.2% in 2005 (Table 4.1).

In addition to liberalization, there was an opening of the economy to foreign investment and deregulation of current and capital account transactions. FDI dramatically increased from 1992 to 1996, but fell during the Asian financial crisis of 1997/98, then continued to increase from 2001 to 2008. Remittances from Lao living abroad to their families and relatives in the Lao PDR also played a significant role in dollarization.²⁶

Dollarization or partial-dollarization involves benefits as well as costs for developing countries and transitional economies. In the case of the Lao PDR economy, where the financial system is still immature and subject to many distortions, dollarization presents both advantages and risks. It can increase financial intermediation by allowing residents to hold deposits in foreign currencies. It also puts pressure on the government to maintain fiscal discipline. On the other hand, dollarization weakens the central bank's control over monetary policy. It also means the government

²⁶There are now about 500,000 Lao migrants in the United States and more than 100,000 in Europe and Australia.

loses seigniorage, and, in some instances, the potential for a banking crisis increases.

4.3.3 Advantages and Disadvantages of Dollarization

Allowing FCD in the domestic banking system enhances the opportunity for re-intermediation in an economy that has undergone periods of very high inflation and unstable macroeconomic conditions. Capital flight is discouraged and the repatriation of funds encouraged because residents can hold foreign currency assets in domestic banks. These funds can increase bank intermediation and facilitate transactions, although banks have to carefully manage currency risk and mismatch. After residents were allowed to hold foreign currency accounts in the Lao PDR banking system, dollar deposits increased sharply.

Lower demand for domestic money in a dollarized economy reduces the opportunity for the government to borrow from the central bank. The situation is even worse in the case of the Lao PDR economy because it has very low financial intermediation. A common indicator of the level of financial intermediation is the percentage of M2 to GDP. In the Lao PDR, the percentage is very low, about 20% at the end of 2006, compared with an average of 72% in developed countries. As a result, financing the budget deficit by borrowing from the central bank becomes more costly in terms of inflation. This is illustrated by the high level of monetized budget deficits in the fiscal years 1997/98 and 1998/99,²⁷ which, compounded by the external shock of the Asian financial crisis, led to rapid currency depreciation and high inflation during that period. This experience forced the government to pursue a more sustainable fiscal path by conducting zero-monetized budget deficits since 2000.

With the use of foreign currency in an economy, the demand for real money balances in the domestic currency declines, and the amount of seigniorage that can be collected at a given level of inflation is lower. In other words, when there is a constant relationship between GDP growth and the desire of households to hold real money balances, an expanding economy implies an increase in household demand for real money balances. If the growth of the money supply does not exceed the increase in demand, fiscal deficits are not inflationary, and the government benefits from an excess of expenditure over revenue (Fischer 1982). To the extent that households hold foreign currencies instead of the domestic currency, part of the benefit of seigniorage passes to the foreign government whose currency is being held. According to Baliño et al. (1999), a simple way of

²⁷According to an IMF (2000) study, during those fiscal years when the government financed budget deficits by borrowing from the central bank, the level of monetized budget deficits was about 4%–5% of GDP

calculating the loss in seigniorage is as follows: if the ratio of dollars to GDP is about 10%, and money supply grows at an average of 15% a year, seigniorage losses would amount to 1.5% of GDP a year.²⁸

However, the more obvious effects of dollarization on the Lao PDR economy involve the loss of control over monetary policy. Dollarization makes the economy more vulnerable to inflation and increases the volatility of exchange rates (Calvo and Végh 1996; Baliño et al. 1999; Berg and Borensztein 2000). First, this is because domestic money demand will be more sensitive to changes in its expected opportunity cost. In addition to the usual effect of changes in interest rates on overall demand for money, the demand for domestic money will also be affected by changes in relative opportunity cost to foreign money. Therefore, the interest elasticity of domestic money demand will be higher when dollarization is higher. The key implication of high interest elasticity in a floating exchange rate regime is that the exchange rate will be more sensitive to expected changes in domestic money supply and other factors that affect money market equilibrium.

Second, the money supply becomes almost endogenous, as monetary authorities can control only domestic money. Changes in the currency composition of money demand render more unstable and unpredictable transmission of monetary impulses to price and output (Chang and Velasco 2002).

Dollarization in general results from prolonged macroeconomic instability. Dollarized financial systems are exposed to both solvency and liquidity risks. The main solvency risk results from currency mismatches on the part of banks in the event of large exchange rate depreciations. With liquidity risk, dollar deposits at domestic banks are different from dollar deposits offshore because of different country risk premiums associated with a sudden loss in business confidence in the domestic economy. Households may need to withdraw immediately, so domestic banks may run out of reserves to facilitate such withdrawals.

Foreign currency deposits account for a large share of banking deposits in many developing and transitional economies. For banks, this results in the dilemma of whether to lend these funds in foreign currency to keep the foreign currency position balanced, or to lend these funds in the domestic currency when there are not enough borrowers who have revenue streams fully denominated in foreign currency. Experience shows that, in general, banks in developing countries tend to increase foreign currency loans in parallel with their FCD to close their foreign currency positions. This policy may force banks to lend in foreign currencies to

²⁸The FCD in the Lao PDR banking system were about \$200 million at the end of 2000, roughly 10% of GDP, and the monetary aggregate growth target was 15%–20%. Therefore, the seigniorage loss was roughly equivalent to \$30 million–\$40 million.

borrowers who may not generate revenue fully in foreign currencies. To maintain their profitability, banks end up lending a large share of their FCD domestically by transferring the currency risk to unhedged clients and are therefore saddled with large portfolios of NPLs. According to Menon (2006), a comparison of the advantages and disadvantages of dollarization in the Lao PDR shows that the costs of dollarization in the country appear to be higher than the benefits.

4.3.4 Measures to Stem the Use of Foreign Currency

The experience of dollarized economies shows that the dollarization process is persistent. During economic instability, households quickly shift to foreign currency holdings to protect their wealth, but when the economy recovers, they appear reluctant to shift back to the domestic currency. Since 2000, the Lao PDR economy has stabilized but FCD in the banking system have declined slowly and are still above 60% of M2. De-dollarization is not an easy task for the government. It needs to adopt a long-term approach and use market instruments. The government should use a combination of policies to de-dollarize the economy. The most important is to keep the economy stable, and in particular to maintain a stable exchange rate between the kip, on the one hand, and the dollar and Thai baht, on the other, to restore the confidence of households in the assets they hold in the domestic currency.

In addition, the government could also use the interest rate difference between the kip and foreign currencies as an incentive to encourage households to shift back to the domestic currency as a store of value. The interest rate difference, although, has to be rational, because an excessive difference could damage the credit market.

Improvements in the payment system would also encourage the use of the kip as a means of payment. This would help reduce transaction costs and promote the formal financial system. At the same time, the entire government budget should be conducted in the domestic currency.

Finally, regional financial cooperation could help de-dollarize the Lao PDR economy (as well as those of Cambodia and Viet Nam—the other CLV countries) by establishing payment mechanisms that reduce demand for the dollar. For instance, the Lao PDR and Thailand have agreed to set up a credit line to facilitate trade clearance in local currency, but unfortunately this has not been put to use so far. The mechanism should be studied further to determine why it is not being put into practice and how it could be revised to make it work.

The advantages of inflation targeting as a medium-term strategy for monetary policy are, first, the authorities can use monetary policy to focus on domestic considerations and respond to shocks to the domestic economy; second, a stable relationship between monetary aggregates and

inflation is not critical to the success of inflation targeting, as authorities use instead all available information to determine the best settings for the instruments of monetary policy.

For inflation targeting to deliver a satisfactory outcome, the monetary authority must have a strong commitment to price stability as its primary goal and be transparent in its inflation targeting. Furthermore, fiscal discipline is crucial. As mentioned earlier, BOL still has limited autonomy and the government has often intervened in the conduct of monetary policy, sometimes in ways that have hindered effective policy. In addition, inflation targeting requires a modern, accurate data system that can track key economic variables such as interest rates, private consumption, investment, and output, and forecast trends in these variables. However, these data are largely unavailable. Interest rates, for example, are still not fully determined by market forces, because the banking sector is not very competitive²⁹ and rates are still partly determined by policy guidelines.

In summary, the Lao PDR needs to further reform the financial sector and enhance the collection and processing of data to support inflation targeting as a monetary policy. Fiscal discipline and a sound financial system are also crucial to the success of inflation targeting.

4.4 Exchange Rate Policy under a Multiple-currency Phenomenon

4.4.1 Exchange Rate Regime

Before economic reform in 1986, the Lao PDR had multiple exchange rates under a fixed exchange rate regime. There were seven different exchange rates,³⁰ ranging from KN10 to KN400 to the dollar. To stimulate exports, increase the share of foreign exchange transactions occurring at market rates, and maintain price stability, Lao PDR authorities began a dramatic reform of the exchange regime in September 1987. First, they reduced the number of exchange rates to four. While the overall spread between the highest and lowest rates was not narrowed, this first step brought the exchange rates applicable to most transactions very close to the parallel market rate (Otani and Pham 1996). Reassured by the stability of the kip in the parallel market in the months

²⁹SOCBs are key players in the banking market and have about 70% of total banking assets.

³⁰These included a symbolic official rate of KN10 to the dollar; a commercial rate of KN95 to the dollar, at which most transactions by state enterprises were made; and several rates close to the then-prevailing parallel market rate of roughly KN400 to the dollar, which applied to transactions in the prefecture of Vientiane (Otani and Pham 1996).

after these initial steps—the kip even appreciated slightly—the authorities then moved quickly to unify all rates at one level very close to the rate in the parallel market by 1 January 1988.

At the start of the disinflation process, the authorities floated the exchange rate to find a rate that reflected market forces more accurately than the fixed rate, and to unify the official exchange rates. A decree by the prime minister in July 1989 adjusted the managed-floating exchange rate and brought the official rate more in line with the parallel market rate. For example, BOL set a benchmark to maintain a spread of less than 10% between the official rate and the market rate. In parallel with these policy initiatives, the government undertook various reforms of the financial sector. It allowed nonbank foreign exchange dealers in 1990 and abolished restrictions on FCD (Otani and Pham 1996). Finally, the difference between the official exchange rate and market rate was narrowed to 2% under the enhanced IMF structural adjustment program.

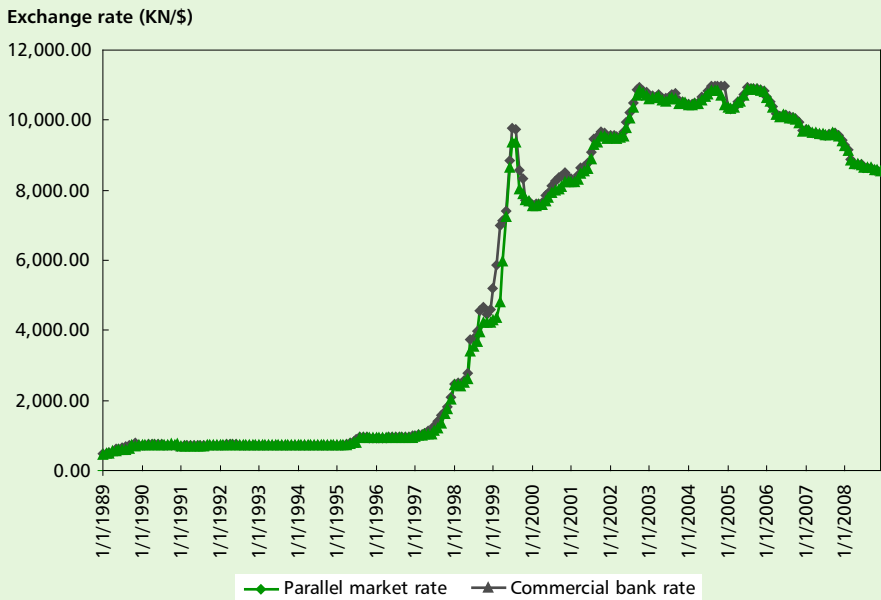
Under the managed-floating exchange rate regime, BOL determines the daily reference rate for the kip against the dollar. It calculates this reference rate by using a weighted average of the previous foreign exchange transactions of commercial banks and market rates. This reference rate has been modified from time to time in response to market conditions. For example, in 2005 commercial banks were required to adjust their daily selling exchange rate for the dollar by $\pm 0.25\%$ from the BOL daily reference rate. They were also required to set margins between the buying and selling rates that did not exceed $\pm 1.5\%$. Other currencies are adjusted correspondingly, but limited to the adjustments in the dollar. In 2006, commercial banks were required to adjust their buying and selling rates by $\pm 0.3\%$ of the reference rate to narrow the spread of exchange rates and reduce the gap between market rates and official rates.

As in the case of monetary policy, the government has to approve key exchange rate policies. Under this policy, the exchange rate has shown significant stability, fluctuating around KN10,000 to the dollar from November 2005 to January 2008, and moving in line with the market rate with variances of no more than 0.2% (Figure 4.3).

However, the exchange rate mechanism has some limitations. The range of exchange rates set for commercial banks is too small.³¹ It limits the flexibility of the foreign exchange market, leading to a disincentive to develop the interbank market. In addition, it creates an informal market for speculation.

To stabilize the value of the kip, BOL intervenes in the foreign exchange market to adjust the exchange rate by selling or buying foreign currencies.

³¹However, further study is required to determine the effect of the range of the reference rate on the foreign exchange market in the Lao PDR.

Figure 4.3: Lao PDR: Monthly Exchange Rates

Lao PDR = Lao People's Democratic Republic, KN = kip, \$ = US dollar.
 Source: Bank of the Lao PDR.

However, during the Asian financial crisis, because of a lack of foreign reserves, the intervention was not effective. In addition, the central bank's lengthy decision-making process makes it difficult to implement exchange rate policies in the market. However, in recent years, foreign reserves have increased and central bank decision making has also improved.

4.4.2 Exchange Rate Policy under the Multiple-currency Phenomenon

Dollarization poses a challenge to the pursuit of a coherent and independent monetary policy. The challenge for monetary authorities is to choose the appropriate monetary and exchange rates regimes. Recent trends in exchange rate regimes seem to favor extreme solutions, either absolute fixed regimes (official dollarization, a currency board, or currency union) or floating regimes with minimum interventions (Fischer et al. 2002).

As mentioned earlier, there are two main foreign currencies used in the Lao PDR in addition to the national currency, the kip: the Thai baht and the dollar. Before the Asian financial crisis, the Thai baht was more popular with households than the dollar, especially as a means of payment for cross-border trade with Thailand. However, the Thai baht crisis in July 1997 pushed the dollar slightly ahead in household savings, although

accurate data on the levels of these two currencies are not available. If the authorities consider pegging the national currency or replacing it fully with a foreign currency, the first question is which currency they should peg it to or adopt as legal tender. This is not an easy question because it concerns a wide range of issues such as the country's history, political regime, and economic conditions, and future trends in regional integration. The next section explores two possible solutions and determines whether they are feasible for the Lao PDR.

CURRENCY BOARD

A currency board is a monetary institution that issues currency fully backed by foreign assets, with an exchange rate that is fixed not just by policy but also by law. Under a currency board, the balance of payments is a self-correcting mechanism in which a balance-of-payments deficit automatically contracts the money supply, resulting in a contraction of spending (Frankel 1999). In past decades, currency board arrangements have been introduced in Hong Kong, China (1983); Argentina (1991); Lithuania (1994); Bulgaria (1997); and Bosnia (1998). Apart from the general benefits of a hard peg, a key advantage of a currency board is that it helps create a credible policy environment by removing from monetary authorities the option of printing money to finance government deficits.³²

However, a successful currency board arrangement must be accompanied by certain institutional and economic prerequisites. First, the announcement of a currency board does not automatically guarantee the credibility of the fixed exchange rate. Little credibility is gained from putting an exchange rate peg into law in a country like the Lao PDR, where legal enforcement is still weak. Second, in the event of a negative shock (especially an external shock), the financial system must be strong enough to survive without a lender of last resort or must be able to arrange emergency loans from foreign banks or international institutions. As discussed previously, the Lao PDR financial system is very shallow, being dominated by SOCBs, and is in need of immediate capitalization. It is unlikely to be able to survive any shocks without backing from the government. Third, any successful hard peg requires a solvent government that has a capacity to carry out a countercyclical fiscal policy in situations where the country faces negative shocks.

The shallow financial system indicates a low level of business activity, which makes it difficult for the government to raise sufficient revenue to finance high demand for public expenditure. Since reforms started

³²For a detailed discussion of the benefits of fixed exchange rate regimes, see Mishkin (1999a) and Corbo (2002).

in the late 1980s, government budgets have always been in deficit and foreign grants and loans have played a key role in financing those deficits. Therefore, the government would have very limited capacity to use fiscal policy to stabilize output and employment if the country faced a negative shock.

Economic conditions in the Lao PDR also do not appear to support a currency board arrangement. First of all, the central bank has very limited foreign currency reserves to back up the monetary base.³³ Secondly, the authorities are in a dilemma about which foreign currency they might choose as a peg: the dollar or the Thai baht. Regarding the dollar, the Lao PDR economy does not fit the key criterion for a traditional optimum currency area: the Lao PDR is not integrated with the United States (US) economy with respect to trade and other economic relationships. The value of trade with the US accounts for only 1%–2% of total trade. On the other hand, the Lao PDR may fit the optimal currency criterion with Thailand, because trade with Thailand is about 50%–60% of the total value of the Lao PDR trade. A high level of trade integration leads to a significant income correlation. However, the Thai economy is relatively small and volatile, so it is hard for the authorities to consider using the baht to back the kip. In conclusion, a currency board arrangement is unlikely to succeed without solid foreign reserves, fiscal discipline, a strong and well-supervised financial system, and strong rule of law—none of which exist in the Lao PDR.

FULL DOLLARIZATION

A more extreme alternative is full dollarization, where a country abandons its currency and officially adopts the currency of another country as legal tender.³⁴ Many countries in the world have become *de facto*–dollarized economies. However, so far, there are only a small number of countries that have officially adopted the dollar as legal tender. The most obvious case is Panama. The conventional reason why most countries would not want to adopt the US currency or any other hard currency as their own is clear. First, such adoption means total forfeiture of monetary independence and is also seen as surrender of a symbol of national political sovereignty. Second, while the benefits of full dollarization have often been mentioned in the literature on the subject, the empirical evidence does not make for easy generalization. Current experiences with full dollarization are limited to 28 small countries, mostly island economies (Edwards and Magendzo 2003). The other conventional argument against full dollarization is that

³³Foreign currency reserves fluctuate between 2.5 months and 3 months of the value of imports, the minimum level set by the IMF.

³⁴Normally, the dollar and the euro are widely used among developing countries. Therefore, the author rules out the Thai baht from consideration.

the government gives up revenue from seigniorage. According to the current level of dollarization in the Lao PDR, the loss in seigniorage would probably be small, so it is hard to argue against full dollarization solely on this basis.

From an economic point of view, the arguments against full dollarization are that the Lao PDR still has very weak financial institutions and does not fit the criteria for an optimum currency area with the US. This argument is almost the same as the one against a currency board. Furthermore, Mishkin (1999b) shows that the optimal monetary policy involves setting interest rates in each period to minimize the inter-temporal loss function, which depends on the output and inflation gaps. With a hard peg, especially full dollarization, the interest rate is in effect set by the anchor country and is unlikely to reflect the domestic business cycle. The loss function from having a hard peg will be small only if the pegging country is so integrated with the anchor country that its output and inflation are highly correlated. The Lao PDR's output and inflation are unlikely to be correlated with those of the US, given the modest trade relationship between the two. From this viewpoint, even for most Latin American countries, Mishkin (1999a) and Corbo (2002) conclude that a hard peg is not the best solution.

More importantly, the trends in its trade and other economic relations give the Lao PDR a closer fit with the Association of Southeast Asian Nations (ASEAN) region than with the US. In the long term, currency cooperation among the countries of ASEAN (or ASEAN+3) would provide the Lao PDR with a more appropriate alternative to the dollar.

In conclusion, weak financial institutions and current economic conditions mean that a hard peg, a currency board, or full dollarization is not a feasible solution for the Lao PDR.

The alternative is greater flexibility in exchange rates with inflation targeting or monetary targets. That is indeed the direction in which some developing countries have been moving. In the current situation, there have been some suggestions for how BOL could improve exchange rate policy. It should create an exchange rate market that would bring commercial banks together to buy and sell foreign exchange, and provide risk management for them. Moreover, it is very important to develop a forward foreign exchange market based on the demand and supply of foreign exchange. In other words, BOL should act as a seller and buyer of foreign exchange and create an environment for commercial banks to participate in these markets.

Table 4.5: Lao PDR: Trade Balance (\$ million)

Trade balance of Lao PDR and ASEAN	1991–1995	1996–2000	2001–2005	2006	2007
Lao PDR export	1,038	1,737	2,431	1,133	1,185
Lao PDR import	1,997	3,241	4,576	1,639	2,044
Lao PDR trade balance	(960)	(1,504)	(2,145)	(507)	(859)
ASEAN export	1,181,172	1,886,265	2,521,166	781,139	887,711
ASEAN import	1,179,698	1,697,160	2,113,680	657,181	780,770
ASEAN trade balance	1,474	189,106	407,486	123,958	106,941

ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic, () = trade deficit.

Source: Asian Development Bank.

4.5 Regional and Subregional Integration

4.5.1 Main Trading Partners and Market Integration in Asia

Since the Lao PDR introduced NEM in 1986, the country has been continuously engaged in regional and global integration initiatives touching almost all aspects of the economy, including, trade, investment, finance, and services. While the reliability of many statistics is still very limited by both the infrastructure and the human resources for data collection and the quality of data, key government institutions such as BOL, the Committee for Planning and Investment, the Ministry of Finance (MOF), and the Ministry of Industry and Commerce are trying their best, with their present capabilities, to analyze and lay out policies for economic integration with the rest of the world and the region.

The country's international trade volume has increased continuously in the last 4–5 years, although the trade balance is still negative. On average, exports and imports have increased by more than 13% annually. Mining products are the main driver for the increase in exports,³⁵ while about one-third of imports are accounted for by imports of goods for FDI purposes.

ASEAN countries are the main trading partners for the Lao PDR, accounting for more than 70% of the country's total trade. Thailand is an especially important partner. However, the Lao PDR represents only a minor trade partner for ASEAN countries, accounting for less than 1% of ASEAN exports and imports (Table 4.5).

³⁵Since copper from Sepon Mining began to be exported in 2003, the operation has contributed significantly to exports and other economic activities. For more detailed mining sector developments, see Kyophilavong (2009).

Table 4.6: Lao PDR: Share of Imports by Origin (%)

	1991–1995	1996–2000	2001–2005	2006	2007
Thailand	63.9	68.1	68.6	72.4	75.2
PRC	7.0	3.9	10.8	11.9	9.1
Viet Nam	6.0	13.8	8.3	6.1	5.9
Singapore	3.7	3.9	4.0	2.9	2.2
Japan	13.9	4.7	2.0	1.5	1.7
Germany	0.2	1.0	1.4	0.8	1.8
Australia	1.4	0.3	1.6	1.3	1.3
Korea, Rep. of	0.5	1.0	1.1	1.4	1.4
France	1.7	1.7	1.3	0.7	0.7
Hong Kong, China	1.8	1.6	1.0	1.0	0.7
Total	100.0	100.0	100.0	100.0	100.0

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Asian Development Bank (2008).

Table 4.7: Lao PDR: Share of Exports by Destination (%)

	1991–1995	1996–2000	2001–2005	2006	2007
Thailand	45.3	23.2	37.0	61.2	56.0
Viet Nam	29.0	45.7	21.4	14.1	17.0
France	7.8	8.0	12.1	3.7	3.4
PRC	6.9	1.9	3.9	5.8	9.7
Germany	6.8	7.5	8.5	4.5	5.6
Malaysia	0.0	0.0	0.8	5.7	3.9
Belgium	0.0	4.8	4.6	2.1	1.4
Netherlands	3.1	2.0	3.6	1.8	1.4
United Kingdom	0.3	4.0	4.7	0.2	0.8
Italy	0.8	2.9	3.4	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Asian Development Bank (2008).

Among ASEAN countries, Thailand has the highest share of exports and imports. The Lao PDR imports from Thailand account for more than 70% of total imports, while exports to Thailand account for more than 50% of total exports (Tables 4.6 and 4.7). The Lao PDR imports various goods including agricultural products, oil, and heavy machines, while it exports electricity, minerals, and some agricultural products.

Table 4.8: Lao PDR: Approved FDI by Source

Country	Projects	Capital	
		\$ million	%
Thailand	333	2,525.5	26.5
France	125	1,730.0	18.2
Viet Nam	169	839.6	8.8
Italy	6	501.7	5.3
PRC	325	428.7	4.5
Korea, Rep. of	159	358.6	3.8
United States	45	167.6	1.8
Malaysia	47	106.4	1.1
Singapore	36	88.0	0.9
Australia	49	57.6	0.6
Russian Federation	10	53.8	0.6
Taipei, China	36	51.2	0.5
Netherlands	55	0.8	0.5
Switzerland	8	41.2	0.4
India	7	36.7	0.4
Japan	50	28.9	0.3
United Kingdom	21	18.6	0.2
Canada	19	11.1	0.1
Others	97	915.5	9.6
Total	1,547	9,525.8	100.0

FDI = foreign direct investment, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Adapted by the author from raw data from the Ministry of Planning and Investment.

In terms of investment, the Lao PDR opened its doors for FDI since the early 1990s when the Law on Promotion and Management of Foreign Investment was enacted in 1994.³⁶ However, capital investment is still limited for many reasons. First, the capital market is not yet developed. There is no regulatory framework to monitor and promote capital investment, so there is no capital market to attract foreign investors. Second, the country still runs trade and budget deficits, which requires the country to be conservative about spending its foreign exchange for

³⁶To attract more foreign direct investment, the Foreign Investment Law was revised in 2004.

Table 4.9: Lao PDR: Approved FDI by Sector

	Projects	Capital	
		\$ million	%
Energy and hydropower	38	5,184.39	54.42
Mining	135	1,747.35	18.34
Agriculture	257	523.30	5.49
Industry and handicrafts	291	501.76	5.27
Services	269	486.86	5.11
Construction	53	286.54	3.01
Telecommunications	17	263.40	2.77
Hotels and restaurants	115	172.51	1.81
Banking	16	133.80	1.40
Wood industry	60	101.39	1.06
Trade	160	63.88	0.67
Garment	67	50.15	0.53
Consultancy	69	10.47	0.11
Total		9,525.80	100.0

FDI = foreign direct investment, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Adapted by the author from raw data from the Ministry of Planning and Investment.

capital investment overseas (for more details, see Suzuki and Souknilanh [2002]).

Since 2004, approved FDI has increased sharply by about 100%. While the main investors in terms of capital accumulation in the period from 1993 to 2008 have been from Thailand, France, and Viet Nam (Table 4.8), the People's Republic of China (PRC) has emerged since 2003 as the country with the highest share of total investment, mostly in the mining sector (Kyophilavong 2009). Energy, hydropower, and mining have attracted the largest share of total investment (Table 4.9). ASEAN and the PRC are the main sources of FDI into the Lao PDR.

4.5.2 Participation in Regional Cooperation Initiatives

Since the opening of the country under NEM, the government has taken many initiatives to integrate with Asian and global economies through various forms of cooperation. The decision to join ASEAN in 1997 marked a new era of cooperation in the region. This has changed the focus of the Lao PDR's international cooperation from bilateral ties with international organizations to regional cooperation. As a result, the country is beginning

to learn how to take joint initiatives, make joint decisions, and take joint responsibility for mutual benefits. Over the 10 years since it joined ASEAN, the Lao PDR has directly or indirectly contributed to many areas of economic integration, including trade, finance, services, and legal regulatory issues.

In economics and finance, the Lao PDR is joining ASEAN's Roadmap for Monetary and Financial Integration, which has four main pillars: capital market liberalization, capital account liberalization, ASEAN currency cooperation, and liberalization of trade in financial services. While the former three need further study and information dissemination, the liberalization of trade in financial services is the most urgent area where the Lao PDR should take action in the near future.

To improve its monetary and exchange rate policy, BOL cooperates with a number of countries in the region. It has bilateral cooperation with central banks of neighboring countries to pursue technical assistance with the aim of improving capacity building for monetary and exchange rate policy mechanisms, tools, and human resources. Within ASEAN, BOL and MOF have cooperated with member countries on many initiatives, particularly on the settlement, strengthening, and capacity building of the National Surveillance Unit so that it can provide efficient data and analyses for monitoring and forecasting the macroeconomic situation. BOL and MOF also participate in the research activities of ASEAN and ASEAN+3³⁷ on monetary and exchange rate policy issues, as well as the issue of an Asian currency unit. However, given its limited research capacities, the Lao PDR is involved in these activities mostly as an observer. The Lao PDR is also closely following developments to fashion a monetary and exchange rate program mutually undertaken by ASEAN, ASEAN+3, or ASEAN + others. In this context, the country is analyzing the pros and cons of joining such a framework and exploring areas where it would need further development before joining. In short, it is preparing a potential road map for implementation.

Although the Lao PDR's macroeconomic situation has stabilized over the last 2 years, it cannot guarantee stability in the long run, especially when the country is facing twin deficits and the economy, including industry, manufacturing, and services, is still in the early stages of development. In short, the country is very vulnerable to external shocks. The government is aware of this situation and is keen to open itself to external financial cooperation. The Chiang Mai Initiative (CMI) could be one model of future financial cooperation in the region. The CMI aims to create a network of bilateral swap arrangements among ASEAN+3 countries to address

³⁷The 10 ASEAN member countries, plus the PRC, Japan, and the Republic of Korea.

short-term liquidity problems in the region and to supplement the existing international financial arrangements.

4.6. Conclusion

The main objective of this study is to give an overview of current monetary and exchange rate policies and to identify the policy options for de-dollarization in Lao PDR. Although the monetary situation and exchange rates have improved since the Asian financial crisis in 1997/98, direct monetary policy tools, financial markets, and policy decision making still need to be developed. A high degree of dollarization still constrains monetary and exchange rate policy. While dollarization has both positive and negative consequences, the costs seem to outweigh the benefits. Therefore, the Lao PDR government should try to de-dollarize by promoting the use of the local currency, the kip, and by implementing prudent monetary and exchange rate policies to maintain price and exchange rate stability.

Because the economy is highly dollarized, options such as inflation targeting, a currency board, or full dollarization are not appropriate for the Lao PDR. Therefore, de-dollarization needs to be a long-term strategy. Increasing confidence in the kip by maintaining a low inflation rate and a stable exchange rate is crucial, and financial systems and the instruments of monetary policy need to be upgraded. In addition, participation in regional cooperation initiatives, such as greater ASEAN currency cooperation, is vital for de-dollarization in the Lao PDR.

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Viet Nam: Dealing with Stabilization

Nguyen Van Dinh

Viet Nam's economy doubled in size during the last decade, while its poverty rate was halved. Social indicators improved markedly, putting Viet Nam in a good position to attain its key Millennium Development Goals. The last decade was thus characterized by undeniable progress in the lives of its citizens.¹

The government is heading toward market mechanisms, building a multi-stakeholder economy and enhancing international integration. The ninth congress of the Communist Party endorsed this vision, which was articulated in several strategic plans and documents, including the 10-year Socio-Economic Development Strategy, 2001–2010, the 5-year Socio-economic Development Plan, 2001–2006, and the Comprehensive Poverty Reduction and Growth Strategy, aimed at creating a socialist-oriented and market economy. They built on the successes of the reform process initiated in the late 1980s, named *doi moi*,² while also preserving the strong focus on poverty reduction that characterizes the reform process of Viet Nam. In that context, the government also approved a series of objectives and measures to develop the country's banking sector.

After 20 years of reforms, the banking system has developed significantly in terms of scale, operational quality, and structure. It has performed its functions well, which has enhanced economic reforms in Viet Nam, helped develop a socialist-oriented market economy, and actively contributed to achieving macroeconomic stability. This has helped push economic growth, contain inflation, encourage exports, and industrialize and modernize the economy, while satisfying the economy's demand for capital and banking services. Despite these recent achievements, the banking system also revealed some weaknesses and challenges it must face.

¹World Bank 2004.

²The name given to the economic reforms initiated by Viet Nam in 1986.

Regarding the conduct of monetary policy in general, the goal of monetary stability has been achieved, with inflation remaining at single-digit levels. This has assisted rapid economic growth and ensured the stability of the banking system. Monetary policy has evolved through a step-by-step process in line with market principles. Direct instruments have been gradually replaced by indirect ones, including a prime rate, open market operations (OMOs), rediscounting operations, refinancing operations, and initial steps to develop effective money-market interest rates. There have also been moves to increase the efficiency and enforceability of the central bank's policies and overall state management in the monetary area. As a result, the stability of monetary policy and the banking system has been secured and improved.

In the area of foreign exchange policy and the exchange rate mechanism, Viet Nam has gradually implemented an open foreign exchange policy. It has liberalized or lifted all unreasonable restrictions on payments, international money transfers, and purchasing, trading, investing, and saving in foreign currencies in an effort to liberalize the current account. Regulations on the opening of foreign currency-denominated accounts at home and abroad, and cross-border foreign currency flows, have also been loosened. Policies on how enterprises and other institutions manage their foreign borrowings and repayments have also been made more flexible, giving them more authority and responsibility. Administrative foreign exchange mechanisms have been replaced with measures that are more indirect, flexible, and responsive to market principles, which help encourage exports, limit imports, build up foreign exchange reserves, and conduct monetary policy more effectively.

In addition, credit regulations have been amended in a way that increases the autonomy and responsibility of credit institutions in the decision-making process. The country has also established the basic structure of its money market, and important money markets have developed. Finally, banking supervision has been reformed to bring it more in line with international practices.

The next section analyzes Viet Nam's monetary and exchange rate policy during the economic reform period that started in late 1980s. The establishment, implementation, and adjustment of the policy is put in the context of Viet Nam's transition to a market-oriented economy and the challenges posed by dollarization, financial repression, informal and newly developing financial markets, and international economic integration.

5.1 Economic Development and Reforms

5.1.1 Economic Performance

The Viet Nam economy experienced high and stable economic growth during the past decade. With the help of broadly prudent macroeconomic management and a gradual opening of the economy, its growth outperformed that of most other low-income countries.

Growth in gross domestic product (GDP) reached 9.5% in 1995 and averaged 7.5% for the period 2001–2005. It is projected to reach 8.0% in the next few years (Table 5.1). The high growth is driven by a dynamic industrial sector that recorded average annual increases of about 15.6% during 2001–2005 and is projected to grow 17.0% annually for the years 2006–2008. While the most vibrant areas of production, such as garments and footwear, have been oriented mainly to export markets, domestic sales have also been robust. The services sector picked up in 2003–2004 to record average annual increases of about 7.2% in 2001–2006. Tourism-related services have also shown strong growth. Despite bad weather conditions and price fluctuations, the agriculture and fisheries sectors continued to grow by an average of over 3.5% per year in 2001–2005.

The share of the state sector in the economy fell to as low as 25.0% during the decade, but then rose to a more stable level of around 40%. Per capita GDP more than doubled from \$318 in 1996 to around \$690 in 2006 (Table 5.2). The unemployment rate decreased slightly from 6.0% in 1996 to 5.6% in 2005 (Table 5.3), while inflation was at a high of 11.2% in 1995 but eventually declined to single digits during 1996–2006 (Table 5.4). This can be considered a successful achievement of monetary policy during the period.

Viet Nam recovered from the regional economic slowdown caused by the Asian financial crisis of 1997–1998, with annual GDP growth accelerating steadily from 6.8% in 2001 to 8.4% in 2006. The poverty rate, which stood at 58% in 1993, declined to 37% by the beginning of the financial crisis, and fell further to 29% in 2002 and below 20% in 2006.

Investment increased from 31% of GDP in 2001 to 36% in 2005. The share of the domestic private sector in total investment rose from 23% in 2001 to over 32% in 2005, while that of the state-owned sector declined from about 60% to 52%. Foreign investment remained strong in the last 3 years. After reaching a 7-year high of \$4.2 billion in 2004, foreign direct investment (FDI) commitments soared to \$6.3 billion in 2005, while FDI disbursements in the same year, including domestic borrowing by joint ventures, stood at \$3.3 billion, or 6% of GDP.

From a slow pace in 2001, export growth accelerated by 21% per year during 2001–2006. In the same period, imports also grew by 23% per year. The trade balance switched from a surplus of 1.9% of GDP to a deficit of 6.6% over 2001–2003, reflecting the import needs of the rapidly

Table 5.1: Viet Nam: Key Economic Indicators

	2001	2002	2003	2004	2005	2006e	2007p	2008p
Output, Employment, and Prices								
GDP growth (%)	6.9	7.1	7.3	7.8	8.4	8.2	8.0	8.0
Industrial production index	14.6	14.5	15.5	16.0	17.2	17.0	17.0	17.0
Consumer price index	0.8	4.0	3.0	9.5	8.4	6.6	7.0	7.0
Unemployment rate (%; urban areas)	6.3	6.0	5.8	5.6	5.3	4.4	4.0	4.0
Public Sector								
Government balance (% GDP)	(2.8)	(1.4)	(1.2)	0.9	(1.2)	(0.7)	(1.5)	(1.5)
Domestic public sector debt (accumulated, % GDP) (including guarantee and off-budget items)	5.5	10.1	13.7	15.4	17.4	17.2	17.9	19.1
Foreign Trade, BOP, and External Debt								
Trade balance (\$ million)	(1,135)	(3,027)	(5,107)	(5,451)	(4,648)	(6,314)	(7,979)	(7,979)
Exports of goods (\$ million)	15,027	16,706	20,176	26,485	32,442	39,826	47,791	57,349
Exports of goods (% change, previous year)	4.0	11.2	20.8	31.3	22.5	22.8	20.0	20.0
Key exports (% change) - crude oil	(10.8)	4.6	16.8	48.3	30.3	12.1	5.0	5.0
Imports of goods (\$ million, cif)	16,162	19,733	25,256	31,954	36,978	44,891	55,216	66,811
Imports of goods (% change, previous year)	3.2	22.1	28.0	26.5	15.7	21.4	23.0	21.0
Current account balance (\$ million)	672	(670)	(1,930)	(1,565)	215	981	(360)	(779)
Current account balance (% GDP)	1.6	(1.9)	(4.9)	(3.4)	0.4	1.6	(0.5)	(1.0)

Continued on next page

Table 5.1 continued

	2001	2002	2003	2004	2005	2006e	2007p	2008p
Foreign direct investment (inflows, \$ billion)	1.3	2.0	1.9	1.9	2.0	2.2	2.6	2.9
Total external debt (DOD, \$ billion)	12.5	12.3	13.4	15.4	17.2	19.7	21.8	24.0
as percent of GDP (%)	38.5	35.0	33.8	33.9	32.5	32.6	32.1	31.5
Debt service ratio (% exports of g&s)	10.6	8.3	7.5	5.9	5.5	5.5	5.0	5.0
Reserves, including gold (\$ billion)	3.4	3.7	5.6	6.3	8.6	12.5	16.0	19.0
Reserves (in weeks of imports of g&s)	8.3	7.2	8.7	8.5	9.8	13.0	13.2	14.0
Financial Markets								
Credit to the economy (% change, period-end)	21.4	22.2	28.4	41.6	31.7	25.0	25.0	25.0
Short-term interest rate (3-M deposits, period-end)	5.9	7.0	6.3	6.7	7.8	8.0	8.0	7.5
Stock market - VN index (Jul 2000 = 100)		183	167	239	308	754	-	-

3-M = 3-month; BOP = balance of payments; cif = cost, insurance, and freight; DDD = disbursed and outstanding debt; e = estimate; GDP = gross domestic product; g&s = goods and services; p = projection; \$ = US dollar; () = negative value; - = not applicable.

Source: General Statistics Office of Vietnam, State Bank of Vietnam, International Monetary Fund, and World Bank. Various years.

Table 5.2: Viet Nam: GDP and Growth Rates

Criteria	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006e
Total (D billion)	272,036	313,623	361,017	399,942	441,646	481,295	535,762	613,443	715,307	839,211	973,790
State share of GDP (D billion)	108,634	126,970	144,407	154,927	170,141	184,836	205,652	239,736	279,704	322,241	363,449
% of state share	39.9	40.5	40.0	38.7	38.5	38.4	38.4	39.1	39.1	38.4	37.3
Per capita (D)	3,720	4,221	4,784	5,221	5,689	6,117	6,720	7,583	8,720	10,098	11,571
Per capita (\$)	318	317	343	368	385	401	434	483	551	639	722
Total at constant 1994 prices (D billion)	213,833	231,264	244,596	256,272	273,666	292,535	313,247	336,242	362,435	393,031	425,135
Growth rate constant 1994 prices (%)	9.3	8.2	5.8	4.8	6.8	6.9	7.1	7.3	7.8	8.4	8.2

D = dong, e = estimate, e = estimate, GDP = gross domestic product, \$ = US dollar.
 Source: State Bank of Vietnam; General Statistics Office of Vietnam; International Monetary Fund Statistical Appendix 1999, 2003, 2005, and 2006; and author's own calculations.

Table 5.3: Viet Nam: Population and Employment

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006e
Total population	73,137	74,307	75,465	76,597	77,635	78,686	79,727	80,902	82,032	83,120	84,156
Annual % change		1.6	1.6	1.5	1.4	1.4	1.3	1.5	1.4	1.3	1.3
Urban	15,085	16,835	17,465	18,082	18,805	19,469	20,022	20,869	21,737	22,419	22,824
Annual % change		11.6	3.7	3.5	4.0	3.5	2.84	4.2	4.2	2.8	2.2
Rural	58,052	57,472	58,000	58,515	58,830	59,217	59,705	60,033	60,295	60,769	61,332
Annual % change		(0.5)	0.9	0.9	0.6	0.60	0.8	0.6	0.4	0.8	0.9
Total employment	35,792	34,493	35,233	35,976	36,702	37,676	39,508	40,574	41,586	42,527	43,347
Unemployment rate (%)		6.0	6.9	6.7	6.4	6.3	6.0	5.8	5.6	5.3	4.8

e = estimate.

Source: State Bank of Viet Nam; General Statistics Office of Vietnam; and International Monetary Fund Statistical Appendix 1999, 2003, 2005, and 2006.

Table 5.4: Viet Nam: Consumer Price Index

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Previous month = 100												
<i>Month</i>												
January	103.8	100.9	100.8	101.6	101.7	100.4	100.3	101.1	100.9	101.1	101.1	101.2
February	103.4	102.5	101.8	102.2	101.9	101.6	100.4	102.2	102.2	103.0	102.5	102.1
March	100.2	100.8	99.5	99.2	99.3	98.9	99.3	99.2	99.4	100.8	100.1	99.5
April	101.0	100.1	99.4	101.6	99.4	99.3	99.5	100.0	100.0	100.5	100.6	100.2
May	101.8	99.5	99.5	101.4	99.6	99.4	99.8	100.3	99.9	100.9	100.5	100.6
June	100.8	99.5	100.1	100.0	99.7	99.5	100.0	100.1	99.7	100.8	100.4	100.4
July	100.0	99.3	100.2	99.5	99.6	99.4	99.8	99.9	99.7	100.5	100.4	100.4
August	100.3	99.6	100.1	101.1	99.6	100.1	100.0	100.1	99.9	100.6	100.4	100.4
September	100.5	100.3	100.6	101.0	99.4	99.8	100.5	100.2	100.1	100.3	100.8	100.3
October	100.1	100.1	100.3	100.3	99.0	100.1	100.0	100.3	99.8	100.0	100.4	100.2
November	100.1	100.9	100.3	100.1	100.4	100.9	100.2	100.3	100.6	100.2	100.4	100.6
December	100.3	101.0	101.0	100.8	100.5	100.1	101.0	100.3	100.8	100.6	100.8	100.5
Monthly average	101.0	100.4	100.3	100.7	100.0	100.0	100.1	100.3	100.2	100.8	100.7	100.5
December of report year compared with December of previous year	112.7	104.5	103.6	109.2	100.1	99.4	100.8	104.0	103.0	109.5	108.4	106.6

Source: General Statistics Office of Vietnam.

expanding economy. The bulk of the rise in imports came from capital goods and inputs for export production. In 2003–2004, the trade deficit started to narrow and by early 2006, Viet Nam was actually running a surplus. Strong foreign remittance inflows have also been a key feature of this period. Remittances through formal channels rose from a little over \$1 billion in 2001 to nearly \$3 billion in 2005. As a result, the current account deficit has narrowed, declining from 4.9% of GDP in 2003 to around 1.0% in 2005. More importantly, the current account deficit has been mainly financed by FDI inflows and concessional lending. As a result, external debt stood at a manageable 37% in 2005 and less than 40% in 2006, with debt servicing at around 5% of exports. External reserves rose to around \$8.6 billion (about 3 months worth of imports) compared to \$3.4 billion at the end of 2001.³

Inflation, which was below 4.0% until 2003, rose sharply to 9.5% by the end of 2004 but eased to 8.4% in 2005 and 6.6% in 2006, mainly due to supply shocks stemming from the avian influenza outbreak, bad weather conditions, and increased international commodity prices. The result was a sharp spike in food prices, which account for nearly 50% of the consumption basket. The macroeconomic policy response was appropriate under the circumstances, as shown by decreases in the consumer price index (CPI) in 2005 and 2006 (Table 5.4). The fiscal deficit, including official development assistance, stood at 1.7% of GDP in 2004 and 2.3% in 2005, and was financed entirely through public debt. Off-budget infrastructure expenditures accounted for 0.7% of GDP in 2004 and 1.6% in 2005, while public debt was around 43% of GDP at the end of 2005.

In summary, the following were the achievements of the Viet Nam economy during the past 20 years of economic reforms:

- Economic growth has been relatively stable, averaging 7.7% per year.
- The economy has continued to industrialize and modernize.
- Resources were well mobilized for development, especially from citizens.
- The macroeconomic environment was fairly stable, with the main balances well supported by the country's development.
- The country's economic integration and international economic affairs have significantly improved.

³World Bank 2004.

5.1.2 Transformation Strategy

Viet Nam's development strategy differs significantly from those of other transitional economies. Massive divestiture of state assets is not a central component of the strategy, because the government, which believes ownership is not a critical determinant of economic performance, is keen to retain control of a large number of state-owned enterprises (SOEs) that it deems strategic. Instead, the emphasis is to secure a level playing field for all activities, regardless of their institutional nature, and to impose budget discipline on the public sector. While many SOEs are being divested, with the ownership often transferred to previous directors and employees, there could still be as many as 2,100 SOEs by the end of 2006. While it is generally accepted that massive divestiture would not necessarily improve performance in the short run, the ability of the government to force competition and impose hard budget constraints on SOEs remains to be proven.

The characteristics of Viet Nam's transformation strategy can be summed up in three words: piloting, scaling-up, and locking-in. Economic reforms are first tested on small-scale units, such as specific SOEs, or levels of local government, and only after receiving a positive evaluation are they extended to the rest of the economy. The success of this approach rests on the quality of the pilot evaluations and the willingness to scale-up the reforms. Locking-in has taken place mainly through international agreements, especially those aimed at integrating the Viet Nam economy with the rest of the world, especially the Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA), the United States–Viet Nam Bilateral Trade Agreement (USVBTA), and the World Trade Organization (WTO). These commitments have been especially useful to fostering competition in product markets.

Despite Viet Nam's economic achievements, the economy still has a lot to improve. For instance, growth rates have not been as high as the economy's potential, and have been lower than the growth rates of other countries at a similar stage of development. Also, structural transitions in the economy have not all gone well. For example, certain industrial or product advantages enjoyed by Viet Nam have not been fully exploited. The country's markets are also not fully developed, and economic balances have not been sufficiently strengthened.

5.2 Financial Reforms and the Banking Sector

5.2.1 Financial Reforms (1989–2001)

Financial reforms in Viet Nam have consisted of banking reforms, restructuring, and the establishment of the stock market.

Banking reforms started in the late 1980s, immediately after the economic reform process was launched. The results can be seen in the banking system today. The reforms aimed at encouraging the private sector, including foreign players, to set up business in the country. This was achieved through reform of the legal system and changes in the socioeconomic environment to attract business people. The government also adopted an important program called “equitization of SOEs” (as part of its restructuring of the state-owned sector), which created joint stock companies, which were conditions for the development of a stock market. At a later stage, the financial markets were added when the stock market was launched in mid 2000. The establishment and operation of financial markets, in turn, are conditions for the development of the banking sector and the ability to conduct effective monetary policy.

Prior to 1989, the banking system was a single-tier banking system wholly owned and controlled by the state. Trade and infrastructure financing were managed by two specialized banks that were departments under the State Bank of Vietnam (SBV). SBV managed the money supply, credit, and the provision of banking services to the economy.

SBV was the sole provider of domestic banking services through a broad branch network. Its task was to ensure that financial resources were allocated to economic units in accordance with the state economic plan. SBV offices functioned as the interface between state planning, the national budget, and various state entities that included some 12,000 SOEs. Lending decisions were not commercially based. For this reason, SBV branches had little experience with standard commercial banking activities such as credit analysis or risk management.

The monetary history during the mid-1980s was marked by recurrent fiscal crises, and government measures to monetize the budget significantly widened fiscal deficits, because revenue growth failed to keep pace with rising expenditures.

During the 1990s, household assets mainly consisted of the dong (the domestic currency), gold, hard currency notes, and easily tradable commodities such as consumer goods. Remittances from overseas contributed to the dollarization of the economy and the growth of the domestic stock of hard currency notes, primarily dollars. Throughout the 1980s, to protect the value of their assets during periods of volatile inflation and hyperinflation, households attempted to reduce their holdings in dong and replace them with gold and dollars.

The situation was worst during the periods of hyperinflation in 1987–1989. The problems served as an impetus for the comprehensive and coordinated economic reforms known as Doi Moi, which included reform of the banking and financial sector. In 1988, the prime minister signed Decree No. 53/ND, which ended the mono-banking system and created a two-tier system. SBV was reorganized to function solely as the central bank, in charge of state management of money, credit, and banking. The commercial bank system has evolved to include state-owned banks (SOBs), as well as other ownership structures such as joint-stock banks, joint-venture banks, and branches of foreign banks.

In the commercial bank system, in addition to the two state-owned commercial banks (SOCBs) that previously existed—Vietcombank (VCB) and Bank for Investment and Development of Viet Nam (BIDV)—two new SOCBs were created from existing departments within the central bank. The Industrial and Commercial Bank of Viet Nam was established from SBV's Industrial and Commercial Loan Department, while the Agricultural Bank of Viet Nam was established from the Agricultural Credit Department. In addition, the government ended VCB's monopoly on foreign trade finance and BIDV's monopoly on long-term financing. The intent was to increase management autonomy and responsibility, and introduce competition in the market to improve bank performance.

In 1990, the government issued the State Bank Ordinance and the Commercial Bank and Credit Cooperative Ordinance. They formalized the objectives, duties, and purposes of each tier in the banking system. SBV was given responsibility for state management of the banking system and assumed the duties of a central bank. The Commercial Bank and Credit Cooperative Ordinance provided the legal framework for commercial banks and other financial institutions. The government liberalized entry into the banking system and lifted rules on sector specialization of SOCBs.

Commercial banks were given responsibility for the operation and control of their finances and implementation of universal banking activities. As a result, the banking sector expanded rapidly and banks began to offer a wider range of services.

The banking reforms were implemented together with a number of reforms in related areas. These included unification and massive devaluation of the exchange rate (which will be discussed in more detail below), legalization of gold trading, domestic price liberalization, increases in deposit interest rates, imposition of a hard budget constraint on most SOEs, and the control of credit growth. These reforms contributed to lower inflation expectations and led to major adjustments in the composition of household liquid assets.

The Viet Nam stock market was officially set up in July 2000 and on its first trading day, 28 July, only two companies were listed. However, the number of listed companies has increased dramatically to 107 by December 2006.

5.2.2 Financial Reforms (2001 to the Present)

In early 2001, a comprehensive multi-year financial sector reform program was adopted. Its goals were to improve the regulation and supervision of banks, enhance their transparency and accountability, improve the financial health of the banking system, and create incentives for banks to operate on a more commercially oriented basis. Progress in carrying out these reforms has been slow. However, in 2004, a series of measures were taken to reinvigorate the process. In the context of Viet Nam's accession to the WTO, the government adopted a plan to integrate the banking sector into the international financial system and reform SBV. The plan entailed sweeping efforts to amend, supplement, revise, or eliminate policies and laws that hindered Viet Nam's ability to meet its commitments to international integration. This included actions to strengthen the supervisory capacity of SBV and bring it more in line with international practices, including the use of standards for capital adequacy, asset quality, management quality, earnings quality, and liquidity. In parallel, the four largest SOCBs issued new credit manuals to provide a better basis for risk management, and improve the screening of credit risks and cash flow of borrowers.⁴

The scheme brought about encouraging results in rehabilitating and financially strengthening the joint-stock banks (JSBs), which saw improvements in operations, governance, and technology. Return on equity at many JSBs has reached 20%. Several urban banks have played a key role in certain market segments and become potential competitors of SOCBs in areas such as retail banking and electronic banking, as well as the launching of new financial products. JSBs are actively widening their branch networks, modernizing their technology, and enhancing their business governance practices.

The need to improve competitiveness is an incentive to promote reform of the whole Viet Nam banking system. The domestic banking system faces difficulties integrating internationally because of risks associated with its weaknesses in finance, operations, technology, and governance. Domestic banks have to resolve these shortcomings and overcome weaknesses such as high ratios of nonperforming loans (NPLs) and the need for recapitalization. They also need to strengthen their

⁴SBV's presentation material on Viet Nam's banking reforms.

capacity and discipline in areas such as credit management and control of credit growth and NPLs.

International integration promotes institutional reforms, improvements in the legal system, and the operational capacity of regulators. SBV has made significant progress in monetary policy and banking supervision in line with financial liberalization. This includes liberalizing interest rates, easing exchange rate controls and foreign exchange management measures, liberalizing the current account, revising banking laws, and reorganizing the supervisory system in compliance with international standards (Basel I). All the macro- and micro-reform measures that have been taken are aimed at creating a favorable operating environment for the banking system. To pursue international integration and meet commitments under bilateral and multilateral agreements, protection measures such as subsidies for SOCBs must be eliminated. The government must remain committed to adopting stronger measures including equitization and the development of a sound financial sector. The results of international integration encourage the development of a sound and fair business environment among enterprises and banks that is more in line with international practices and standards.⁵

5.2.3 Directions for Further Banking Reforms

Viet Nam's banking system has achieved significant results from the reforms undertaken in past years, despite the work that still remains to be done. In the new context of international integration, however, more radical measures are needed to strengthen the ability of SBV to function effectively as a modern central bank and to develop the competitiveness of domestic commercial banks to support high economic growth in the medium and long terms.⁶

In the short term, to improve the system's legal framework in line with international integration, there must be (i) changes to the Law on SBV and the Law on Credit Institutions and the implementing guidelines of the two statutes; and (ii) improvements in the mechanisms and policies on credit, secured lending, foreign exchange, the mobilization of funds, payments, and other financial services so that SBV would intervene less in the operations of credit institutions. This should be done in a way that enhances the autonomy of credit institutions while ensuring their safety and efficiency by facilitating SBV's supervision and inspection capabilities.

In the medium term, ways should be sought to (i) promulgate the Payment Law and the E-Transaction Law, (ii) minimize state protection and subsidies to the credit sector to create a fair business environment and

⁵World Bank 2004.

⁶SBV data.

strengthen the competitiveness of enterprises in the context of integration and trade liberalization, and (iii) reform SOEs by increasing charter capital for SOCBs and equitizing SOCBs.

In the long term, SBV must (i) improve its independence and clearly define the primary objective of monetary policy—namely, stabilization of the currency—and increase the efficiency and effectiveness of its banking supervision and inspection; (ii) take further steps to create a healthy, fair, and transparent environment for monetary and banking operations; and (iii) improve the legal framework and infrastructure needed to develop a complete and effective financial market.

5.2.4 Structure of the Banking System

In 1990, following the Ordinance on Banks, Credit Cooperatives, and Financial Companies, Viet Nam's banking system officially became a two-tier system, with SBV as the central bank. Since then, credit institutions in the country have grown in organizational structure, size, and number. The 1990 Banking Ordinance was replaced in 1997 by the Law on Credit Institutions, which was subsequently amended in June 2004.

As stipulated by the law, credit institutions include state-owned credit institutions, joint-stock credit institutions, cooperative credit institutions, and joint-venture credit institutions, as well as wholly foreign-owned credit institutions, branches of foreign banks, and representative offices of foreign credit institutions.

The system of credit institutions consists of 6 SOCBs, 37 JSBs, 12 nonbanking credit institutions (including 6 finance companies subordinated to general SOEs and 6 financial leasing companies subordinated to 4 SOCBs), and 905 people's credit funds (Table 5.5). SOCBs still play a major role in the domestic market. JSBs, due to their small size, only focus on retail banking, which includes individuals and small enterprises. SOCBs account for the majority of wholesale banking, international transactions, and transactions with large enterprises, because of their greater financial resources and their traditional client base among large SOEs.

Viet Nam's commercial banks hold the majority of the market in terms of deposits and loans (Figure 5.1). They, particularly SOCBs, have had a long history of business relationships with traditional customers. As a result, their market share in deposit taking has remained stable at around 90%, with 6 SOCBs accounting for 73.9% and 36 JSBs for 16.7% of the market.

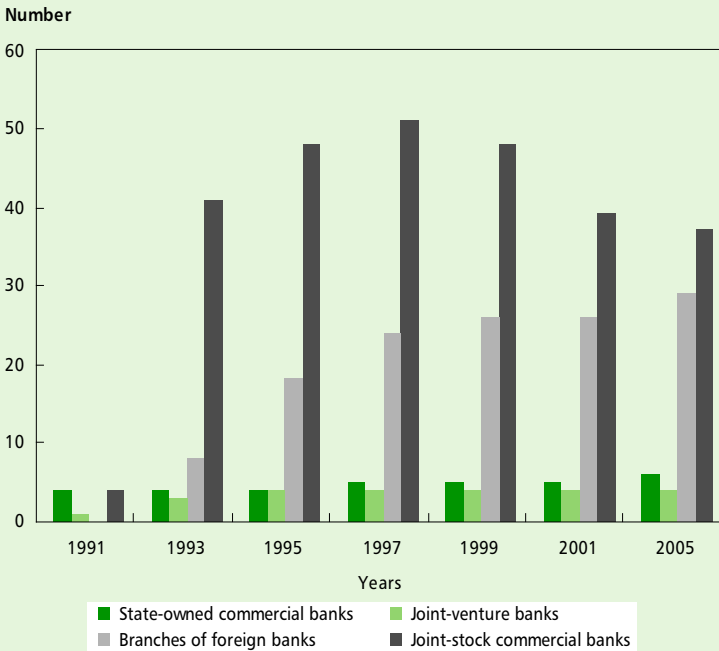
From a situation in the early 1990s where state-owned banks dominated all deposits and lending, other types of banks by 2005 had significantly increased their share of the market (Table 5.6). Even though SOCBs still accounted for about three-fourths of the market in 2004, the gains being made by other categories of banks were on the rise. The trend

Table 5.5: Viet Nam: Credit Institutions

		Domestic credit institutions			Joint-venture and foreign credit institutions			
		State-owned	Joint-stock	Cooperative	Joint-venture	100% foreign-owned	Branches	Representative office
Banks		6	37	0	4	0	29	49
Non-banks	Financial companies	6	0	0	0	0	0	0
	Leasing companies	6	0	0	1	2	0	0
People's credit funds		0	0	905	0	0	0	0
Total		18	37	905	5	2	29	49

Source: State Bank of Vietnam, as of 30 June 2006.

Figure 5.1: Viet Nam: Number of Banks



Source: State Bank of Vietnam.

Table 5.6: Viet Nam: Deposit and Lending

	2000	2001	2002	2003	2004	2005
Deposit market share (%)						
State-owned commercial banks	77.0	80.1	79.3	78.1	75.2	na
Joint-stock banks	11.3	9.2	10.1	11.2	13.2	na
Foreign bank branches	9.2	8.8	8.1	7.8	8.2	na
Joint-venture banks	1.1	1.2	1.3	1.5	1.5	na
Lending market share (%)						
State-owned commercial banks	72	73	74	73	75	68
Joint-venture banks	17	14	12	13	12	16
Joint-stock banks	11	13	15	15	14	16

Source: VinaCapital. 2006. *Banking Sector Report*. August.

is expected to continue when Viet Nam opens its banking market in line with its WTO commitments.

Nonbanking credit institutions, meanwhile, are only allowed to mobilize deposits with terms of more than 1 year. They hold an insignificant market share of about 0.5%. Despite the large number of people's credit funds, these institutions only account for less than 1%, since their activities mainly focus on rural and remote areas of the country.

In 2000–2004, the market share of SOCBs remained stable at 75% to 80%, while that of JSBs was approximately 10%, but on an upward trend. The market share of finance and financial leasing companies was modest at about 0.3%. Credit outstanding at the people's credit funds only accounted for around 1.3% of the whole system.

According to the Law on Credit Institutions, foreign credit institutions may operate in Viet Nam in the form of branches of foreign banks, joint-venture, and 100% foreign-owned credit institutions (which include joint-venture banks, joint-venture finance companies, 100% foreign-owned finance companies, joint-venture financial leasing, and 100% foreign-owned financial leasing companies). A 100% foreign-owned bank was recently allowed to set up operations in Viet Nam, but it has not yet done so. In addition, foreign credit institutions can open representative offices but they are not allowed to engage in profit-making business.

By the end of 2005, there were 39 branches of foreign banks together with 6 affiliates, 4 joint-venture banks, 2 100% foreign-owned financial leasing companies, 1 joint-venture financial leasing company, and 49 representative offices of foreign credit institutions.

Most operating foreign banks are large companies with worldwide networks. These banks mainly focus on wholesale banking services, taking

Table 5.7: Viet Nam: Domestic Credit (D trillion)

	1998	1999	2000	2001	2002	2003	2004	2005
Domestic credit	81.0	115.7	155.2	191.2	239.9	316.9	434.6	585.6
Net claims on government	8.4	3.0	(0.5)	2.1	8.8	20.1	14.5	32.5
Credit to the economy	72.6	112.7	155.7	189.1	231.1	296.8	420.1	553.1
% Increase from previous year		55.2	38.2	21.5	22.2	28.4	41.5	31.7
Claims on state enterprises	38.1	54.3	69.9	79.7	89.5	105.4	142.9	181.3
% of state sector claim	52.5	48.2	44.9	42.6	38.7	35.5	34.0	32.8
Claims on other sectors	34.5	58.4	85.8	109.4	141.6	191.4	277.2	371.8

() = negative value, D = dong.

Source: International Monetary Fund Statistical Appendix 2003 and 2006.

advantage of their international expertise. Joint-venture banks in Viet Nam mainly provide retail banking services due to limited resources.

Branches of foreign banks are the most important group of foreign credit institutions. Their market share in total deposits is about 10% of the entire system. Finance and financial leasing companies are permitted to take term deposits of more than 1 year. These companies basically operate on their own equity capital and borrowings from other institutions.

The lending share of foreign banks' branches has declined in recent years. Although their total credit outstanding has increased, it has done so at a slower rate than that of domestic banks. By the end of 2004, their market share accounted for only 8.3% of the whole system.

The development of the banking sector still remains strong as reflected in the increase in credit to the economy (Table 5.7). In 1998, the level of domestic credit was 81 trillion dong (D), equal to only 33.1% of GDP. But by 2005, it had increased more than fourfold to almost D586 trillion, equal to 149% of GDP. The portion accounted for by lending to the state sector during the same period declined from 52.5% to 32.8% of the total.

5.3 Monetary Policy and the Multi-currency Phenomenon

5.3.1 Monetary Policy Framework

The framework for monetary policy is stipulated in the Law on State Bank of Vietnam 1997 (SBV Law). This law specifies the position and functions of SBV as well as the framework of monetary policy. According to the law, SBV is a body of the Viet Nam government (Article 1) and its governor is a member of the government (Article 11).

The law makes a clear distinction between the functions of SBV and those related to national monetary policy, which is “a component of economic–financial policies of the State” (Article 2). Decisions regarding monetary policy and its supervision are principal functions of the National Assembly and the government.

The government has the specific task of preparing a monetary policy plan, including a projection of the annual inflation rate, and submitting it to the National Assembly, which then needs to approve it. Part of the role of the National Assembly is to set annual targets for the target inflation rate in line with the state budget and economic growth objectives. The government is also closely involved in the implementation of monetary policy. It is tasked by law to organize and implement instruments related to monetary policy and determine the amount of liquidity to be injected into the economy. The National Assembly supervises the implementation of monetary policy, and the government is required to report periodically on the implementation to a standing committee of the National Assembly.

The functions of SBV include the preparation of a plan for monetary policy (Article 5) and the implementation of monetary policy, as designed by the government. In addition to that role, SBV has other functions that are stated in Article 1 (2): “The State Bank shall conduct the state’s management over monetary and banking activities, is the issuing bank, the bank of credit institutions and the bank providing monetary services for the government.” Independent of these functions, the state reserves the right to undertake the unified management of all banking activities.

The law makes it clear that monetary policy is largely the responsibility of the National Assembly and the government, and that SBV is an integral part of the government. The National Assembly, together with the government, sets monetary policy objectives and the stance of monetary policy. By law, the National Assembly plays an important decision-making role in the monetary policy process. Apart from setting policy objectives, it supervises the implementation of monetary policy. This strong position can possibly be explained by the experience of hyperinflation in the 1980s and early 1990s, and other similar episodes of economic turmoil. The strong involvement of the government in the implementation of monetary policy, at least legally, suggests that the independence of SBV is limited.

According to the SBV Law, the goals of monetary policy are: stabilizing the value of the currency, controlling the inflation rate, facilitating socioeconomic development, ensuring national defense, security, and improving the living standards of the people (Article 2). The specific annual goal for the inflation rate is set by the National Assembly and the government in line with other principal objectives of economic policy. The SBV Law states that “the operations of the State Bank shall aim at the stabilization of the value of the currency, contribute to securing the safety of banking activities and the system of credit institutions, facilitate the socio-economic development in a manner consistent with the socialist orientation” (Article 1(3)). “*Stabilization of the value of the currency*” is interpreted here as stabilization of the *exchange rate*, because the stabilization of the currency is mentioned as a separate goal, together with controlling the inflation rate, in Article 2, as goals of monetary policy.

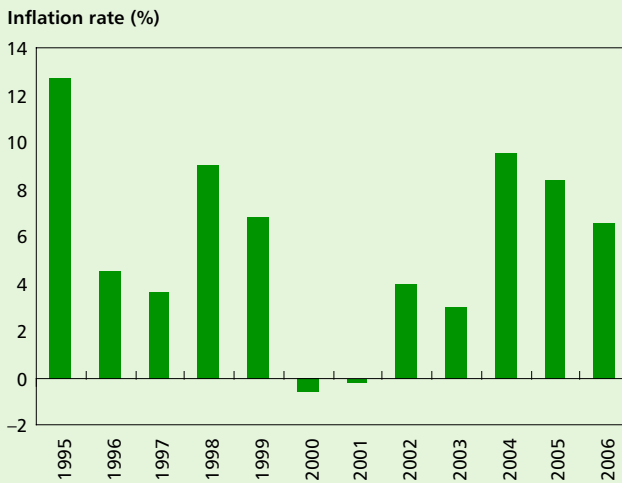
The goals of monetary policy in the SBV Law are very broadly defined and the primary objective is not clearly identified. The multiplicity of goals without established hierarchy raises the risk of conflicting objectives. While the SBV Law does not stipulate a hierarchy of goals, the actual economic policies pursued by the government suggest that economic growth has been the primary goal.

Article 16 of the SBV Law specifies the official monetary instruments to be used. The instruments are refinancing tools, interest rates, the exchange rate, reserve requirement ratios, OMOs, and other instruments as set by the governor when necessary. These instruments are considered as indirect tools, which differ from the direct tools applied in the past. By applying indirect tools, the monetary policy is considered more market-based than the so-called administrative-based measures employed in the past.

5.3.2 The Conduct of Monetary Policy

In Viet Nam, the monetary framework is derived from the 5-year plan on Socio-Economic Development Plan, which is formulated during the Conference of the Communist Party. The conference takes place once every 5 years. The government is then responsible for formulating an action plan for implementing the 5-year plan. SBV, as part of the government, is in charge of formulating the action plan for the banking sector. Targets are set for the injection of liquidity into the economy, total liquidity (M2), deposits and credits, and other financial sector-related measures that will be implemented as part of the government’s action plan.

Two principal components of the monetary policy strategy of SBV can be identified: an annual target for the value of the dong and targets for total liquidity and credit to the economy. During the past 15 years, the government adopted prudent fiscal and monetary policy while permitting

Figure 5.2: Viet Nam: Annual Inflation Rates

Source: State Bank of Vietnam.

rapid credit growth and controlling inflation rates (Figures 5.2, 5.3, and 5.4).

As a result, Viet Nam has achieved a high rate of economic growth, macroeconomic stability, and low inflation from 1990 to 2005. From the early 1990s, the monetary policy pursued by the government has achieved the goals of stabilizing the value of the currency, controlling inflation, contributing to economic growth, and facilitating the stabilization and development of financial institutions.

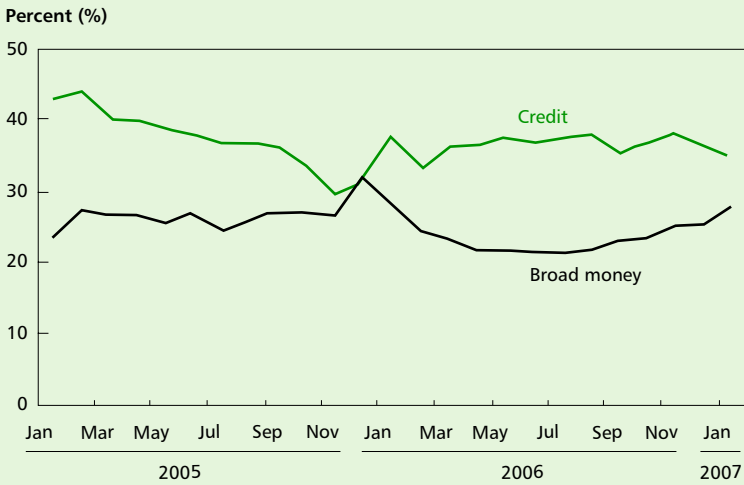
Throughout this period, SBV has made numerous efforts to adjust specific goals in response to changes in each subperiod, to improve the implementation of monetary measures. It has also used various channels to transmit the desired effects of the measures to the economy.

The objectives for individual periods are set based on assessment of the situation and the macroeconomic goals for each period. Instruments have been developed and applied flexibly from period to period, with an orientation toward more market-based measures.

5.3.3 Monetary Policy from 1990 to 1995

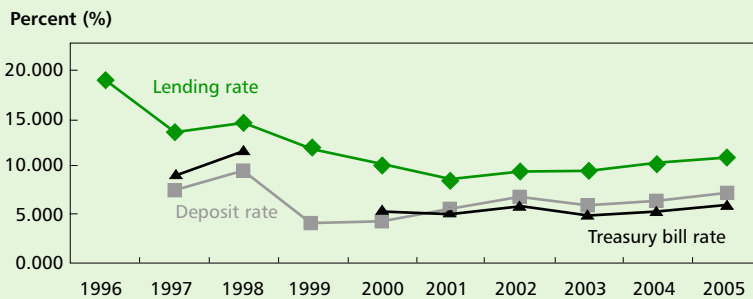
Viet Nam adopted a formal monetary policy only in 1991 and put it into effect in 1992. Its goal, as stated simply in the State Bank Ordinance 1990, was “to ensure the stability of prices” by maintaining “the currency purchasing power.” The principal method of achieving that at the time was

Figure 5.3: Viet Nam: Credit and Money Growth



Source: International Monetary Fund.

Figure 5.4: Viet Nam: Interbank Rates



Source: Figure quoted from Camen, U. 2005. Monetary Policy in Vietnam: The Case of a Transition Country. *BIS Paper No. 31*. Bank for International Settlements; International Monetary Fund. *International Financial Statistics*.

“to limit the further money supply to stabilize [the] currency.” The next priority for the period was to bring inflation under control.

From 1990 to 1995, the core task of SBV and the goal of monetary policy was to control inflation to stabilize the value of the dong and pursue economic growth. That goal was suitable for the period when the economy had just come out of a period of crisis, and the banking system was undergoing its first steps toward market-oriented reform.

The measures used by monetary policy in this period included interest rates, exchange rate controls, credit ceilings, and other tools such as refinancing and reserve requirement ratios.

The period started without a formal monetary policy and ended with one. In this regard, the period 1990–1995 can be viewed in the history of the Viet Nam banking and financial system as the genesis of a formal monetary system.

The application of a positive interest rate mechanism (lower mobilizing rates and higher lending rates) was introduced in this period. Interest rates were also adjusted based on market signals. The decision to raise the interest rate for household deposits in the formal banking system helped increase confidence in the domestic currency and encourage households to deposit their dong assets in banks. In 1989, real interest rates on household deposits rose sharply. This encouraged a steady rise in the value of household deposits at SOCBs, which rose from D207 billion in March 1989 to D1,348 billion by January 1990, according to SBV statistics.

This period was also marked by the change from a multi-exchange rate system to a single-exchange rate system. The exchange rate control mechanism was improved through the establishment of an interbank market for foreign currencies in 1994. This facilitated the formulation of exchange rates that were closer to market demand–supply equilibrium. Rates for transactions were allowed to move within a limited band from the rates stated by SBV.

A reserve requirement ratio (RRR) was introduced in 1992, while credit ceilings and refinancing tools were introduced in 1994.

5.3.4 Monetary Policy from 1996 to 2000

The objectives for this period were intended to tighten monetary policy to stabilize the currency, increase foreign currency reserves, stabilize interest rates, control exchange rates to encourage exports, limit imports in an effort to mitigate the effects of the Asian financial crisis of 1997/98, achieve high economic growth, control inflation, and improve the balance of payments.

The objectives were adjusted within subperiods to make them more suitable to changes in specific circumstances. From the third quarter of 1999, the objective was to loosen monetary policy prudently following two quarters of deflation that year. Monetary instruments were also renewed and adjusted according to new conditions and objectives.

With regard to interest rate tools, SBV applied ceiling rates on lending, depending on the term of the loans, with higher rates for longer terms. The interest rates were adjusted reflecting the changes in exchange rates.

SBV decided to depreciate the dong gradually to lessen the shock and improve exports in the context of the financial crisis affecting the region at the time.

From February 1999, the exchange rate management mechanism was changed significantly, moving from an administrative system to a market-oriented system with state management. Instead of setting an official rate and allowing transactions to be settled within a band, SBV began announcing the average exchange rates on Viet Nam's interbank markets. Based on the announced rates, commercial banks could trade within a band of $\pm 0.1\%$ of the previous day's rate.

The RRR was set at 10% based on the daily deposit balance (1992–1999). This was later changed to 10% of the average deposit balance for the reporting period. The measures were applied not just to commercial banks but also to credit cooperatives and people's credit funds, with RRR ranging from 0% to 20% of deposit balances for each period. The improvement in RRR helped SBV to better control the money supply, in particular narrow money (M1).

Credit ceilings were applied from 1994 to control credits provided to the economy and limit money creation. They were considered as a direct tool to control the money supply. They were not suitable later when the market started to develop, because they did not take into account market signals, so SBV stopped using them as a regular tool.

The refinancing tool was also applied from 1994. The interest rates for refinancing were set as a percentage of lending rates (60% to 100%) during the period 1994–1997. From May 1997, the interest rates were changed to conform to the international convention of using refinancing rates as a target rate for monetary policy implementation.

5.3.5 Monetary Policy from 2000 to 2005

The objectives of monetary policy for this period were “to implement a prudently relaxed monetary policy in order to ensure the target of currency stability, control inflation at the level not higher than 5%, to contribute to encourage economic growth as well as to implement the government plan in stimulate demand of the economy and to stabilize the banking system.”⁷

The general objectives remained unchanged for the whole period, with some adjustments based on the economic situation. For 2004–2005, the criteria were adjusted to “currency stability, inflation control but not to affect the target economic growth.”⁸

⁷SBV Annual Report 2005.

⁸SBV Annual Report 2005.

Regarding interest rate tools, from August 2000 to May 2002, prime interest rates replaced ceiling interest rates. SBV announced prime rates monthly. Based on the prime rate, commercial bank could add a margin of 0.3% per month for short-term loans and 0.5% per month for long-term loans. From June 2006, the “prime rate plus margin” system was replaced by the negotiable rate system, which is considered a liberalized interest rate. Commercial banks could then negotiate and set the lending interest rate based on the supply and demand of capital in the market and the credit ratings of clients. The announced prime rates, refinancing rates, and rediscount rates were the guiding rates for interbank market transactions. The OMO rates were also used as a reference.

The exchange rate mechanism during this period remained the same, except for a small change in the allowable band from 0.1% to 0.25%. At the same time, SBV continued to improve the determination of the exchange rate for the dong. The controlling mechanism (based on the currency basket) was changed to be more flexible, linking the domestic market to international markets to get the most appropriate value of the dong. SBV also left forward rates to be set by the difference in the interest rates between the two transacted currencies. Foreign currency transactions became more open, and the government allowed options transactions between foreign currencies and pilot option transactions between the dong and the dollar.

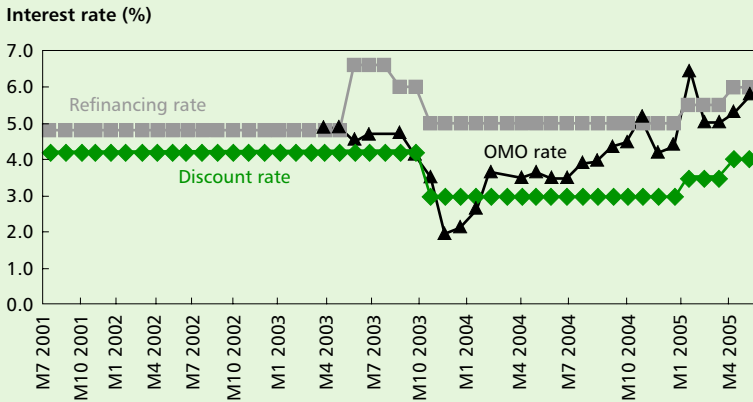
The RRR tool was adjusted several times during the period for deposit balances in both dong and foreign currencies to facilitate banking transactions in dong rather than in foreign currencies. The RRR for the dong was adjusted twice from 10% to 5% in 1999, then to 3% and 2% in 2003. The ratio for foreign currencies increased to 15% in 1999 but eventually decreased to 12%. It was further reduced to 3% in the time between 2001 and October 2003.

From April 2003, SBV started to formulate its framework for interest rate control, in which refinancing rates were used as ceiling rates, discount rates as floor rates, and the open market rates as guiding rates for the interbank market (Figure 5.5).

Open market operations (OMOs) have been used as a monetary policy tool since July 2000. This marked a critical shift by SBV from using direct monetary tools to indirect ones to reallocate lendable funds and interest rates more efficiently. Since then, OMOs have been improved in all respects, including sequence, value, and settlements. In practice, SBV has mostly used repurchase (REPO) transactions rather than single-direction (long or short only) transactions. The SWAP transactions are actually OMOs, but deal with foreign currencies

A study carried out by SBV in 2005 summarized the setup of monetary policy in Table 5.8.

Figure 5.5: Interest Rates of the State Bank of Vietnam



M = month in a year, OMO = open market operations.
 Source: Figure quoted from Camen, U. 2005. Monetary Policy in Vietnam: The Case of a Transition Country. *BIS Paper No. 31*. Bank for International Settlements; International Monetary Fund. *International Financial Statistics*; and press reports.

Table 5.8: Viet Nam: Summary of Monetary Policy

	1990–1995	1996–1999	2000–2005
Monetary policy instruments	<ul style="list-style-type: none"> • Ceiling rate • Refinancing • Required reserve • Exchange rate • Credit quotas 	<ul style="list-style-type: none"> • Ceiling rate • Refinancing • Required reserve • Exchange rate • Credit quotas 	<ul style="list-style-type: none"> • Refinancing, discounting • Required reserve • Open market operation • Exchange rate
Operating objectives	<ul style="list-style-type: none"> • Control of money supply (to purchase foreign currency, to lend as guided) 	<ul style="list-style-type: none"> • Control of money supply 	<ul style="list-style-type: none"> • Control of money supply • Open market rate • Prime rate • Refinancing rate
Intermediate objectives	<ul style="list-style-type: none"> • M2 • Credit 	<ul style="list-style-type: none"> • M2 • Credit • Exchange rate 	<ul style="list-style-type: none"> • M2 • Credit • Interest rate • Exchange rate
Final objectives	<ul style="list-style-type: none"> • Dong value stability • Inflation control • Economic growth 	<ul style="list-style-type: none"> • Currency value stability • Inflation control • Economic growth • System stability 	<ul style="list-style-type: none"> • Currency value stability • Inflation control • Economic growth • System stability

M2 = broad money.
 Source: Thanh, N.K., et al. 2006. *Report on the monetary policy implementation process in Viet Nam*, August. State Bank of Vietnam.

Table 5.9: Viet Nam: Current Guiding Rates (%)

Rates	Value	Decisions' dates	Valid from
Prime rate	8.25	29 Dec 2006	1 Jan 2007
Refinancing rate	6.50	1 Dec 2005	12 Jan 2005
Discount rate	4.50	1 Dec 2005	12 Jan 2005

Source: State Bank of Vietnam.

The inflation rate, as measured by the CPI, has been controlled at single-digit levels during 1996–2005 (Table 5.4 and Figure 5.2).

Table 5.9 shows the prime rate, refinancing rate, and discount rate currently applicable in the market. These rates are adjusted when SBV deems necessary.

5.4 Present Stance and Prospective Strategies

5.4.1 Limitations of Monetary Policy Set Up and Conduct

Despite past success, the design, adjustment, and implementation of monetary policy in Viet Nam still have some limitations.⁹ They can be grouped in the following areas: managing money flows, measuring the effectiveness and efficiency of monetary instruments, management of related markets, and transmission mechanisms.

SBV's ability to regulate the money market is still limited because it does not manage all monetary flows in the economy, such as foreign currency flows, state budget revenue and expenses, and banking operations of investment funds and other nonbanking financial institutions. In addition, SBV is still unresponsive to abnormal market developments due to (i) insufficient information, leading to limited analysis and forecasting capacity; (ii) undefined transmission mechanisms for monetary policy; and (iii) engagement in tasks inappropriate to the functions of a central bank in a market economy.

The effectiveness and efficiency of Viet Nam's indirect monetary instruments are still limited in their ability to regulate the money supply and interest rates and stabilize the money market. This is due to the country's underdeveloped money market, lack of tradable "commodities" (mostly treasury bills and bonds), the maturity structure of securities, the limited amount of government bills and bonds, and the weak capacity of credit institutions in treasury operations.

⁹These are analyzed in Nguyen Kim Thanh, SBV (2006) as quoted.

The money market, particularly the secondary market, is still in a developmental phase, inflexible and weak in transaction instruments. The linkage among submarkets—between the money and capital markets—is not strong. Moreover technological innovations introduced in the payment, transactions, and monitoring process, as well as the institutional framework, are incomplete and ineffective. In addition, transmission mechanisms have not been clearly understood and defined by SBV. This situation, coupled with weaknesses in the money market, confronts SBV with difficulties in controlling money supply, exchange rates, and interest rates.

Furthermore, delays in the effects of monetary policy actions have not been anticipated. As a result, SBV often finds itself reacting passively to rebalance unforeseen effects. Appropriate coordination between monetary policy and other macroeconomic policies has not always been clearly observed.

To carry out monetary policy effectively, policy makers in Viet Nam need to have a much better grasp of the actual transmission and adjustment mechanisms than they do at present.¹⁰

5.4.2 Directions to Improve Monetary Policy

In the government's long-term strategy and vision for developing the banking industry,¹¹ the implementation of monetary policy is seen as having achieved the objectives of stabilizing currency fluctuations, controlling inflation, facilitating economic development, and ensuring the safety of the banking system. The policy tools have been modified and developed to bring them in line with the modern tools that are commonly used in developed countries.

Monetary policy is conducted in a prudent, flexible, and effective manner on the basis of modern monetary policy instruments and advanced technology. The overall target of monetary policy in this period was to stabilize currency fluctuations, control inflation, ensure the security of the banking system, and create a favorable environment for economic growth.

The government can ensure the achievement of these goals by developing and implementing monetary policy in compliance with market principles and on the basis of a policy framework with appropriate transmission mechanisms and quantified targets. It must also enhance the capacity of SBV to manage money, interest rates, and exchange rates through reforms and improvements of monetary policy instruments; and the mechanisms to manage exchanges rate and interest rates and

¹⁰Packard 2006.

¹¹SBV 2006.

the development of the money market in conformity with international practices. Success also requires comprehensive coordination among monetary policy instruments and between monetary policy management, on the one hand, and other macroeconomic policies, on the other.

SBV implements monetary policy based on regulating the volume of money, while concurrently setting up the necessary conditions for gradually implementing a monetary policy based on interest rate regulation. SBV is in the process of setting up the necessary terms to switch to a monetary policy based on inflation targeting after 2010.

At present, to gradually apply an inflation-targeting model, SBV has been (i) gathering, processing, and analyzing data on the CPI, monetary criteria, indirect tax, and commodity prices managed by the state; (ii) working out basic inflation measures by excluding the effects caused by indirect tax and price controls by the state; and (iii) applying statistical techniques such as verifying the Granger causality model, regression models, structural models, and Cogley models in selecting basic inflation measures.

5.4.3 Inflation Targeting and Monetary Policy

As discussed in the previous section, the monetary policy goal set forth in the SBV Law is broadly defined and has multiple objectives. The goals are interpreted by SBV in a slightly different manner for each period based on the situation and socioeconomic development goals of the economy. From the 1990s, monetary stability has always been set as one of the general objectives. However, the priority placed on inflation control compared with other objectives such as economic growth, exchange rate stability (which also implies currency stability), economic balances, and so on, has differed from period to period.

Inflation targeting has a number of advantages. The primary advantage is its transparency to the public. It makes clear the commitment to price stability. Inflation targeting also makes the central bank more accountable for keeping inflation low, which helps counter the time-inconsistency problem. It enables monetary policy to focus on domestic considerations and respond to shocks in the economy. The monetary policy strategy does not require a stable relationship between money and inflation, thus it allows the central bank to use all available information to determine the best settings for monetary policy.

However, inflation targeting has some limitations that need to be overcome before it can be applied. First, inflation is not easily controlled because the central bank cannot intervene directly but only through the money supply, which in turn is affected by many factors that are not easily measured and influenced. Second, because of the lag effects of monetary

policy, an inflation target is unable to send immediate signals to both the public and markets about the monetary policy stance of the government.

With regard to the conduct of monetary policy in Viet Nam, Packard (2006) makes the following argument: “The implication for monetary policy is that it is not feasible to employ a monetary aggregate such as M2 as an intermediate target. The authorities cannot know how to manipulate M2 to get the desired impact on the price level because the relationship between M2 and the inflation rate is neither close nor stable. It also is not possible to estimate the time lag between the transmission of a monetary policy impulse and its impact on the real economy. While monetary aggregates are not suitable intermediate targets, they should be utilized as monitoring variables that aid the analysis of economic and financial conditions, so policymakers can better assess the response of key economic players to monetary policy impulses.”¹²

To develop and adopt an inflation targeting model, SBV should be well aware of the initial conditions needed to support it. They can be divided into four groups:

First, there should be a mandate to pursue an inflation objective and the central bank should be held accountable for achieving it. For this to happen, SBV should not only have an explicit mandate to pursue an inflation target, it must also have sufficient discretion and autonomy to set its monetary instruments accordingly. The public should be informed about the monetary policy framework and the conduct of monetary policy.

Second, a set of conditions should be met to ensure that the inflation target will not be subordinated to other objectives. Monetary policy should be more independent than it is now and should not be dominated by fiscal priorities. The government should raise the bulk of its funding in financial markets, and access to central bank credit should be strictly limited. The external position should be strong enough to enable monetary policy to pursue the inflation target as its primary objective. At the outset of full-fledged inflation targeting, inflation should be low enough to ensure a reasonable degree of monetary control.

Third, the financial system should be developed and stable enough for the framework. There should be sufficient financial stability to enable monetary policy to pursue the inflation target without being sidetracked by concerns about the health of the financial sector. Financial markets should be sufficiently well developed to enable monetary policy to be implemented using market-based instruments, and to ensure that the conduct of monetary policy is not complicated by weaknesses in financial market infrastructure.

¹²Packard 2006.

Finally, a set of proper tools to implement monetary policy in support of the inflation target should be created. SBV should be in a position to influence inflation through its policy instruments and have a reasonable understanding of the links between the policy stance and inflation. Exchange rate objectives must be clearly subordinated to the inflation target. Therefore, SBV should make clear that foreign exchange market interventions and changes in interest rates intended to influence the exchange rate are only aimed at smoothing the effects of temporary shocks. Fiscal policy and public debt management should be coordinated in support of the inflation target.

Currency stability and inflation have been the main focus of Viet Nam's monetary policy. Although these policies have led to significant achievements, especially between the late 1980s and early 1990s, inflation targeting is not the model that Viet Nam has followed. Before it can adopt an inflation targeting policy, the government and SBV must create the necessary conditions.

5.4.4 The Multiple-currency Phenomenon in Viet Nam

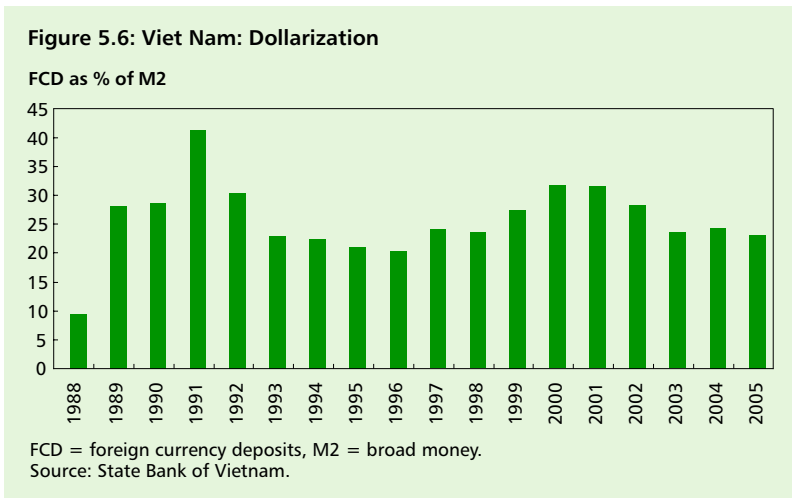
The multiple-currency phenomenon was not an issue in Viet Nam until the late 1990s, because of the country's situation prior to economic reforms. Markets were not developed and the economy was characterized by low monetization. The dong was predominantly used for domestic transactions. The use of foreign currency was strictly prohibited and rarely used by the general public.

In the initial stages of economic reforms in the early 1990s, the adoption of a floating exchange rate regime in a period of economic instability caused public confidence in the dong to decrease significantly. This led to an increase in foreign currency holdings, especially the dollar. Therefore, dollarization in Viet Nam, which was a consequence of economic adjustments during the transition process, can be described as unofficial, because it was neither sought nor encouraged by SBV and the government.

Dollarization in Viet Nam increased steadily from 9.4% in 1988 to a peak of 41.2% in 1991. It then gradually decreased during the period 1993–1997 to a low of 22.4% in 1997.

During 1995–2005, dollarization remained under 30%, except for 2000 and 2001 when it was at 31.5% (Figure 5.6).

A number of studies have attributed dollarization mainly to the weak financial system in late 1980s when economic reforms were starting and the dong was relatively weak. Monetary authorities eventually decided to allow dollar-denominated deposits in the banking system. Other studies blamed the instability and uncertainty of the monetary and foreign exchange markets as the reason for the dollarization of the economy.



There are two main causes for dollarization. First, a loss of credibility in monetary policy due to long periods of high and volatile inflation, and a depreciating domestic currency increases the risk premium on nominal assets. As a result, the public shifts nominal assets into a more stable currency or into real assets. Second, low levels of savings in domestic currency-denominated assets and relatively low maturities of those assets (deposits and bonds) motivate borrowing abroad in foreign currency, especially dollars, as a substitute, causing a dollarization of liabilities.

In Viet Nam, the failure of monetary reforms led to high inflation from the end of the 1980s until the early 1990s. This then led to a loss of public confidence in the dong. Reform of the exchange rate regime thereafter also contributed to a gradual depreciation of the dong against the dollar. The weak performance of the national currency as a store of value forced savers into alternative assets such as gold and dollars. The weakness of the dong was also perceived as a reason for the instability of the banking system, and led to a situation where savers chose short-term rather than long-term deposits. Starting its economic reforms with a low savings rate in the economy, Viet Nam introduced the Foreign Investment Law in 1987 and other policies to attract foreign investment and economic cooperation. After a number of amendments to the law, the country succeeded in attracting foreign currency into various channels including FDI, foreign aid, and remittances from abroad. This increased foreign liabilities and the level of dollarization in the economy in early 1990.

Dollarization in Viet Nam has had some positive effects, coming together with the opening and development of the economy. It helped deepen the financial market. The increased inflows helped to increase credits to the economy, which at that time had a low level of savings.

However, as many studies have demonstrated, high dollarization will increase the risks in the financial market due to the increase in currency mismatches in the banking system. It also causes a situation where monetary policy is less effective because it is difficult for the central bank to control the supply of foreign currency. This will lead to a weakening of power over the money supply in the country.

These negative effects have not been significant for Viet Nam because the dollarization has been at manageable levels.

5.4.5 Potential Effects of Dollarization in Viet Nam

Despite the low level of dollarization, the potential effects of increasing dollarization still remain a threat to Viet Nam economy. First, because of a loss of currency independence, the economy may lose adjustment mechanisms, especially in cases of external shocks. Second, the economy may lose the government's function as the lender of last resort; in cases of liquidity needs in the banking sector, authorities might find they do not have the ability to inject the necessary amounts of money into the economy. In other words, the money supply function becomes less elastic and systemic risk in the financial sector increases.

The Viet Nam government has taken a number of actions to limit the use of foreign currency in the economy. Most of the efforts of SBV have focused on resolving the main cause of dollarization, which is the loss of public confidence in the dong, while at the same time encouraging currency inflow to the country.

Dollarization occurs when a country's currency proves to be weak as a store of value. However, not all economies with weak currencies are directly dollarized. As stated before, the introduction of dollar deposits and also the quasi-legalized domestic use of dollars certainly fueled the dollarization process in Viet Nam. In its current situation of incomplete dollarization, Viet Nam is in the worst of all possible worlds. To regain the exchange rate as an adjustment mechanism and to pursue a more independent monetary policy, de-dollarization of the banking system is an essential condition. Once a country is dollarized, however, hysteresis effects make it difficult to reverse the process. As a common pattern, currency-related portfolio decisions are very difficult to overturn. In principle, monetary authorities have to strengthen the quality of the domestic currency and build a robust financial and legal infrastructure as a precondition to reverse dollarization. The final objective of having the dong as the only legal tender implies that dollar deposits in the banking system should be prohibited. However, because banks lend in dollars, a

sudden prohibition of dollar deposits is not feasible. Instead, a gradual approach is needed; business in dollars has to be made unattractive for banks.

The necessary measures can be grouped into two sets of actions. The first is surrender requirement policies. This is to limit the holding of foreign currency by businesses. The regulations are set in a number of legal documents including official ordinances, decrees, decisions, and guidance documents issued by the government. These documents regulate foreign exchange transactions and holdings of foreign currencies. In principle, if transactions in foreign currency are controlled, the holding of foreign currencies by businesses and individuals would be discouraged. However, there is a trend to deregulate foreign exchange transactions and holdings with the introduction of the Foreign Exchange Decree 2005.

The second set of actions involves using monetary instruments to increase public confidence in the dong and to encourage the holding of dong-denominated assets. Instruments are applied to control inflation, strengthen the domestic currency, and control lending in dollars. One effective tool is through interest rate control. Because the holding of currency-denominated assets is sensitive to differences in interest rates among currencies, actions to keep dong interest rates high compared to dollar interest rates—while keeping the exchange rate stable over a long period of time—have encouraged the holding of dong. In addition, higher RRRs on dollar deposits could help make the dollar less attractive to banks.

To lower the level of dollarization and keep it manageable, SBV needs to apply instruments flexibly and continue to build public confidence in the dong by maintaining its competitive value against foreign currencies.

5.5 Exchange Rate Policy in Viet Nam

The SBV Law specifies exchange rate stabilization as an objective of monetary policy, which is part of the government's social-financial policy (Article 2). The law also considers the exchange rate as an instrument of monetary policy, along with other policy instruments such as refinancing, RRRs, and OMOs.¹³

The exchange rate therefore is considered as both an objective of monetary policy and as means to implement monetary policy. The reforms of the exchange rate regime can be tracked through the process of banking reform and monetary reforms.

¹³SBV Law 1997, Articles 2 and 16.

5.5.1 Brief History of Foreign Exchange Regimes

Before 1989, Viet Nam adopted a multiple exchange rate system with two official exchange rates for foreign trading and nontrading and an internal exchange rate, which was applicable to business relations between domestic banks and other domestic businesses using foreign exchange and for state budgeting. In 1988, the two official exchange rates were devalued several times.

In March 1989, these two official exchange rates were merged into a single rate and further devalued to a level close to the foreign exchange market rate. Since then, exchange rate determination has become more market-oriented. Still, some issues were brought about by the exchange rate arrangements during the economic reform. They include how the exchange rate was managed, what helped maintain rates during the recent regional crisis, and the nature of the movements toward a flexible exchange rate regime.

Following the establishment of the foreign exchange centers, which opened in Ho Chi Minh City in August 1991 and Ha Noi in November 1991, the rates auctioned by the centers were used as official rates.

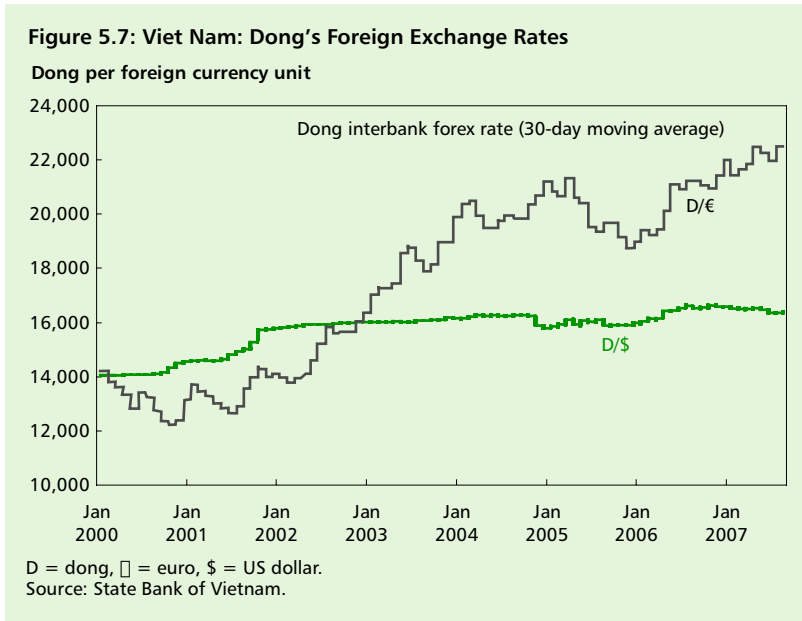
In 1991, another new rate called the auction fixing rate replaced the convertible currency rate for governing all transactions.

In 1994, the interbank foreign exchange market began operating and currency control was relaxed. The market permitted spot and forward transactions in six currencies and the authorities widened the trading band for the dong in the interbank market. Also, according to a decision on 6 August 1998, the general director or directors of credit institutions were allowed to fix the spot buying and selling rates between the dong and foreign currencies.

On 25 February 1999, SBV announced that there would be only one exchange rate that would be used between the dong and the dollar. This would be based on the weighted average actual transaction rates in the interbank foreign currency market between the dong and the dollar. Based on this exchange rate, commercial banks could set their own rate within a band of plus or minus 0.1%. Thus, the exchange rate system was reclassified as a crawling peg starting in 1999.

From a multi-exchange rate system, Viet Nam's exchange rate regime was changed to a market-based exchange rate system. The government and SBV explicitly announced they would follow market mechanisms in the exchange rate. During the economic reform period from 1990, the exchange rate regime changed from a fixed exchange rate system to a crawling peg.

In general, there have been no significant changes in the exchange rate regime from 1999 to the present, except that the announced rate is now calculated as the average of interbank market transactions based on



market signals every day and a small change recently in the allowable trading band (from 0.1% to 0.5%).

Figure 5.7 shows the exchange rate between January 2000 and January 2007, revealing relative stability. During the same period, the dong depreciated significantly against the euro following depreciation of the dollar.

5.5.2 Objectives of Exchange Rate Policy

In the framework of the government's monetary, social, and financial development policies, the objectives related to the exchange rate are to stabilize the value of the domestic currency against foreign currencies, improve Viet Nam's balance of payments, and facilitate the creation of a macroeconomic environment that is suitable for growth.

The exchange rate policy itself is not considered as an independent policy but as one of the instruments of monetary policy. The SBV Law and the Foreign Exchange Ordinance 28/2005 stipulate "the exchange rate of [the] Vietnamese dong is determined based on supply and demand of foreign currencies in the markets and guidance from the government"¹⁴ and "the SBV determines the exchange rate mechanism according to

¹⁴SBV Law 1997, Article 14; SBV 2005, Article 3.

macroeconomic objectives set in each time period.”¹⁵ This is the exchange rate regime that Viet Nam currently follows.

The implementation of the exchange rate regime over the years has shown a step-by-step shift from the use of administrative tools that directly set the official rate—the basis for market transactions—to the use of indirect tools in exchange rate policy.

The policy requires that adjustments in exchange rates must not create significant volatility or chaos in the economy. The policy must ensure the relative stability of the macroeconomic environment, society, and the political environment, and limit the impact of external factors to facilitate the international integration of the economy.

5.5.3 Exchange Rate Policy Tools

There are a set of exchange rate policy tools that have been in applied in Viet Nam over the years. They include administrative tools and indirect market tools.

The administrative tools have consisted of a set of official rates and allowable trading bands, and regulations on foreign exchange controls, borrowing and repaying of foreign debt, and foreign currency positions.

For the set of announced rates, SBV determines the official exchange rate and the allowable band for transactions in the market (actually, among and between banks and their corporate clients). This tool was predominantly used before 1999, but was changed when the announced rate was explicitly set based on the markets. It was totally abolished when the announced rate was replaced by the average interbank rate. However, part of this tool—the allowable transaction band—is still applied in the market. This band was set at 0.1% in February 1999, then adjusted to 0.25% from July 2002 and to 0.5% by early 2007.

Regulations on exchange controls, borrowing and repaying foreign debts, and foreign currency positions have been widely imposed on all businesses as well as individuals. However, as the Viet Nam economy integrates more broadly into the world economy, an orientation toward deregulation has been gradually implemented, particularly on foreign exchange transactions. For instance, the issuance of the Foreign Exchange Ordinance 2005 and related documents allowed broader scope for foreign exchange flows and transactions. Also, the use of direct tools has been reduced.

Indirect exchange rate tools include central bank intervention in the interbank foreign exchange market by buying and/or selling foreign currency and the use of interest rates and other monetary tools.

¹⁵SBV 2005, Article 3.

As far back as 1991, SBV had prepared for the application of indirect market intervention when it first set up two foreign exchange centers, and when it established the interbank market for foreign exchange in 1994. Because most official trading of foreign currencies happened on this market, it provided market signals for currency demand and supply. This information is crucial for the policy-making process, especially for foreign exchange and trade policy. To use this tool, SBV also set up the Foreign Exchange Stabilization Fund, which is ready for trading as the need arises. As the size of the fund has increased, policy has moved toward a market-based system, with SBV increasing its use of this tool as a form of intervention. Currently, this is the main channel for exchange rate interventions.

As discussed earlier, the other monetary tools for foreign exchange rates are interest rates and the RRR, which is set at different levels for the dong and foreign currencies.

The exchange rate policy has improved by becoming more open, gradually abolishing unreasonable limitations on international settlements, fund transfers, currency trading, investments, savings, and remittances to free up the current account and loosen capital transactions.¹⁶ Table 5.10 shows the exchange rates from 1997 to mid-2006.

5.5.4 Foreign Exchange Management Reforms

Reforms of the foreign exchange rate regime can be characterized by the following:

First, the capacity and coverage of SBV in managing and monitoring foreign exchange transactions domestically and abroad has been strengthened. SBV simultaneously has adopted effective instruments to limit and monitor capital outflows.

Second, current account transactions were liberalized while capital account transactions have been loosened step-by-step and prudentially regulated toward the opening of its financial market. The convertibility of the dong has been improved with the aim of laying the foundation for a freely convertible domestic currency after 2010. Dollarization has been managed at relatively low and stable levels. The responsibility and capacity of commercial banks to satisfy foreign currency demand has been improved by loosening the restrictions on the ability of institutions and individuals to access the foreign exchange market.

Third, official foreign exchange reserves have increased, while SBV has implemented uniform tools to manage foreign currency. The trading of foreign currency has been concentrated in the banking system. The open foreign exchange policy has been applied to attract foreign currency inflows through the banking system.

¹⁶SBV 2006.

Table 5.10: Viet Nam: Dong–Dollar Exchange Rates

Effective exchange rates	1997	1998	1999	2000	2001	2002	2003	2004	2005	Jan–Jun 2006
	(From 1997: 12-month average; 1990 = 100)									
Nominal	45.1	46.7	42.2	42.1	102.2	97.7	88.5	82.6	81.1	80.9
Real	134.7	145.5	136	132	100.1	98.3	90.6	89.3	93.2	96.7
Annual percentage change										
Nominal	2.8	3.7	(9.7)	(0.1)	2.2	(4.4)	(9.4)	(6.7)	(1.8)	1.6
Real	2.8	8.0	(6.5)	(2.9)	0.1	(1.8)	(7.9)	(1.4)	4.3	7.5
In units indicated										
Dong per dollar: End of period	12,292	13,890	14,028	14,514	15,070	15,368	15,608	15,739	15,875	15,957
12-month average	11,692	13,301	13,944	14,170	14,786	15,244	15,475	15,704	15,816	15,920

() = indicates depreciation.

Source: State Bank of Vietnam.

Fourth, foreign exchange rates have been managed under the motto, “flexibility in the short-term and stability in the long-term.” The flexible exchange rate mechanism has been continuously consistent with market mechanisms, pegged to a basket of currencies representing Viet Nam’s trade and investment partners. SBV only intervenes in the market and responds to the country’s essential foreign exchange demand with a view to achieving monetary policy targets and stabilizing the money market. SBV has increased its management capacity and its ability to conduct foreign exchange market interventions through market operations. Also, it has improved the legal framework for foreign exchange to create favorable conditions for foreign exchange market development, including expansion of institutional foreign exchange operations and ease of access to foreign exchange sources for both institutions and individuals. Lastly, it has considerably reduced unofficial foreign exchange operations.

5.5.5 Foreign Exchange Rate Policy and Intervention Mechanisms

Viet Nam’s foreign exchange mechanism, as stipulated in the Foreign Exchange Ordinance 2005, is a responsibility of SBV. However, this ordinance and the SBV Law and other related legal documents also state that exchange rate stability is an objective, while the interest rate mechanism is a tool of monetary policy. Monetary policy, in turn, is part of, and must be based on, the government’s socioeconomic development policy. Also, the exchange rate must support the overall goals of the economy.

The exchange rate and intervention policy can be summarized in the following way:

- The government approves the long-term development of exchange rates; the manner in which SBV intervenes is based on plans prepared and submitted by SBV to the government for approval.
- SBV makes decisions on short-term interventions and movements within the approved limits.
- SBV is responsible for proposing and implementing exchange rate policy as well as monetary policy.

From 1999, SBV has intervened in the exchange rate mainly through adjustments to the allowable band on foreign exchange transactions and through transactions to purchase or sell foreign currency on the interbank market.

Before 1999, the exchange rate was directly controlled by the government in an attempt to keep it stable.¹⁷ Administrative instruments were also employed from time-to-time to regulate exchange rate levels. SBV set and announced official exchange rate levels and allowable bands within which commercial banks could trade foreign exchange.¹⁸ During 1990–1991, although it was announced that the official exchange rate was set based on market supply and demand, in reality the official exchange rate was often set at levels that were below those prevailing in the parallel “black” foreign exchange market, where a number of exchange rate transactions were carried out, although illegally.

To overcome the problem of official exchange rates that did not reflect underlying supply and demand for currencies—leading to the existence of a black market for foreign exchange—the government in 1991 established an official foreign currency market. It consists of two foreign exchange trading floors, one in Ho Chi Minh City, set up in August 1991, and another in Ha Noi, set up in November 1991. Based on the auctioned rates at these two floors, the official exchange rate is set and announced by SBV. To reduce exchange rate fluctuations, the allowable band for exchange rate transactions based on the official rate was significantly reduced from 5% to 0.5%. The introduction of this arrangement appeared to make exchange rates more market-based. However, not long after the establishment of this arrangement, the official exchange rate still remained lower than the exchange rate in the parallel market. In effect, it was still controlled by the dominance of SBV, which could buy and sell large amounts of foreign exchange to achieve a predetermined exchange rate level. Nevertheless, the mere shift from the administrative setting of the official exchange rate to a system where the rate was determined through government intervention in the market for foreign exchange was a remarkable step toward a market-based mechanism.

5.6 Scope for Regional Cooperation

Monetary and exchange rate policies are an integral part of the socioeconomic development policies for any country. The development of monetary policy therefore is partly determined by the economic orientation and development of a country.

In Southeast Asia, Viet Nam is one of the larger economies, especially in comparison to neighboring countries (Appendix A5.5).

¹⁷SBV. 1995–1998. Annual reports.

¹⁸SBV Ordinance Law 1990.

Despite the fact that Viet Nam's trade with the countries of ASEAN+3¹⁹ plays an important role in Viet Nam's international trade, the country's trade volumes with Cambodia and the Lao People's Democratic Republic (Lao PDR), its two immediate neighbors, are not significant.

Viet Nam's exports to ASEAN+3 countries increased in volume from 1995 to 2005 (Table 5.11). However, they decreased afterward as Viet Nam expanded exports to markets in other regions as a result of its global economic integration, although they still stood at 37% of total exports in 2005. During the same period, Viet Nam's exports to Cambodia and the Lao PDR increased, but in terms of total share, they decreased. Similarly, the share of Viet Nam's imports from Cambodia and the Lao PDR remained at low levels, whereas imports from other countries increased dramatically. The share of Viet Nam's imports from the two countries was only as high as 1.3% of total imports in 1995 but decreased to 0.4% in 2005, while imports from ASEAN+3 countries was around 60% of total imports.

It is obvious that trading volumes play an important role in specifying a country's position and scope for monetary cooperation. Therefore, trade among Cambodia, the Lao PDR, and Viet Nam needs to improve before they can consider full integration of monetary and exchange rate policies.

It is suggested that the scope for monetary and exchange rate policy cooperation should start from simple forms, then take steps toward greater cooperation.

Within the scope of banking and finance in ASEAN, Viet Nam has actively participated in banking and finance conferences for ASEAN and ASEAN+3, such as the Governors' Meeting. This is the forum for leaders and specialists in banking and finance to express their views and exchange ideas on common issues for the region as well as the possibility to enhance and improve cooperation activities in the following areas:

- **ASEAN supervising mechanism.** Semiannually, Viet Nam prepares a report on its economic, finance, and monetary situations, as well as provides relevant data to the ASEAN Secretariat to prepare the ASEAN surveillance report. These reports present analysis and forecasts on economic and financial conditions and propose policies that could enhance coordination in the ASEAN region.
- **ASEAN swap arrangement (ASA).** This arrangement encourages monetary cooperation in the ASEAN region and includes a mechanism for mutual assistance among member countries who have difficulties in their account balances. The method of assistance is through currency swaps between the concerned countries for

¹⁹ASEAN countries plus the People's Republic of China, Japan, and the Republic of Korea.

Table 5.11: Viet Nam: Trade Value

Descriptor	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Exports											
World	5,621.4	7,463.2	9,484.3	9,307.0	11,541.4	14,482.5	15,019.7	16,704.7	20,143.8	25,653.1	30,957.3
Cambodia (C)	94.6	99.0	108.9	75.2	90.2	141.6	146.0	178.4	267.3	153.4	81.9
Lao PDR (L)	20.6	24.9	30.4	73.4	165.3	70.7	64.4	64.7	51.8	68.0	77.7
C + L Total	115.2	123.9	139.3	148.6	255.5	212.3	210.4	243.1	319.1	221.4	159.6
% to C + L Total	2.1	1.7	1.5	1.6	2.2	1.5	1.4	1.5	1.9	0.9	0.5
ASEAN+3	3,170.4	4,222.5	4,589.0	4,203.9	5,368.8	7,083.6	6,888.8	6,861.3	8,237.2	9,613.1	11,744.3
% of ASEAN+3 to Total	56.4	56.6	48.4	45.2	46.5	48.9	45.9	41.1	40.9	37.5	37.9
Imports											
World	8,358.5	11,284.9	11,875.1	11,309.8	11,742.1	15,636.5	16,217.1	19,744.8	25,255.1	33,160.8	37,979.8
Cambodia (C)	23.6	17.9	24.7	42.1	12.7	37.3	22.8	65.4	94.7	46.7	19.9
Lao PDR (L)	84.0	68.1	52.7	131.4	197.4	105.7	68.0	62.6	60.7	79.8	91.2
C + L Total	107.6	86.0	77.4	173.5	210.1	143.0	90.8	128.0	155.4	126.5	111.1
% to C + L Total	1.3	0.8	0.7	1.5	1.8	0.9	0.6	0.7	0.6	0.4	0.3
ASEAN+3	4,876.6	6,362.8	6,723.3	6,804.0	7,068.1	9,904.7	9,848.6	11,712.4	14,695.3	20,010.6	23,881.4
% of ASEAN+3 to Total	58.3	56.4	56.6	60.2	60.2	63.3	60.7	59.3	58.2	60.3	62.9

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic.
Source: International Monetary Fund. Various years. *Direction of Trade Statistics*.

dollars, euro, or yen. The total value of ASA is \$2 billion. Viet Nam's contribution is \$120 million and the country can borrow up to \$240 million.

- **Financial services liberalization.** Viet Nam actively participates in activities promoting regional financial integration. The goal of this process is to liberalize financial services in the region by 2015 and apply them to related areas by 2020.
- **Capital account liberalization.** Viet Nam has coordinated with other ASEAN countries to review and evaluate capital account policies of member countries, gather information and country experience on the management and liberalization of capital accounts, publish *Capital Account Policies in ASEAN*, and update Viet Nam's capital account policy page on ASEAN's website.

In addition, Viet Nam's integration in the area of banking and financial services has been promoted through coordination and cooperation among ASEAN+3 countries. The Chiang Mai Initiative and the Asian Bond Markets Initiative are good examples. Viet Nam is also participating in the creation of free trade agreements between ASEAN and Japan, the Republic of Korea, the People's Republic of China, Australia, New Zealand, and India, and development of the East Asia Summit by signing relevant economic cooperation agreements in which related countries commit to open areas including banking and financial services.

However, Viet Nam's integration into the banking and financial sectors of ASEAN still faces obstacles. Among them is Viet Nam's legal framework, which has not yet been completely developed and harmonized with ASEAN to create a level-playing field. So far, efforts at cooperation in this area have not been realistic and applicable to the context of Viet Nam's development. As a result, commitments in this area have not been enforced, and there has been insufficient focus on the appropriate activities.

To further integrate into the banking and financial sectors in the region, Viet Nam needs to focus on the following:

- Improve banking laws and related legal documents such as the guidelines for licensing banks and financial institutions, foreign exchange management, accounting in the banking sector to meet international standards, and regulations on banking services.
- Improve SBV's capacity to establish and implement monetary policy and supervise commercial banks in international integration.

- Improve the competitiveness of commercial banks by increasing their financial capability, human resource development, banking modernization, banking risk management, and expanding and diversifying banking services.
- Promote information about integration through mass media, seminars, and published documents.

Appendix

Table A5.1: Viet Nam: Selected Monetary and Banking Indicators

Month	National currency		Percent per annum			National currency per \$				
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d
M1 1995	37,241,800		na	na	na	11,047	98.37	15,369,460	23,228,560	0.329
M2 1995	36,742,100		na	na	na	11,053	100.38	16,549,270	22,896,050	0.296
M3 1995	37,566,700		na	na	na	11,053	96.92	17,040,010	23,522,780	0.328
M4 1995	38,015,100		na	na	na	11,049	94.58	17,573,760	23,769,400	0.319
M5 1995	38,151,900		na	na	na	11,050	96.86	17,919,280	23,729,690	0.287
M6 1995	38,543,200		na	na	na	11,050	97.50	18,198,080	23,463,950	0.271
M7 1995	39,443,700		na	na	na	11,046	98.43	18,815,560	24,188,790	0.273
M8 1995	41,082,800		na	na	na	11,041	101.42	19,502,270	24,910,350	0.307
M9 1995	41,496,900		na	na	na	11,030	103.91	20,569,290	25,077,780	0.311
M10 1995	42,943,300		na	na	na	11,015	103.46	22,138,160	24,755,200	0.326
M11 1995	43,920,600		na	na	na	11,011	103.79	22,210,990	26,089,570	0.286
M12 1995	45,282,600		na	na	na	11,014	104.20	22,570,910	26,779,260	0.355
M1 1996	46,666,300		na	na	9.66	11,015	106.48	22,347,790	26,443,550	0.350
M2 1996	47,736,600		na	na	8.73	11,013	109.17	21,125,860	27,177,410	0.312
M3 1996	48,351,500		na	na	9.43	11,013	110.30	21,224,960	28,972,830	0.296
M4 1996	48,426,400		na	na	8.53	11,013	110.86	21,577,780	29,630,800	0.254
M5 1996	48,911,000		na	na	6.08	11,015	110.59	21,808,370	29,605,010	0.285

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Table A5.1 continued

Month	National currency		Percent per annum				National currency per \$				
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d	
M6 1996	49,701,700		na	na	4.65	11,015	111.16	20,910,790	29,182,310	0.292	
M7 1996	51,796,600		na	na	3.96	11,017	110.66	22,259,170	30,878,300	0.302	
M8 1996	52,594,100		na	na	3.25	11,019	109.17	21,998,610	31,543,300	0.309	
M9 1996	54,236,800		na	na	3.04	11,021	109.77	23,476,240	31,371,720	0.300	
M10 1996	55,540,700		na	na	3.04	11,052	110.35	24,010,960	30,469,060	0.341	
M11 1996	56,300,300		na	na	3.82	11,074	110.67	25,060,930	29,885,600	0.351	
M12 1996	56,926,100		na	na	4.59	11,124	112.21	25,972,560	31,962,460	0.340	
M1 1997	57,704,600		9.9	5.1	4.45	11,156	114.50	26,371,870	30,752,230	0.359	
M2 1997	57,540,100		9.9	4.1	3.78	11,185	119.23	26,430,360	31,621,840	0.356	
M3 1997	57,985,400		10.2	4.8	2.34	11,540	115.60	27,039,780	30,917,110	0.384	
M4 1997	59,269,800		9.9	5.1	1.68	11,652	114.64	27,089,590	31,824,480	0.357	
M5 1997	60,741,000		9.3	5.7	1.60	11,655	112.28	27,389,000	32,951,200	0.344	
M6 1997	61,866,300		8.0	7.1	2.27	11,661	111.77	28,175,590	32,910,900	0.342	
M7 1997	63,651,900		7.5	7.5	3.23	11,672	114.83	29,070,790	33,425,500	0.324	
M8 1997	65,385,400		7.5	7.5	3.72	11,688	116.90	29,848,910	33,482,600	0.316	
M9 1997	67,297,600		7.5	6.0	4.00	11,706	118.01	31,285,200	34,549,500	0.292	
M10 1997	68,924,300		7.5	6.0	4.19	11,844	117.68	32,659,770	33,994,500	0.310	

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Table A5.1 continued

Month	National currency		Percent per annum			National currency per \$					
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d	
M11 1997	69,762,700		7.5	6.0	3.68	12,150	116.50	33,619,330	32,535,830	0.373	
M12 1997	70,776,900		7.5	6.0	3.64	12,291	120.48	34,712,210	34,552,630	0.346	
M1 1998	71,718,300		8.7	5.7	4.08	12,292	126.40	34,964,010	32,822,830	0.376	
M2 1998	71,742,600		9.2	5.3	4.46	12,632	122.02	34,653,530	34,355,900	0.379	
M3 1998	72,658,600		9.0	5.4	4.12	12,977	117.99	35,148,530	34,542,900	0.397	
M4 1998	73,473,800		9.4	5.0	6.35	12,985	120.22	35,532,420	34,693,650	0.427	
M5 1998	75,433,400		9.4	5.0	8.42	12,982	122.72	35,828,450	33,312,220	0.431	
M6 1998	76,165,800		9.4	5.0	8.32	12,984	126.18	35,990,050	33,330,730	0.428	
M7 1998	78,130,700		9.2	5.3	7.47	12,974	126.26	36,036,910	33,199,000	0.424	
M8 1998	81,265,600		9.3	5.1	8.56	13,784	121.74	36,696,410	34,091,290	0.469	
M9 1998	82,443,100		9.3	5.1	9.07	13,907	117.72	36,853,780	35,044,200	0.439	
M10 1998	83,023,300		9.3	5.1	9.04	13,907	113.15	37,535,030	35,986,800	0.445	
M11 1998	84,714,600		9.3	5.1	8.74	13,898	114.29	38,626,950	35,948,500	0.444	
M12 1998	87,395,600		9.3	5.1	8.56	13,894	115.37	40,220,840	36,885,340	0.497	
M1 1999	87,378,500		9.2	4.0	9.08	13,885	117.23	40,233,590	38,874,500	0.453	
M2 1999	91,430,200		9.2	4.0	8.71	13,880	121.65	40,688,400	40,208,100	0.483	
M3 1999	92,640,900		9.0	4.2	8.88	13,901	122.93	41,760,660	37,958,000	0.544	

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Table A5.1 continued

Month	National currency		Percent per annum			National currency per \$				
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d
M4 1999	96,096,100		9.1	4.1	6.49	13,903	121.65	5,828,450	37,590,200	0.552
M5 1999	98,336,600		8.9	4.3	4.61	13,910	121.49	6,524,200	38,588,800	0.551
M6 1999	99,086,400		8.6	4.6	4.27	13,918	121.53	85,027,540	37,318,700	0.567
M7 1999	na		9.0	4.2	4.37	13,944	120.06	na	na	na
M8 1999	na		8.2	3.8	2.80	13,959	116.67	na	na	na
M9 1999	107,305,000		5.0	7.0	1.18	13,978	114.45	86,778,070	42,261,200	0.510
M10 1999	na		3.6	8.4	-0.17	14,000	111.34	na	na	na
M11 1999	na		5.0	7.0	0.17	14,010	112.13	na	na	na
M12 1999	145,470,000		3.9	8.1	-0.17	14,030	112.29	119,088,400	58,135,100	0.511
M1 2000	na		3.6	7.2	-1.39	14,041	113.00	na	na	na
M2 2000	na		3.6	7.2	-1.68	14,058	116.05	na	na	na
M3 2000	160,759,000		3.6	7.2	-2.10	14,061	113.90	129,144,400	58,144,100	0.666
M4 2000	na		3.6	7.2	-2.19	14,063	113.52	na	na	na
M5 2000	na		3.6	7.2	-2.37	14,077	114.57	na	na	na
M6 2000	168,407,000		3.5	7.3	-2.54	14,085	111.80	141,198,200	56,947,200	0.723
M7 2000	na		3.5	7.3	-2.71	14,091	111.92	na	na	na
M8 2000	na		3.5	6.7	-2.23	14,106	112.99	na	na	na

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Table A5.1 continued

Month	National currency		Percent per annum			National currency per \$					
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d	
M9 2000	179,577,000		3.5	6.7	(1.83)	14,162	112.83	149,660,210	57,432,800	0.875	
M10 2000	na		3.7	6.5	(0.67)	14,306	113.01	na	na	na	
M11 2000	na		3.7	6.5	(0.17)	14,452	113.38	na	na	na	
M12 2000	196,994,000		4.2	6.0	(0.58)	14,511	113.26	163,965,660	72,598,500	0.844	
M1 2001	208,380,000		5.4	5.3	(0.75)	14,534	113.63	166,083,400	78,512,500	0.815	
M2 2001	209,842,000		5.2	5.6	(1.87)	14,557	113.85	169,656,000	75,552,400	0.866	
M3 2001	216,185,000		5.2	5.3	(1.48)	14,552	115.29	172,682,600	73,115,400	0.941	
M4 2001	217,303,000		5.4	4.1	(1.25)	14,557	115.91	174,644,500	72,223,100	0.954	
M5 2001	219,492,000		4.7	4.9	(0.84)	14,604	115.49	177,810,500	76,059,300	0.895	
M6 2001	226,933,000		4.8	4.2	(0.34)	14,769	115.49	181,151,700	72,241,700	1.029	
M7 2001	231,263,000		4.8	4.2	0.08	14,897	115.21	183,362,300	73,676,900	0.997	
M8 2001	233,226,000		5.4	3.6	0.00	14,979	112.21	186,836,900	77,665,100	0.933	
M9 2001	235,255,000		5.4	3.6	0.68	14,099	118.92	189,340,200	78,272,500	0.976	
M10 2001	239,741,000		5.9	3.1	0.42	15,022	113.67	192,452,000	81,899,200	0.913	
M11 2001	245,194,000		5.9	2.7	(0.25)	15,063	115.48	195,838,300	83,671,600	0.933	
M12 2001	250,846,000		5.7	2.8	0.50	15,069	118.25	199,360,900	84,746,000	0.936	
M1 2002	257,112,000		5.9	2.7	1.34	15,101	121.04	203,334,700	86,328,100	0.896	

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Table A5.1 continued

Month	National currency		Percent per annum			National currency per \$				
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d
M2 2002	256,077,000		5.9	2.7	3.16	15,151	123.09	203,989,000	92,493,800	0.812
M3 2002	256,018,000		6.0	2.5	3.18	15,242	119.62	208,391,000	89,485,400	0.837
M4 2002	260,442,000		6.4	2.1	3.70	15,214	119.13	213,418,400	89,913,700	0.853
M5 2002	264,989,000		6.4	2.1	4.13	15,243	116.12	216,948,200	89,114,900	0.889
M6 2002	263,877,000		6.4	2.9	4.30	15,303	113.81	219,307,000	86,968,000	0.917
M7 2002	268,028,000		6.5	3.0	4.30	15,303	110.98	223,829,000	87,407,000	0.930
M8 2002	268,515,000		6.8	2.7	4.47	15,329	111.92	228,720,500	87,379,800	0.907
M9 2002	269,684,000		6.8	2.7	4.11	15,339	112.57	233,755,300	86,243,400	0.916
M10 2002	274,902,000		6.8	2.7	4.63	15,357	113.59	237,715,200	88,463,600	0.886
M11 2002	278,166,000		6.8	2.7	4.61	15,376	112.90	243,501,400	91,027,400	0.821
M12 2002	284,144,000		6.8	2.6	4.08	15,396	112.23	248,644,000	94,428,500	0.749
M1 2003	300,916,000		6.8	2.7	3.79	15,433	110.42	247,830,400	112,746,000	0.603
M2 2003	298,314,000		6.8	2.5	3.78	15,418	111.44	255,416,100	106,771,200	0.603
M3 2003	300,781,000		7.0	2.5	3.81	15,427	110.20	263,774,100	109,832,700	0.538
M4 2003	305,179,000		7.0	2.4	3.81	15,452	111.42	271,899,800	117,376,600	0.411
M5 2003	313,123,000		7.0	2.5	3.48	15,478	109.07	280,326,500	124,420,400	0.359
M6 2003	324,527,000		7.1	2.3	3.07	15,486	108.92	291,240,900	124,809,000	0.352

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Table A5.1 continued

Month	National currency	Percent per annum			National currency per \$				
	Money plus quasi-money (M2)	Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d
M7 2003	326,319,000	7.1	2.4	2.91	15,510	109.16	296,037,100	118,101,100	0.408
M8 2003	329,946,000	6.6	3.0	2.67	15,519	109.10	300,353,900	111,901,200	0.442
M9 2003	341,303,000	6.1	3.5	2.58	15,537	107.89	306,556,900	113,504,300	0.454
M10 2003	350,633,000	6.0	3.5	2.09	15,573	104.74	314,139,700	116,233,600	0.442
M11 2003	358,800,000	6.0	3.6	2.41	15,639	104.63	321,287,900	113,607,800	0.441
M12 2003	378,060,000	6.0	3.6	2.88	15,643	103.51	330,906,100	121,362,100	0.421
M1 2004	392,867,000	6.0	3.6	3.25	15,670	102.95	327,581,900	134,882,100	0.377
M2 2004	392,122,000	6.0	3.6	4.03	15,728	104.56	342,551,800	123,410,400	0.403
M3 2004	404,093,000	6.0	3.6	5.62	15,754	105.97	364,035,500	116,269,300	0.450
M4 2004	410,770,000	6.0	3.6	6.17	15,727	106.27	374,791,900	115,367,500	0.421
M5 2004	417,129,000	6.0	3.6	7.19	15,746	107.59	383,834,100	120,329,100	0.421
M6 2004	420,263,000	6.0	3.6	8.15	15,732	107.54	397,479,000	121,193,000	0.409
M7 2004	427,403,000	6.0	3.6	9.12	15,735	107.38	406,700,300	122,760,200	0.409
M8 2004	438,363,000	6.2	3.4	9.91	15,762	107.52	415,595,200	123,725,900	0.429
M9 2004	445,393,000	6.5	3.4	10.14	15,755	107.32	422,501,500	120,557,100	0.442
M10 2004	456,961,000	6.5	3.5	10.32	15,755	105.29	434,575,200	121,452,800	0.451
M11 2004	472,446,000	na	na	9.95	na	103.71	449,260,200	121,732,700	0.448

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Table A5.1 continued

Month	National currency		Percent per annum			National currency per \$				
	Money plus quasi-money (M2)		Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d
M12 2004	495,447,000		6.5	3.7	9.71	15,776	103.54	437,352,600	140,743,300	0.420
M1 2005	503,131,000		6.5	3.7	9.60	15,817	105.07	465,354,900	152,411,400	0.304
M2 2005	510,205,000		6.5	4.6	9.10	15,794	106.98	473,242,400	152,626,100	0.336
M3 2005	517,024,000		6.5	4.6	8.28	15,815	104.97	495,017,300	139,805,100	0.374
M4 2005	526,885,000		7.2	3.6	8.39	15,817	106.15	509,539,300	145,395,100	0.338
M5 2005	533,128,000		7.2	3.6	8.02	15,844	107.12	521,377,500	138,446,600	0.370
M6 2005	544,601,000		7.2	3.8	7.68	15,865	108.73	532,471,300	134,991,000	0.384
M7 2005	548,352,000		7.2	3.8	7.49	15,872	109.78	543,581,600	134,711,300	0.370
M8 2005	566,701,000		7.2	3.8	7.30	15,877	108.50	556,542,000	142,160,600	0.357
M9 2005	577,793,000		7.5	3.7	7.78	15,885	109.11	569,487,600	145,263,700	0.349
M10 2005	588,309,000		7.5	3.7	8.21	15,905	110.78	582,141,400	145,631,200	0.369
M11 2005	604,791,000		7.5	3.9	8.40	15,908	113.91	589,646,800	152,952,600	0.454
M12 2005	648,574,000		7.5	3.9	8.85	15,908	114.40	608,896,700	174,140,000	0.424
M1 2006	677,388,000		7.5	3.7	8.97	15,924	113.01	602,725,100	208,622,400	0.326
M2 2006	675,823,000		7.7	3.5	8.54	15,924	115.29	609,512,100	177,085,700	0.399
M3 2006	699,988,000		7.7	3.5	7.92	15,914	113.78	627,989,400	188,405,900	0.393
M4 2006	na		na	na	na	na	111.32	na	na	na

Continued on next page

Table A5.1 continued

Month	National currency	Percent per annum			National currency per \$					
	Money plus quasi-money (M2)	Deposit rate	Deposit lending spread	Inflation rate	Nominal exchange rate	Real exchange rate ^a	Credit volume ^b	Base money ^c	Dollarization ratio ^d	
M5 2006	na	na	na	na	na	107.99	na	na	na	
M6 2006	na	na	na	na	na	109.44	na	na	na	
M7 2006	na	na	na	na	na	109.02	na	na	na	
M8 2006	na	na	na	na	na	108.99	na	na	na	
M9 2006	na	na	na	na	na	110.54	na	na	na	
M10 2006	na	na	na	na	na	111.68	na	na	na	
M11 2006	na	na	na	na	na	111.42	na	na	na	
M12 2006	na	na	na	na	na	na	na	na	na	
M1 2007	na	na	na	na	na	na	na	na	na	

M = month in a year, na = no data available, () = negative value, \$ = US dollar.

^aReal effective exchange rate. ^bSum of all claims by banks. ^cCurrency outside banks plus bank reserves. ^dForeign assets/sum of all claims by banks.

Source: International Monetary Fund. Various years. *International Financial Statistics*.

Table A5.2: Viet Nam: Monetary Statistics

Year	Base money (deflated by nominal GDP) ^a	M2 (deflated by nominal GDP)	Credit volume/GDP ^b	Exchange reserves/GDP
1995	0.117	0.198	0.099	na
1996	0.117	0.209	0.095	na
1997	0.110	0.226	0.111	6.9
1998	0.102	0.242	0.111	6.5
1999	0.145	0.364	0.298	9.5
2000	0.164	0.446	0.371	9.9
2001	0.176	0.521	0.414	11.1
2002	0.176	0.530	0.464	10.4
2003	0.198	0.616	0.539	14.3
2004	0.197	0.695	0.613	13.7
2005	0.208	0.774	0.727	15.7

GDP = gross domestic product, M2 = broad money, na = no data available.

^aBase money = Currency outside banks plus bank reserves. ^bCredit volume = Sum of claims by banks.

Source: International Monetary Fund. Various years. *International Financial Statistics*.

Table A5.3: Viet Nam: Macroeconomic Indicators

Year	Current account balance as % of GDP (percent)	Overall balance as % of GDP (percent)	GDP per capita, current prices (dong)	GDP at constant prices, % change (percent)	Unemployment rate (percent)	Consumer price index (country) (2000 = 100)	Overall budgetary surplus/deficit, central government as % of GDP (percent)	Expenditure, central government, total as % of GDP (percent)
1995	na	na	3,179,254	9.5	na	83.5	(0.8)	24.1
1996	(8.2)	na	3,718,538	9.3	5.9	88.3	(0.7)	23.6
1997	(5.7)	0.5	4,220,644	8.2	6.0	91.1	(0.8)	22.0
1998	(3.9)	(0.8)	4,784,438	5.8	6.9	97.7	na	na
1999	4.1	2.7	5,221,400	4.8	6.7	101.7	na	na
2000	3.6	(1.0)	5,688,719	6.8	6.4	100.0	na	na
2001	2.1	0.1	6,116,669	6.9	6.3	99.6	(3.2)	na
2002	(1.7)	1.0	6,719,923	7.1	6.0	103.4	(2.8)	na
2003	(4.9)	5.4	7,582,507	7.3	5.8	106.6	(2.6)	na
2004	(2.0)	1.9	8,719,885	7.8	5.6	114.9	(2.2)	na
2005	0.4	4.0	10,080,101	8.4	5.5	124.4	(1.9)	na

GDP = gross domestic product.

Source: World Bank. Various years. *World Development Indicators*.

Table A5.4: Viet Nam: Exports and Imports (\$)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Exports											
World	5,621.4	7,463.2	9,484.3	9,307.0	11,541.4	14,482.5	15,019.7	16,704.7	20,143.8	25,653.1	30,957.3
Japan	1,461.0	1,546.4	1,675.4	1,514.5	1,786.2	2,575.2	2,509.8	2,437.0	2,908.6	3,506.9	4,122.1
Brunei Darussalam	0.0	0.1	0.1	0.3	0.5	2.1	1.5	1.4	0.5	0.7	0.8
Cambodia	94.6	99.0	108.9	75.2	90.2	141.6	146.0	178.4	267.3	153.4	81.9
PRC	361.9	340.2	474.1	440.1	746.4	1,536.4	1,417.4	1,518.3	1,883.1	2,321.7	2,317.6
Indonesia	53.8	45.7	47.6	317.2	420.0	248.9	266.2	334.4	467.2	378.0	399.1
Korea, Republic of	235.3	558.3	417.0	229.1	319.9	352.6	406.1	468.7	492.1	612.1	631.0
Lao PDR	20.6	24.9	30.4	73.4	165.3	70.7	64.4	64.7	51.8	68.0	77.7
Malaysia	110.6	77.7	141.7	115.2	256.5	413.9	337.2	347.8	453.8	527.4	928.9
Myanmar	0.1	0.7	1.9	1.5	1.5	5.7	5.4	7.1	12.5	16.5	18.8
Philippines	41.5	132.0	240.6	401.1	393.2	478.4	368.4	315.2	340.0	401.0	707.7
Singapore	689.8	1,290.0	1,215.9	740.9	876.4	885.9	1,043.7	961.1	1,024.7	1,228.7	1,648.7
Thailand	101.3	107.4	235.3	295.4	312.7	372.3	322.8	227.3	335.4	398.8	810.0
ASEAN + 3	3,170.4	4,222.5	4,589.0	4,203.9	5,368.8	7,083.6	6,888.8	6,861.3	8,237.2	9,613.1	11,744.3
Rest of World	2,451.0	3,240.8	4,895.3	5,103.1	6,172.6	7,398.9	8,130.9	9,843.4	11,906.6	16,040.0	19,213.0
Imports											
World	8,358.5	11,284.9	11,875.1	11,309.8	11,742.1	15,636.5	16,217.1	19,744.8	25,255.1	33,160.8	37,979.8
Japan	915.7	1,260.3	1,509.3	1,481.7	1,618.3	2,301.0	2,183.1	2,504.7	2,982.1	3,499.6	3,949.3
Brunei Darussalam	0.0	0.2	0.2	0.9	0.0	0.0	0.0	0.1	0.1	0.1	0.1

Continued on next page

Table A5.4 continued

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cambodia	23.6	17.9	24.7	42.1	12.7	37.3	22.8	65.4	94.7	46.7	19.9
PRC	329.7	329.0	404.4	515.0	673.1	1,401.1	1,606.2	2,158.8	3,138.6	4,557.2	6,203.3
Indonesia	190.0	149.0	200.0	256.5	286.8	345.5	289.1	362.7	551.5	661.1	746.3
Korea, Republic of	1,253.6	1,781.4	1,564.5	1,420.9	1,485.8	1,753.6	1,886.8	2,279.6	2,625.4	3,581.1	3,774.8
Lao PDR	84.0	68.1	52.7	131.4	197.4	105.7	68.0	62.6	60.7	79.8	91.2
Malaysia	190.5	200.3	226.8	249.0	305.0	388.9	464.4	683.3	925.0	1,254.5	1,275.9
Myanmar	0.0	0.6	1.4	1.5	1.2	3.6	4.0	5.9	18.3	24.1	27.5
Philippines	24.7	28.9	36.3	67.7	47.5	62.9	53.6	100.6	140.9	749.3	342.7
Singapore	1,425.2	2,032.6	2,128.0	1,964.0	1,878.5	2,694.3	2,478.3	2,533.5	2,875.8	3,496.7	4,862.6
Thailand	439.8	494.5	575.2	673.5	561.8	810.9	792.3	955.2	1,282.2	2,060.4	2,588.0
ASEAN+3	4,876.6	6,362.8	6,723.3	6,804.0	7,068.1	9,904.7	9,848.6	11,712.4	14,695.3	20,010.6	23,881.4
Rest of World	3,481.9	4,922.1	5,151.8	4,505.8	4,674.0	5,731.8	6,368.6	8,032.5	10,559.8	13,150.2	14,098.4

ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China (PRC), Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic, \$ = US dollar.

Source: International Monetary Fund. *Direction of Trade Statistics* CD-ROM.

Table A5.5: ASEAN Countries: Selected Indicators

Country	Total land area ('000 km ²)	Total population ^b ('000 km ²)	Population density ^b (persons per km ²)	Annual population growth ^b (percent)	GDP ^c at current prices (\$ million)	Gross domestic product per capita at current prices (\$)	Merchandise trade ^e (\$ million)		FDI inflow ^f (\$ million)		
							Exports	Imports			
Brunei Darussalam	5,765	383	66	3.5	11,845.7	30,928.8	25,940.1	5,768.7	1,028.7	6,797.4	288.5
Cambodia	181,035	13,996	77	2.5	6,105.2	436.2	2,406.4	2,602.4	2,147.0	4,749.4	381.2
Indonesia	1,890,754	222,051	117	1.3	364,258.8	1,640.4	4,930.1	103,964.0	78,392.7	182,356.8	6,107.3
Lao PDR	236,800	6,135	26	2.5	3,527.4	574.9	2,280.4	254.7	423.6	678.3	27.7
Malaysia	330,257	26,686	81	2.1	156,924.2	5,880.4	12,568.5	161,248.7	131,720.1	292,968.8	3,964.8
Myanmar ^g	676,577	57,289	85	2.3	11,951.0	208.6	1,589.1	3,514.8	2,115.5	5,630.2	71.8
Philippines	300,001	86,910	290	2.0	117,457.1	1,351.5	5,116.4	47,037.0	51,523.0	98,560.0	1,132.5
Singapore	699	4,484	6,433	3.3	132,273.4	29,499.6	29,065.6	271,601.0	238,503.0	510,104.0	20,080.5
Thailand	513,254	65,233	127	0.7	206,645.1	3,167.8	9,492.4	129,948.5	126,848.5	256,797.0	4,007.8
Viet Nam	330,363	84,222	255	1.3	60,965.2	723.9	3,600.1	39,605.0	44,410.0	84,015.0	2,020.8
ASEAN	4,465,505	567,390	127	1.5	1,071,953.2	1,889.3	5,421.7	765,544.8	677,112.1	1,442,656.9	38,082.9

ASEAN = Association of Southeast Asian Nations, FDI = foreign direct investment, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, km² = square kilometer, PPP = purchasing power parity, \$ = US dollar.

^aMyanmar GDP is based on fiscal year from April to March of the following year, and computed using derived foreign exchange rate based on the International Monetary Fund's (IMF) *World Economic Outlook (WEO)* data. ^bRefers to or based on mid-year total population as published in the ASEAN Statistical Yearbook 2006. ^cGDP figures for Cambodia, the Lao PDR, and Myanmar are derived using growth estimates from the IMF WEO database September 2006; Brunei Darussalam data is estimated using foreign exchange rate for first to third quarters only. ^dRecomputed based on IMF WEO estimates and actual country data. ^eAll figures are preliminary as of 12 April 2007; figures for Brunei Darussalam, Cambodia, and the Lao PDR are first to third-quarters only. ^fRefers to net inflow of FDI as measured in the balance of payments; also includes reinvested earnings.

Source: ASEAN Finance and Macroeconomic Surveillance Unit Database and ASEAN Statistical Yearbook 2006 (compiled/computed from data submission and/or websites of ASEAN member countries' national statistical offices, central banks, and other relevant government agencies); IMF's *World Economic Outlook* Database as of September 2006; and, Trade data for Brunei Darussalam, Cambodia, the Lao PDR, and Myanmar are from country submission through National ASEAN Free Trade Area (NAFTA) Unit; for Indonesia from Bank Indonesia (www.bi.go.id); for Malaysia from the Malaysia Trade Development Corporation (www.matrade.gov.my/foreignbuyer/Msiatradestat.htm); for the Philippines from the National Statistics Office (www.census.gov.ph); for Singapore from the Department of Statistics (www.singstat.gov.sg); for Thailand from the Bank of Thailand (www.bot.or.th); and for Viet Nam from the General statistics Office (www.gso.gov.vn).

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Measuring Dollarization

Eric Girardin

The multiple-currency phenomenon (MCP) arises when residents of a country hold a substantial share of their monetary assets in foreign currency. This has been a major feature of the economies of Cambodia, the Lao People’s Democratic Republic (Lao PDR), and Viet Nam, or the CLV countries, since at least the early 1990s. A number of different currencies can be involved, with the effect that regional currencies circulate alongside the dollar and the national currency, as has been the case in the Lao PDR.

When foreign currency holdings are motivated by the willingness to carry out transactions, the MCP corresponds to currency substitution. In that case, residents hold foreign currency banknotes. By contrast, the holding of foreign currency time and savings deposits with domestic banks fulfills only the store of value function of money. The latter is generally characterized as “financial dollarization,” which is a generic concept without any direct relationship with the holding of the dollar. In some countries at earlier stages of financial development, and/or with a recent history of high inflation, holding foreign currency in cash can also be partly motivated by the store of value function of money.

This chapter aims at systematically measuring the level of the MCP for the CLV countries, and examining its impact on financial development or stability as well as on monetary policy.

Foreign currency cash (FCC)—the physical component of the MCP—is, as a rule, not recorded in national or multilateral estimates of monetary aggregates. In practice, such a cash component can represent from 50% to 90% of narrow fiduciary money held or up to 80% of total money in circulation, including bank deposits. In such cases, it is almost impossible to deal with monetary policy issues without including an estimate of FCC. Accordingly, a major effort has to be put into the quantification of currency substitution. As argued in the thorough survey by Krueger and Ha (1996, p. 61), “estimates of cocirculation, even if they are fairly rough, are needed for balance of payments [BOP] and monetary policy purposes and to accurately assess national monetary and financial conditions. At a

minimum, authorities need a qualitative understanding of the approximate magnitude and economic uses of the cocirculating currency.”

However, given that data on FCC are not readily available, existing empirical work relies, with only a few exceptions, on the study of currency deposit data (Levy-Yeyati 2006) to try to quantify the whole MCP. In other words, financial dollarization is often mixed up with currency substitution.

This chapter endeavors to fill a gap in the empirical study of the MCP in the case of the CLV countries. On the basis of comparable data published by multilateral institutions, we will provide consistent and comparable time series measures of currency substitution. Mismeasurement problems faced for some of the data used must be kept in mind. We will address them, but they should not lead researchers to refrain from any quantification. Finally, we will consider the positive implications of the MCP for financial deepening and the negative ones for monetary policy.

We will propose a complete measure of the MCP for the CLV countries, including a consistent direct measurement of foreign currency in cash circulation. By using a direct method, we will put the emphasis on the origin of the foreign currencies circulating domestically through an analysis of BOP flows. This amounts to examining the “supply” side of the MCP. In all cases, we do not attempt to measure the distribution of the circulation among different foreign currencies.

The implications of the MCP are also examined. We first look at the consequences in terms of financial deepening. FCC holdings and deposits have enabled two of the CLV countries to reach similar levels of financial development, when a measure based on domestic currency money holdings shows wide divergences in such levels. We then examine the implications for monetary policy of the movements in the velocity of money, as well as the stability of money multipliers. Finally, we present the main results and conclusions.

6.1 Measuring the Multiple-currency Phenomenon

The extent of the MCP varies quite remarkably between the CLV countries, both in the currency substitution component and in the financial dollarization share.

6.1.1 Currency Substitution

While currency substitution was quite a popular subject of study from the 1970s through the 1990s (for a survey, see Giovannini and Turtelboom

[1994]), mainstream research has recently abandoned it.¹ Statistical work on currency substitution mostly focuses on Latin American countries, and relies on the dollar and monetary instruments reports (Porter and Judson 1996), which record all outflows of dollars in excess of \$10,000. This is done for Argentina (Feige et al. 2002) and for Bolivia (Fernandez Telleria 2005). However, such data are not available for CLV. Among alternative methods for measuring the extent of currency substitution, we favor a direct approach that relies on careful accounting of monetary stocks and BOP flows (Krueger and Ha 1996).

A number of descriptive studies, often reported in International Monetary Fund (IMF) country staff reports, emphasize that in many developing countries the MCP is supply- and externally driven. Indeed, transfers from abroad can be a recurrent and very sizable source of foreign currencies for the domestic private sector. This is particularly the case for the CLV countries (Watanabe 2006). To the extent that BOP data are available for a long enough sample (Box 6.1 data sources), cumulating net transfers from abroad² and converting them into domestic currency (CUMTRANS) thus gives a reasonably good proxy for the stock of foreign currencies circulating in a given country, either as bank deposits or as cash holdings. Since data on deposits with banks in foreign currencies (FXDEP) are generally available and reported in the Monetary Survey (IMF *International Financial Statistics*), it becomes straightforward to obtain a proxy for FCC as follows:

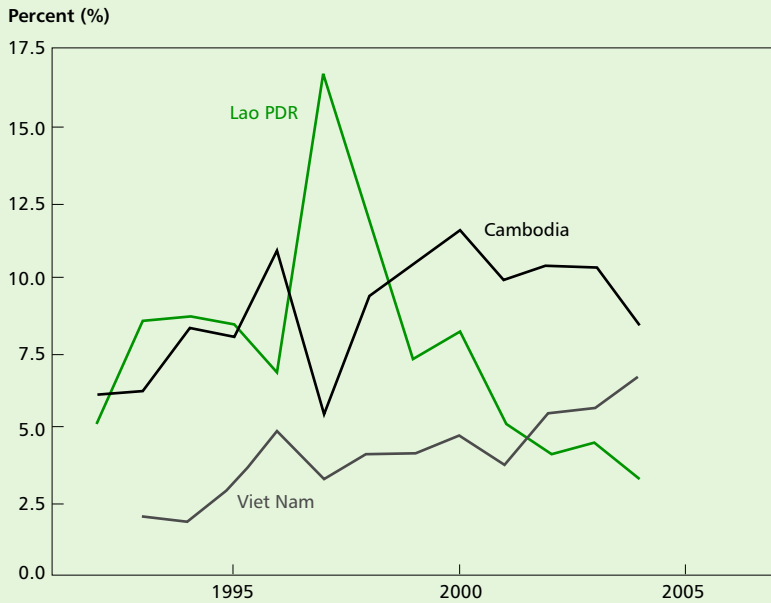
$$\text{FCC} = \text{CUMTRANS} - \text{FXDEP} \quad (1)$$

¹Interest in the holding of foreign currency in cash form arose in the academic literature in the 1990s, particularly due to the Latin American experience. Attempts were made to try to model such holdings on the basis of analyses of network externalities and switching costs provided by Farrell and Saloner (1986), as well as Dowd and Greenaway (1993). This was considered in an operational framework by, for example, Feige et al. (2002), leading to the specification of a reduced-form demand function for foreign currency cash plus deposit holdings. However, such an approach is unable to discriminate between the determinants of currency substitution and asset dollarization. Most recent work has focused on deposit (Hauskrecht and Hai 2004 for Viet Nam), or financial, dollarization (Levy-Yeyati 2006). However, for many developing countries, and particularly among CLV countries, foreign cash holdings are a major and pressing issue. If, say, such foreign cash holdings represent more than four-fifths of extended broad money (including foreign cash and deposits), it becomes clear that mainstream research has gone astray, because constructing a correct measure of foreign cash holdings would seem to be the most pressing issue.

²This assumes that private transfers are the bulk of transfers. This assumption is mostly right in all CLV countries. Alternatively, as in Cambodia in the early 1990s, this can represent public transfers which are spent directly in the country, for example, by the peacekeeping force.

Box 6.1: Sources of Data for Cambodia, the Lao People's Democratic Republic, and Viet Nam

- Bank reserves with the central bank = reserve money minus currency outside banks. International Monetary Fund (IMF). 2006. *International Financial Statistics*, CD-ROM. November.
- Errors and omissions, balance of payments = World Bank. 2006. *World Development Indicators*, CD-ROM.
- Foreign currency deposits = IMF. 2006. *International Financial Statistics*, CD-ROM; and IMF. 1998–2006. Country surveys and statistical tables, Cambodia, the Lao PDR, and Viet Nam. Various issues.
- Gross domestic product (GDP) deflator = IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Narrow money in domestic currency = IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Nominal GDP = IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Overseas foreign currency deposits = banking statistics, Bank for International Settlements web site (www.bis.org/statistics/bankstats.htm).
- Quasi-money = IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Real GDP = IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Service receipts, balance of payments = World Bank. 2006. *World Development Indicators*, CD-ROM.
- Transfers, balance of payments = IMF. 1998–2006. Country Surveys and statistical tables, Cambodia, the Lao PDR, and Viet Nam. Various issues; and World Bank. 2006. *World Development Indicators*, CD-ROM.
- Travel receipts, balance of payments = World Bank. 2006. *World Development Indicators*, CD-ROM.
- Velocity of US broad money (M2) = National Bureau of Economic Research. Computed from M2 and nominal GDP data, macrohistory data base; and IMF. 2006. *International Financial Statistics*, CD-ROM. November.
- Workers' remittances, balance of payments = World Bank. 2006. *World Development Indicators*, CD-ROM.

Figure 6.1: CLV Countries: Share of Net Transfers to GDP (%)

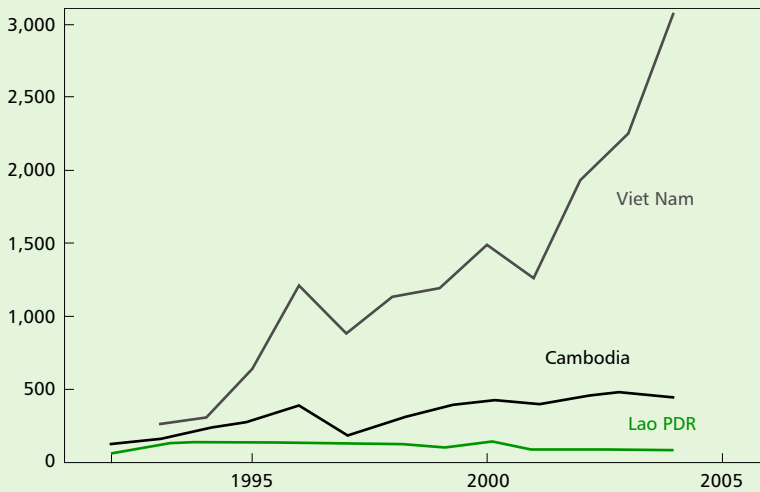
CLV = Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam; GDP = gross domestic product.
Source: Author's elaborations.

One important issue refers to the distinction between private and official transfers, and to what extent part of official transfers should be included on top of private ones in the CUMTRANS variable. We present movements in these two components of such transfers before examining developments in the resulting estimates of currency cash holdings, and considering measurement errors.

6.1.2 Transfers

In the Lao PDR, as a share of gross domestic product (GDP), transfers shot up in the second half of the 1990s, peaking at more than 17% in 1997 (Figure 6.1). The rapid depreciation of the kip over the late 1990s is partly responsible for this sharp rise in the GDP share of transfers, since both components of the ratio need to be expressed in the same currency. Indeed, expressed in dollars, net transfers did not register such an explosion (Figure 6.2). Subsequently, they fell sharply as a share of GDP.

The transfers as a share of GDP experienced similar trends in Cambodia and Viet Nam (Figure 6.1). Two features differentiate Cambodia from its neighbor: a much higher starting point, generated by the large

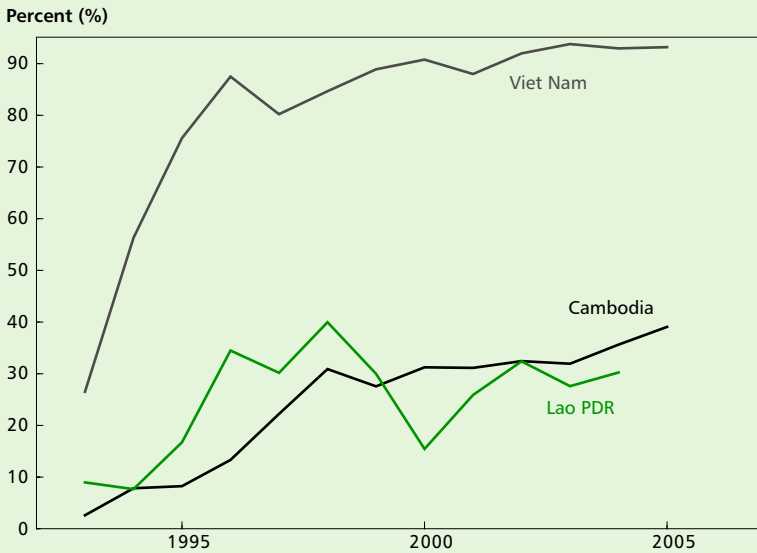
Figure 6.2: CLV Countries: Net Transfers (\$ million)

CLV = Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam; \$ = US dollar.

Source: Author's elaborations.

expenditures of the United Nations peacekeeping force (\$1.7 billion) over 1991–1993, and a sharp collapse of transfers in 1997. After 1997, this trend was a factor that also explains the rise in transfers in Viet Nam after 2001 due to a jump in remittances. In Viet Nam, the mild upward trend led over the last decade to a threefold rise in the GDP share of transfers to 7% in 2005.

Viet Nam stands apart from its two neighbors also because of the predominance of the private component of transfers, which tripled from 1993 to 1996 to reach 90% (Figure 6.3). The private share also tripled in the Lao PDR and Cambodia, but only after 1995 and from a much lower base, bringing it to only one third. In Cambodia, available data from 1993 through 1997 show that project aid represented half of total official transfers. Given that reported private transfers cannot account for all accumulated foreign currency holdings in Cambodia, we take the 50% share as a reasonable approximation of the proportion of public transfers which leak through to foreign currency holdings. Given the lack of data for the Lao PDR, we apply the same proportion.

Figure 6.3: CLV Countries : Private Transfers (% share of total transfers)

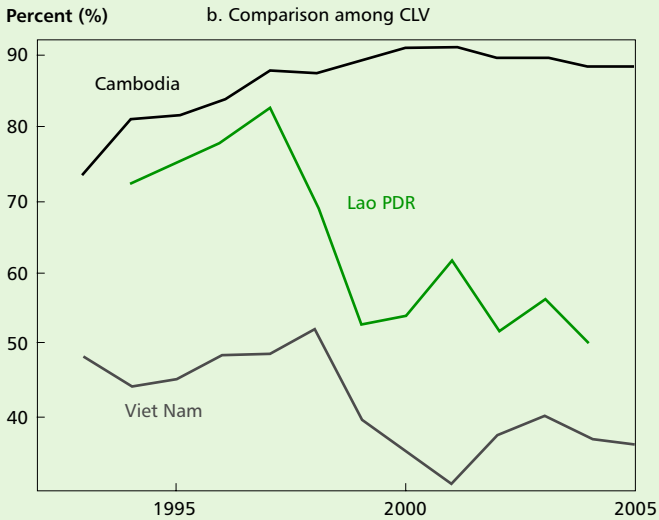
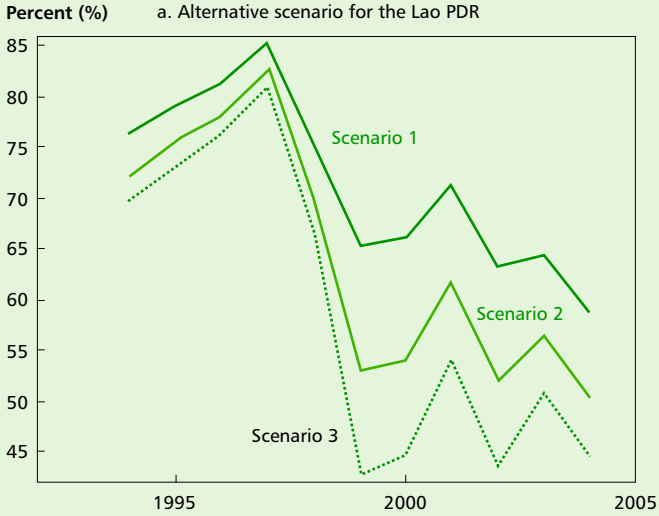
CLV = Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam.
Source: Author's elaborations.

6.1.3 Foreign Currency Cash Holdings

Based on the above assumptions, we use a different procedure for Viet Nam and its two neighbors. For Viet Nam, to obtain FCC holdings, we simply subtract foreign currency deposits (FCD) from accumulated private transfers. Given the unavailability of data for transfers in Viet Nam before the mid-1990s, we have to initialize the stock of FCC holdings. We use the estimate generally put forward by informed observers (IMF country staff report, various issues; Watanabe 2006). This leads us to set the initial level of FCC at \$2 billion in 1995 in Viet Nam.

In the cases of the Lao PDR (given the availability of data for transfers since the mid-1980s) and of Cambodia, because the sample encompasses 1992–1993—which marked the start of the accelerated accumulation of foreign currency holdings—cumulating transfers avoids having to postulate an initial value (Figure 6.4). For these two countries, FCC holdings are obtained by subtracting FCD from the sum: accumulated private transfers plus accumulated public transfers (Scenario 2). We experimented with two alternative shares for the Lao PDR: 45% (Scenario 3) and 75% (Scenario 1) of official transfers, but the former (latter) yields unreasonably low (high) levels of FCC holdings (Figure 6.4a). We therefore consider our estimate (Scenario 2) as a reasonable middle ground.

Figure 6.4: Share of Foreign Currency Cash Balances in Extended Narrow Money (%)



Lao PDR = Lao People's Democratic Republic.
 Source: Author's elaborations.

In Figure 6.4b, we plot for the CLV countries the ratio of FCC over narrow money (M1) (including FCC), thereafter FCC ratio. The estimated shares of extended M1 that we obtain for the most recent period match the available estimates of close to 90% for Cambodia, 50% for the Lao PDR, and slightly over a third for Viet Nam (see respectively on each country: de Zamaróczy and Sa [2003]; Keovongvichith [2004]; and Watanabe [2006]).

The M1 share was close in Cambodia and the Lao PDR up to 1997. A difference between the two countries emerged subsequently because the effects of the high inflation episode were reversible in the Lao PDR (as against the hysteresis hypothesis developed by Uribe [1997], and Kamin and Ericsson [2003]), which was not the case in Cambodia after the experience of the early 1990s. From a much lower base of 45% in 1995, Viet Nam paralleled the Lao PDR with the sharp reversibility of currency substitution: the FCC ratio dropping by two-fifths and one-third.

In Cambodia, in the mid-1990s, as well as in 2005, FCC balances represented two-thirds of total broad money (M2), including FCC (Figure 6.5), implying that the economy was cash dominated. By contrast, in Viet Nam, FCC only amounted to between less than one-third and two-fifths of M2. For the Lao PDR, the share was initially in between that of its neighbors, at roughly half, but fell in the late 1990s to the same level as in Viet Nam.

6.1.4 Measurement Errors

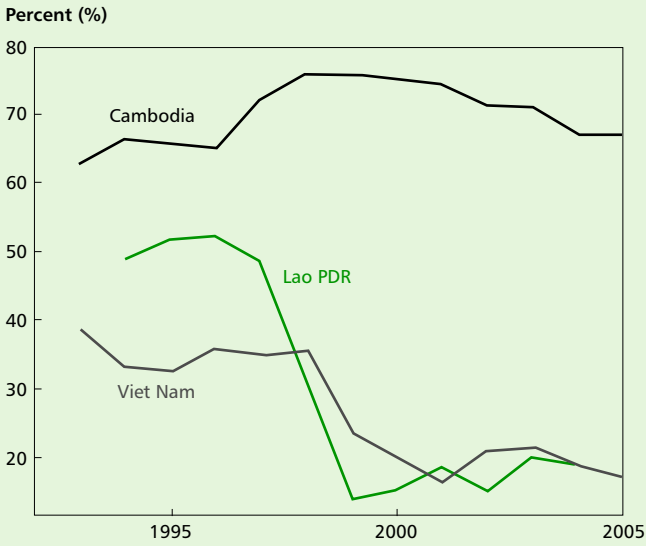
The direct approach to measuring FCC holdings is subject to measurement errors, both in the downward and upward directions, which arise from widely different sources.

One source of downward bias is the unrecorded inflows of foreign currencies linked to visits by foreign tourists and business travelers. Such net “travel” receipts in the BOP generate foreign currency holdings for residents.

A countervailing element, generating an upward bias, is the extent of capital flight, occurring for instance through under-invoicing of exports and over-invoicing of imports. It is expected, for instance in the Lao PDR, that unrecorded trade at the border with neighboring countries would contribute to inflows and outflows of foreign currencies (Menon 2007). Such (net) capital flight can be proxied through the net errors and omissions in the BOP, representing the unrecorded amount of foreign currency outflows (inflows) when negative (positive).

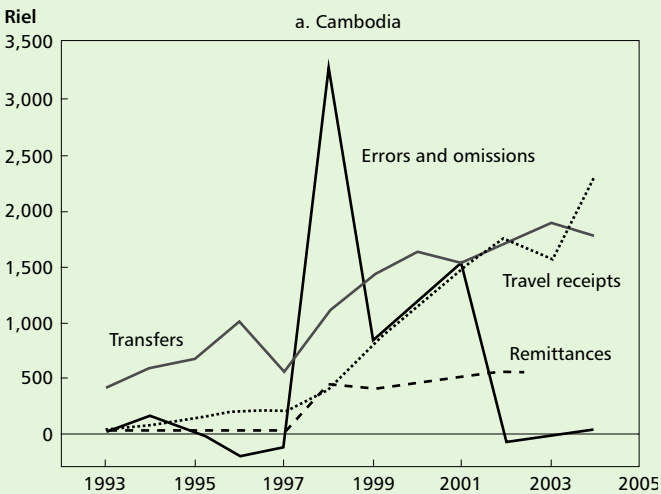
We report in Figure 6.6a, b, and c for the CLV countries, in domestic currency, net errors, and omissions, and travel receipts alongside net transfers and remittances (when available). Over 1997 through 2001, Cambodia illustrates the case when net errors and omissions correspond

Figure 6.5: Share of Foreign Currency Cash Balances in Extended Broad Money (%)



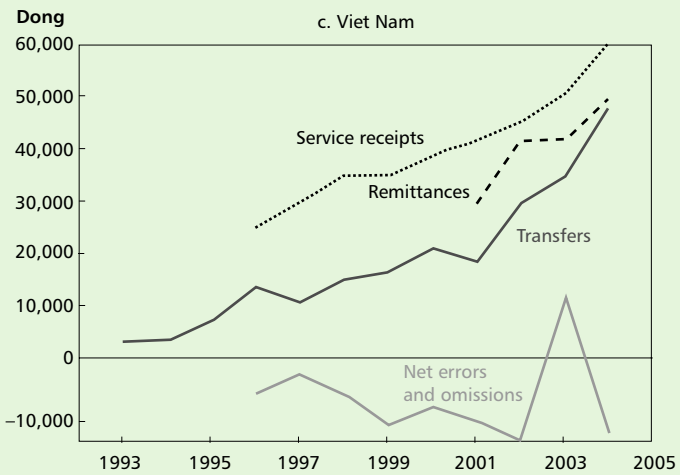
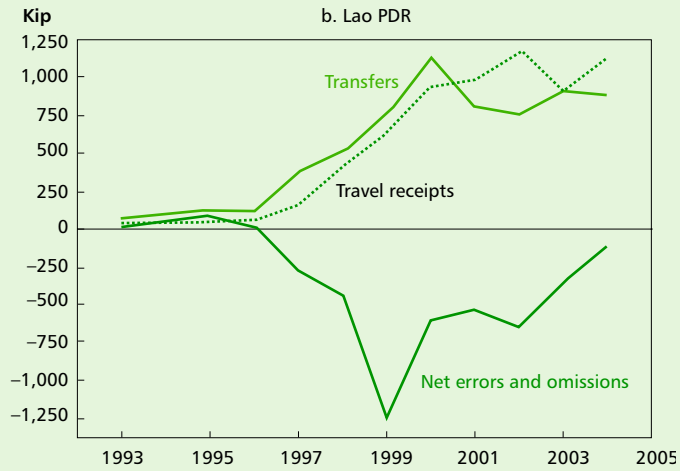
Lao PDR = Lao People's Democratic Republic.
Source: Author's elaborations.

Figure 6.6: Errors and Omissions, Transfers, and Travel Receipts (Domestic currency in millions)



Continued on next page

Figure 6.6 continued



Lao PDR = Lao People's Democratic Republic.
 Source: Author's elaborations.

to inflows of foreign currencies. By contrast, the Lao PDR and Viet Nam were characterized for most of the period by outflows recorded by net errors and omissions. Overall, for the latter two countries, travel receipts have more than compensated for outflows due to net errors and omissions. In the CLV countries, net errors and omissions are very volatile.

To examine the impact on foreign currency holdings of accounting for both (cumulated) travel receipts (CUMTRAVEL) and net errors and omissions (CUMNEO), we computed for both Cambodia and the Lao PDR an estimate of FCC holdings including CUMNEO. For Cambodia, the implied share of total M1 is implausibly equal to 100%. For the Lao PDR, this also implies implausible values while our initial estimate is much closer to the generally accepted estimates. Accordingly, in the following we will only use FCC estimated on the basis of equation (1) above, while keeping in mind that such estimates are aimed at giving orders of magnitude and are subject to some margin of error.

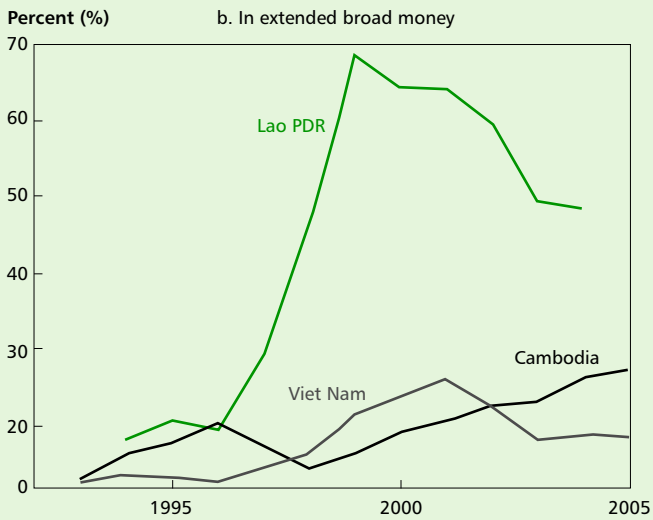
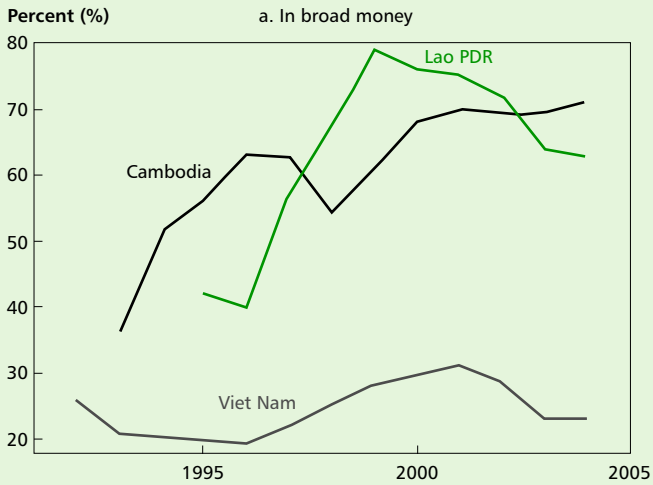
6.1.5 Financial Dollarization

The share of FCD in M2 reported in Figure 6.7 shows two alternative groups of countries. When M2 excludes FCC holdings, Cambodia is close to the Lao PDR, with a share rising over the sample from 40% to 70%, while Viet Nam's share is smaller by twice (Figure 6.7a). By contrast, when M2 includes such FCC holdings, Cambodia is close to Viet Nam, with a moderate FCD share, while the Lao PDR's share has been twice as high since 1998, but falling a little since the late 1990s (Figure 6.7b).

In Cambodia, the main component of deposits is FCD in domestic banks, which account for close to 90% of deposits, with overseas deposits accounting for the remainder (Figure 6.8a). The share of FCD fell in the late 1990s, but only at the benefit of overseas deposits, which reached over 18%. However, in the new millennium the latter reverted to an even lower level, around 7%. Domestic currency deposits have doubled compared to the mid-1990s to reach around 3% of total deposits.

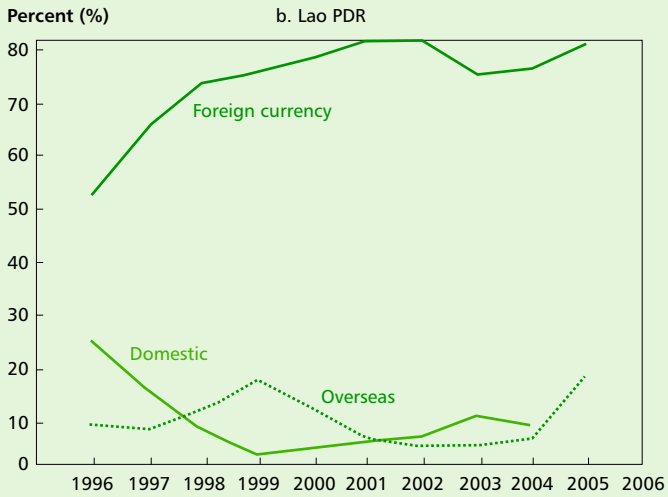
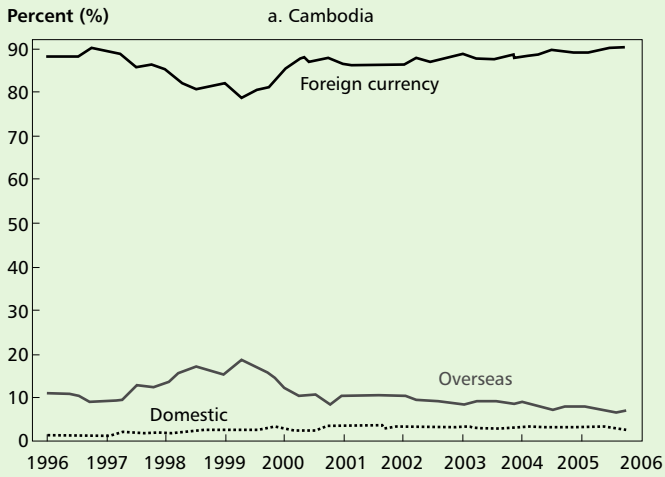
The rise in the share of FCD with Lao PDR banks was remarkable in the second half of the 1990s, with a 50% rise to three-quarters of deposits (Figure 6.8b). This occurred at the expense of domestic currency deposits, which initially had a share close to 28%, of which more than four-fifths were lost over 3 years, at the time of record inflation. Overseas deposits saw their share almost double to reach 17% in 1999. Domestic currency deposits recovered to 19% in 2003, while the share of overseas deposits was collapsing, and the share of FCD was marginally reduced (by 6 percentage points).

While overseas deposits are negligible in Viet Nam, the relative share of onshore deposits went through two scissor-like movements over the last 10 years (Figure 6.8c). Starting with a three-fifths/two-fifths split in favor

Figure 6.7: Share of Foreign Currency Deposits (%)

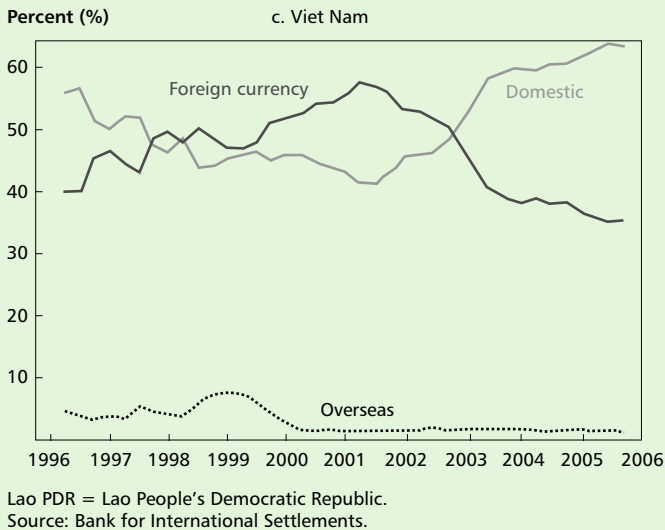
Lao PDR = Lao People's Democratic Republic.
Source: Author's elaborations.

Figure 6.8: CLV Countries: Composition of Deposits (%)



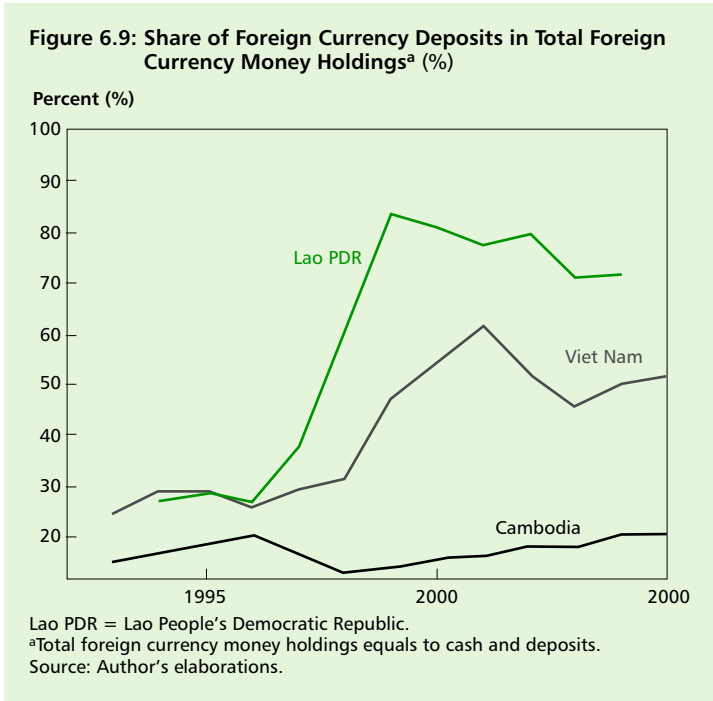
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Figure 6.8 continued



of domestic currency deposits, the ranking started to reverse in 1998, with overseas deposits temporarily grabbing up to 7.5%. By late 2001, relative positions were reversed, with three-fifths for foreign deposits, while overseas deposits were back to an even lower level. The second scissor-like movement occurred in 2002, leading eventually to a two-thirds share for domestic deposits. Deposit de-dollarization was thus successful in Viet Nam.

The bottom line of our analysis of the relative importance of the two components of the MCP in the CLV countries is provided in Figure 6.9. In Cambodia, the MCP is mainly a cash balance issue. Indeed, FCC holdings represent about 80% of total foreign currency holdings. By contrast, in Viet Nam, foreign currency holdings are on average equally divided between cash and deposits, with the two alternatively dominating over time. The Lao PDR was close to the case in Viet Nam in the mid-1990s, but durably moved away from it in the late 1990s, to give a two-thirds share to deposits.



6.2 The Implications of the Multiple-currency Phenomenon

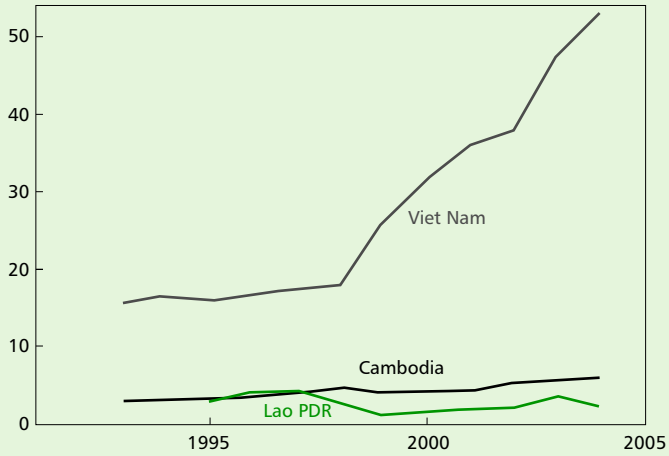
The implications of the MCP involve both the financial system (Honohan and Shi 2003; de Nicolo et al. 2003) and monetary policy (Baliño et al. 1999). Given the dominant role that banks play in the financial system of the CLV countries, the consequences of the MCP in terms of financial deepening must be considered from the point of view of the ratio of monetary assets to GDP. With respect to the implications of the MCP for monetary policy, we examine the other side of the mirror, i.e., the consequences of movements of the velocity of money and the stability of money multipliers.

6.2.1 Financial Deepening

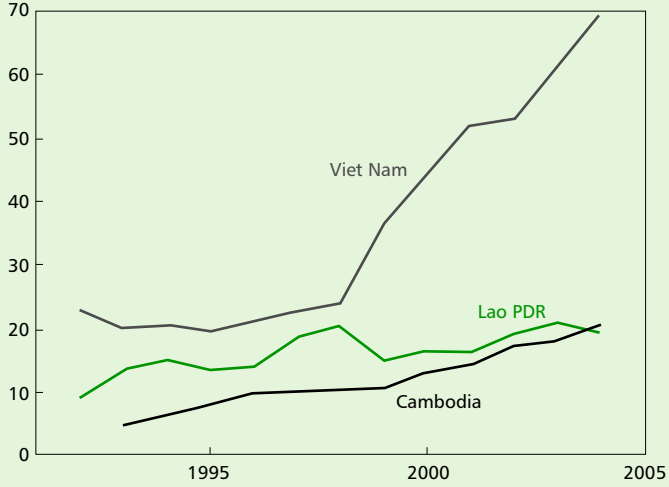
On the face of it, excluding FCD and cash holdings, financial development in Viet Nam seems far ahead of that in Cambodia and the Lao PDR. Indeed, as shown in Figure 6.10b, using the traditional measure of financial development, i.e., M2 (without FCC holdings) over GDP, Viet Nam's ratio was initially four times larger than in its two neighbors, and skyrocketed

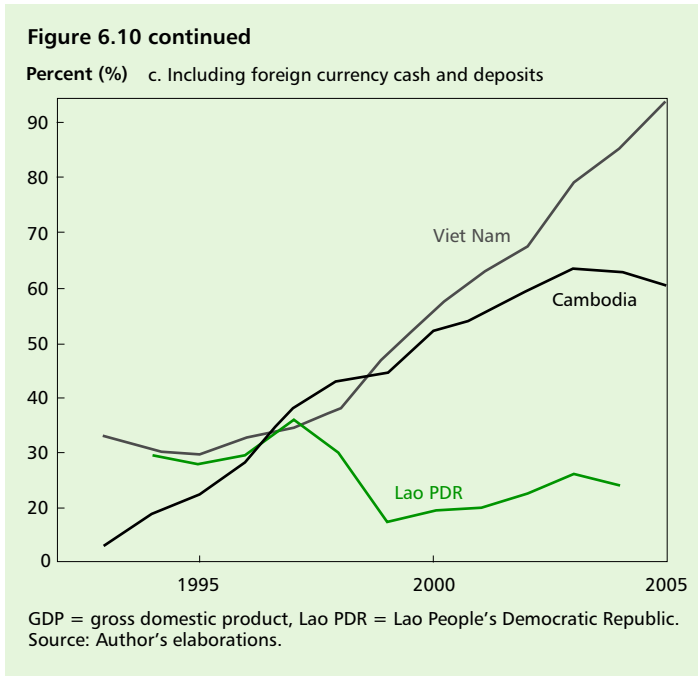
Figure 6.10: Share of Broad Money to GDP (%)

Percent (%) a. Excluding foreign currency cash and deposits



Percent (%) b. Excluding foreign currency cash

*Continued on next page*



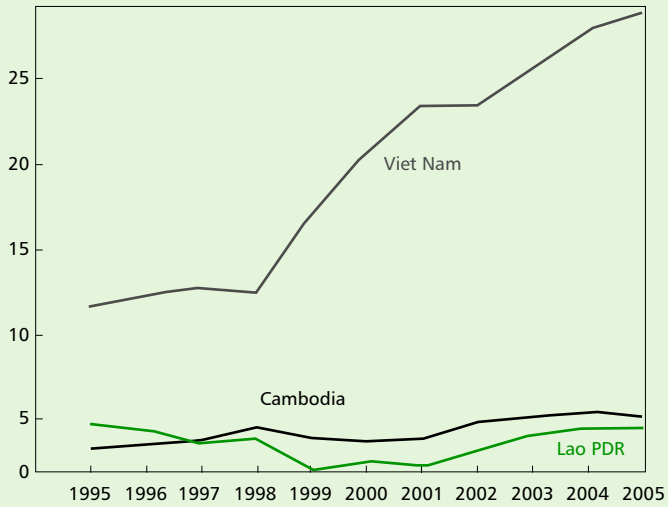
in the mid-1990s, while it stabilized in both Cambodia and the Lao PDR. Financial deepening, as measured by the ratio of M2 (including foreign deposits) to GDP reduces the gap between Viet Nam and the other two countries, especially in the first half of the sample. Subsequently, there was a continuous and fourfold rise in Viet Nam. Overall, Cambodia and the Lao PDR were characterized by a gradual and steady movement. Indeed, the latter two countries have tripled their ratio over the last 10 years to reach the level (20%) from which Viet Nam started its upward movement in 1998.

However, traditional measures are misleading. Indeed, when total M2 supply, with both foreign cash and deposit holdings, is considered (Figure 6.10c), the ratio of financial development for both Cambodia and Viet Nam, while initially equally low, remarkably increased over a 10-year period to converge to around 60% in 2001. Subsequently, progress carried on in Viet Nam, but was halted in Cambodia. The special behavior of Lao PDR ratio is noticeable, giving the impression of missing money after the late 1990s. The fast growth in nominal GDP due to a burst of inflation in 1998 and 1999—at 60% and 80%—is partly responsible for this pattern.

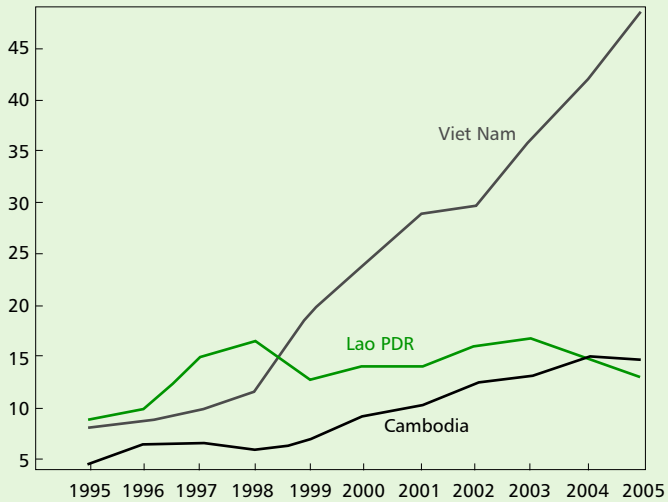
The progress in financial deepening in Viet Nam came partly from M1 (roughly one-third) and partly from quasi-money (Figure 6.11b). In contrast, in Cambodia and the Lao PDR, only FCC holdings contributed to

Figure 6.11: Share of Money to GDP (%)

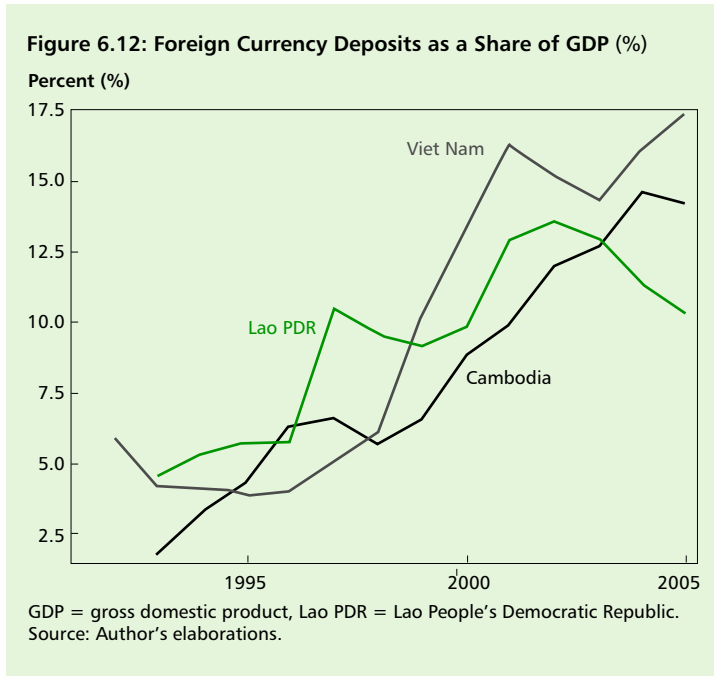
Percent (%) a. Narrow money (in domestic currency)



b. Quasi-money (in domestic and foreign currencies)



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.
Source: Author's elaborations.



financial development since domestic currency M1 stagnated in the long run as a share of GDP (Figures 6.11a). This implies that the MCP was beneficial to Cambodia and the Lao PDR in terms of financial deepening, but this cannot be detected by traditional measures of the MCP, which only account for foreign currency deposits.

As a ratio to GDP, foreign deposits have moved in a strikingly similar manner over the last decade in the CLV countries. Starting from a similarly low base in the mid-1990s of between 4% and 6%, the ratio first grew in the Lao PDR, followed by growth in Viet Nam and then Cambodia (Figure 6.12). In 2003, the CLV countries had converged within a band of 12%–14%. Subsequently, the progression continued in Cambodia and Viet Nam, but was substantially reversed in the Lao PDR.

Overall, the striking diversity inside the CLV area in terms of standard measures of financial deepening can, in fact, be explained by the differences in the extent of the MCP.

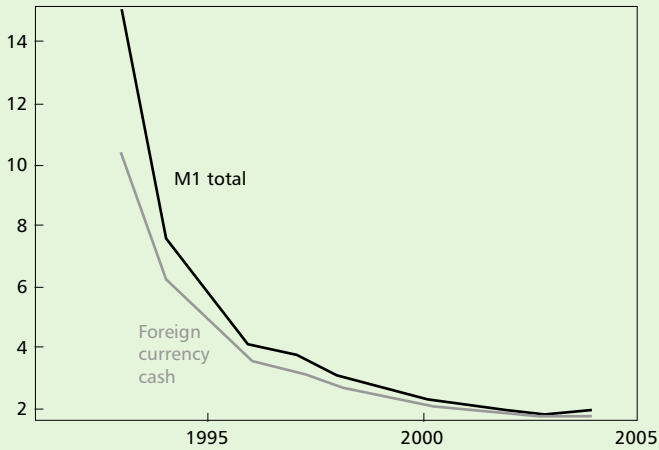
6.2.2. Monetary Policy with the Multiple-currency Phenomenon

Here we consider the way in which the velocity of circulation of money evolved in the CLV countries depending on the inclusion or exclusion of foreign currency holdings. We then examine the stability of the money multiplier.

Figure 6.13: Velocity of Narrow Money

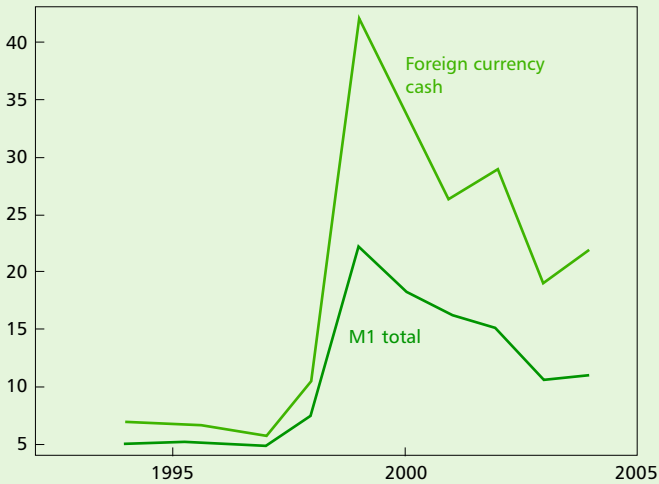
Percent (%)

a. Cambodia



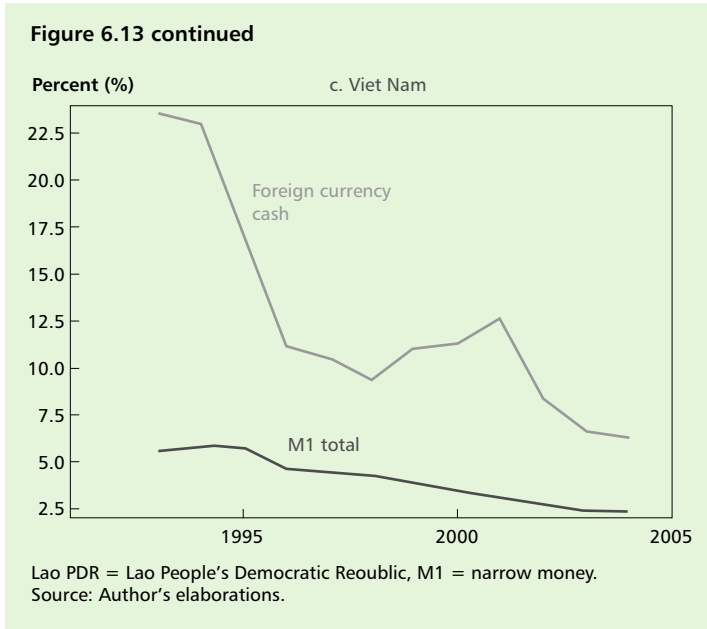
Percent (%)

b. Lao PDR

*Continued on next page*

THE MULTIPLE-CURRENCY PHENOMENON AND THE VELOCITY OF MONEY

We consider money velocity as the ratio of nominal GDP to a broad or narrow monetary aggregate. Given the overwhelming weight of foreign cash balances in M1 in both Cambodia and the Lao PDR, it is not surprising that the velocity of extended M1 mirrors that of FCC balances (Figure 6.13). Logically, the two move quite differently in Viet Nam.



By contrast, in the Lao PDR, due to macroeconomic instability in the second half of the 1990s, the velocity of M1 rose very sharply at the time of high inflation. Subsequently, the movement was partly, but not fully corrected.

In the Lao PDR, velocity of broad money including all foreign currency holdings within the country (Figure 6.14b) was at a similar level as its neighbors after the 1990s, but rose sharply at the time of high inflation, with only partial reversibility. By contrast, the level and movements of that same velocity have subsequently been quite similar in Cambodia and Viet Nam, roughly from three to one.

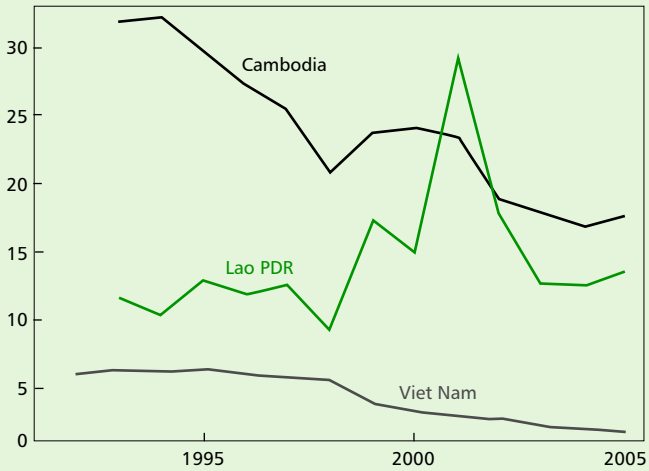
It is remarkable that the movement of velocity for Cambodia and Viet Nam over a very short period replicated the very long-run movement of M2 in the United States over 5 decades from the late 19th century to the 1930s (Figure 6.15). The overall movement of the velocity of domestic broad money mimicked for all CLV countries that of total M2, often at a much higher level (Figure 6.14a).

MONEY MULTIPLIER

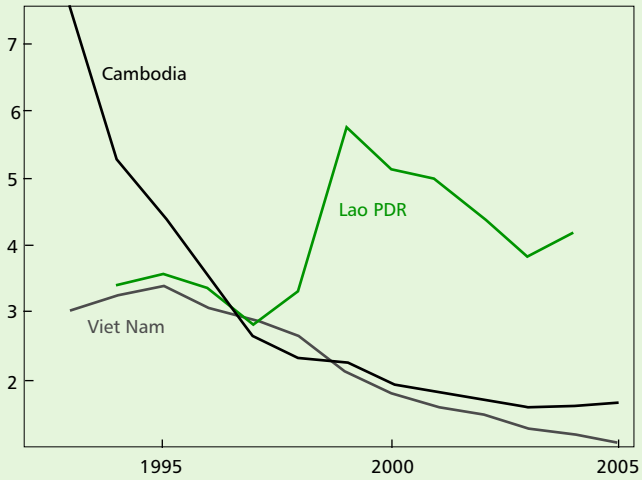
As shown in Figure 6.16, the money multiplier (narrow monetary aggregate over bank reserves with the central bank) remained very low over the whole period for domestic currency money in Cambodia and the Lao PDR, while it stayed at a high level in Viet Nam. The multiplier for the Lao

Figure 6.14: Velocity of Broad Money

Percent (%) a. Without foreign currency cash holdings



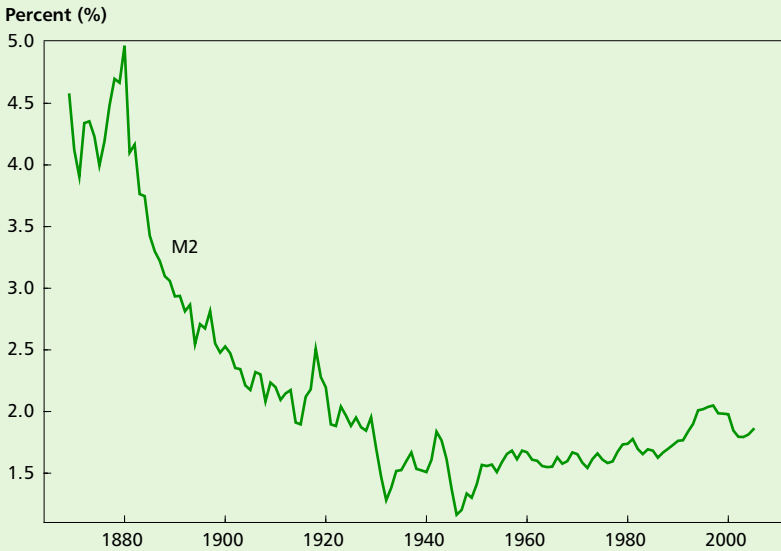
Percent (%) b. With foreign currency cash holdings



Lao PDR = Lao People's Democratic Republic.

Source: Author's elaborations.

Figure 6.15: Velocity of Broad Money: Historical Movements in the United States



M2 = broad money.

Source: Bank for International Settlements.

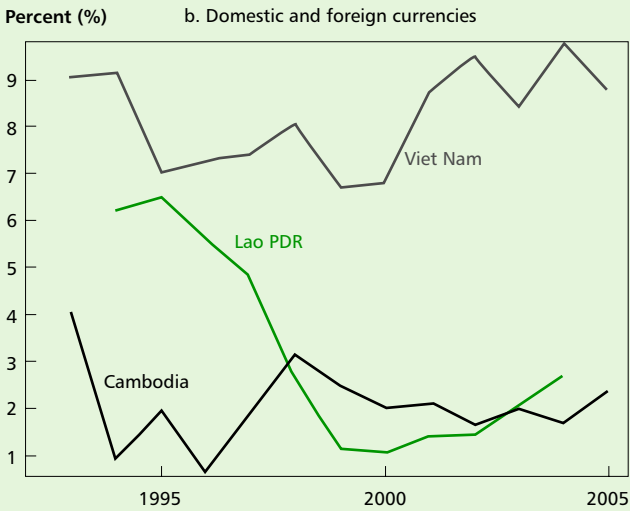
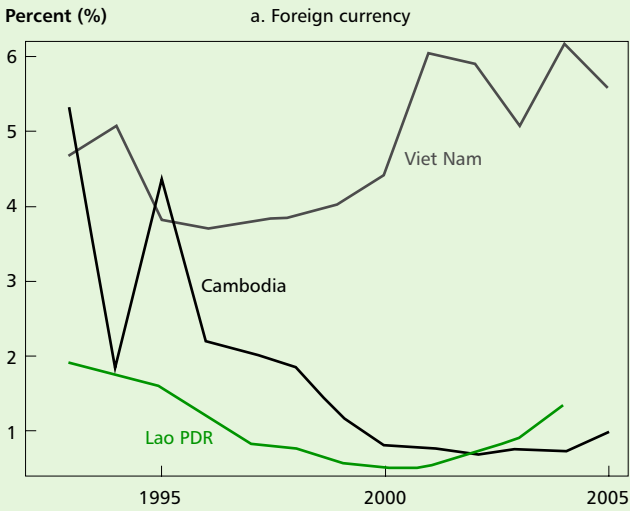
PDR was initially close to the level of Viet Nam but fell to the Cambodia's one in the late 1990s. When only foreign currency M1 is considered, the multiplier went through a similar pattern, but Cambodia and the Lao PDR swapped their relative positions.

6.4 Conclusion

This chapter has endeavored to fill a gap in the empirical study of the MCP in the case of the CLV countries. We have provided the first consistent and comparable time series measures of currency substitution. The positive implications of the MCP for financial deepening and the negative ones for monetary policy were finally considered.

Our direct measure of foreign currency in cash circulation enabled us to examine the “supply” side of the MCP. Even though measurement errors should not be ignored, we concluded that in Cambodia and Lao the PDR, FCC holdings represent respectively around 90% and 50% of narrow fiduciary money, but two-thirds of total money in circulation in Cambodia as opposed to one-fifth in the Lao PDR. In Viet Nam, FCD represented at some stage more than half of foreign currency holdings.

Figure 6.16: Money Multiplier: Narrow Money



Lao PDR = Lao People's Democratic Republic.
 Source: Author's elaborations.

“Financial dollarization” in Viet Nam thus appears in line with levels found in financially globalized emerging economies.

We considered the implications of the MCP in terms of financial deepening. Based on standard measures, such as the ratio of domestic currency money holdings over GDP, financial deepening is widely different between Viet Nam at the high end and Cambodia and the Lao PDR at the low end. However, such a picture is misleading. Indeed, when foreign currency (especially cash) holdings are included in the numerator, Cambodia and Viet Nam seem to have reached similar levels of financial development.

The implications for monetary policy were first examined with respect to the velocity of money. We noticed that, including foreign currency money holdings, the downward movement in velocity of M2 in Cambodia and Viet Nam over the last decade has replicated the long-run drop in velocity seen during financial development in advanced economies. By contrast, due to more recent macroeconomic instability compared to Cambodia, the behavior of money velocity in the Lao PDR has not yet converged to a pattern similar to its neighbors.

For the domestic component of M1, money multipliers have been decreasing for Cambodia and the Lao PDR, and increasing for Viet Nam, but with some variability in the latter country.

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CLV Countries: Common Ground in Policy Formulation

Toshiki Jinushi

This chapter summarizes the findings and discussions in the chapters on monetary and exchange rate policies in Cambodia, the Lao People’s Democratic Republic (Lao PDR), and Viet Nam, or the CLV countries. We try to find common ground among the three countries to prescribe policy recommendations and explore room for regional cooperation.

7.1 Background

7.1.1 Transitions and Reforms

All three countries are “transition economies.” They differ in precisely when each of them started to move away from a centrally planned to a market-oriented economy. The Lao PDR and Viet Nam started in 1986; Cambodia, in 1993. They had to cope with difficulties common in transition economies, such as transforming state-owned enterprises (SOEs) into viable entities. These SOEs have been losing money and extending huge nonperforming loans (NPLs) to new banks, thereby creating large fiscal deficits. In many respects, the Viet Nam economy has proceeded further than the other two, mostly agricultural, economies, but all three have much in common.

The financial sectors of these economies, to differing degrees, are not well developed. Under the old regime, a single “mono-bank” allocated funds to governments and enterprises according to central plans. During the transition, each country had to split its mono-bank into a central bank and commercial banks to create a two-tier banking system. Naturally, the financial industry lacked personnel with the necessary skills. High NPLs to SOEs led to major inefficiencies, such as high transaction costs and wide loan–deposit interest-rate spreads. Neither enterprises nor households were familiar with financial practices or decision making in a market economy. These shortcomings have discouraged investments. In addition, the public tends to have no confidence in domestic financial institutions,

so savings are not well mobilized. In sum, the financial sectors in these three economies have not contributed enough to economic development.

7.1.2 The Multiple-currency Phenomenon

The economies of all three countries are highly dollarized. Foreign currencies function as a medium of exchange, a store of value, and a unit of account, alongside the local currencies. The adoption of foreign currencies is related to the high inflation and the rapid depreciation of local currencies that resulted from the monetization of fiscal deficits during the transition or from the Asian financial crisis of 1997/98. The public and enterprises lost confidence in their domestic currency and shifted to foreign currencies, especially the dollar. This situation was exacerbated to a different degree in each country by injections of dollars into the economy during the war in Viet Nam and the United Nations (UN) peacekeeping operation, and by remittances from overseas nationals, foreign direct investment (FDI), and official development assistance.

However, the three countries differ significantly in their degree of dollarization. Viet Nam recently became less dollarized, but Cambodia is still near full dollarization. The Lao PDR is a special case, since it uses not only dollars but also Thai baht as money in the economy, in addition to the local currency, the kip.

7.1.3 Recent Macroeconomic Performance

All three countries have enjoyed macroeconomic stability since the start of the decade. The Asian financial crisis affected them only to a limited extent compared with other neighboring countries. After recovering from the crisis, these economies had low inflation, mostly in single digits, and experienced good growth, near natural rates. The balance of payments is not currently a serious concern and exchange rates are stable. Conservative fiscal and monetary policies, economic reforms, and active FDI flows seem to have contributed to this solid economic performance. Some argue that dollarization has also been a factor, because it has restricted the monetization of fiscal deficits and led to the import of the United States' (US) monetary policy stances into these countries.

7.2 Monetary Policy

Monetary policies in the CLV countries seem to have fared well recently, but all must contend with serious limitations. As explained earlier, a primitive financial sector and high dollarization—two factors common to the three countries—hamper effective policy transmission. In addition, curbs on central bank independence, problems in making policy decisions, and insufficient data

hamper policy operations. Thus, the current policy strategy of accepting partial dollarization and stabilizing the exchange rate seems to be a reasonable choice that has helped lower and stabilize inflation. For each country, however, de-dollarization is a long-term target, which will require further reforms.¹

7.2.1 Policy Framework

The CLV economies share the policy goal of price stability. But unlike the developed economies, they interpret this to mean not only domestic price stability but also exchange rate stability. These two are highly interrelated in the CLV economies, because the pass-through effects from exchange rate changes to domestic prices are quite high under dollarization. In addition, the central bank in each country is also saddled with other policy goals, such as economic growth and poverty reduction in the Lao PDR, economic development in Cambodia, and socioeconomic development in Viet Nam.

These other goals can significantly affect the conduct of monetary policy in these countries, because the central banks are hardly independent from the government. Both the Lao PDR and Viet Nam maintain a one-party political system. Lacking counterforces in the political arena, these governments find fewer obstacles in influencing monetary policy operations. In particular, the Bank of the Lao PDR Act explicitly states that all key monetary policy decisions must be approved by the government. Policy making thus tends to be lengthy and opaque.

Policy makers also have serious data limitations. On the financial side, they do have high-frequency data on exchange rates and interest rates. But for more data to be available, other markets must exist. However, even the stock markets and the government bond markets are not well developed. As a result, financial prices do not offer much information to the central banks in these countries. With regard to the economy, the situation is worse. Neither Cambodia nor the Lao PDR has quarterly data on gross domestic product (GDP), a monthly index of industrial production, monthly unemployment rates, and other important economic indicators. In general, high-frequency data on the real economy are in very short supply.²

On top of all these problems, high dollarization limits policy operations.³ Basically, partial dollarization is similar to the bimetal standard. We all know the bimetal standard collapsed because of fluctuations in the relative prices of silver and gold. People switched from

¹Successful de-dollarization is rare. See Reinhart et al. (2003).

²Custom data are available and can be used as a substitute.

³Reinhart et al. (2003) argue that this may not be true. However, they do not show the transmission mechanisms.

one metal to the other as prices fluctuated. Similarly, households and corporations switch between local and foreign currencies quite actively under partial dollarization. If central banks are to stabilize these currency substitutions, they must keep local currency interest rates in line with foreign currency interest rates. By doing so, they can largely stabilize the exchange rates, which represent the relative prices of the local and foreign currencies. However, they still need to intervene in the foreign exchange market from time to time.

As for exchange rate stability, central banks in partially dollarized economies face a loss of flexibility in interest rate control.⁴ Foreign currency interest rates are largely determined by foreign factors. Thus, these central banks are lucky if foreign currency interest rates move up when they want to tighten control (and vice versa). Otherwise, they are in trouble. They have to employ other policy instruments such as credit controls, reserve requirement ratios, and other instruments, in the absence of full control over interest rates.

However, the financial systems in the CLV economies are not well developed. The financial deepening ratios are still quite low. The formal financial institutions serve a very limited part of the economy, so their policy also exerts limited influence. Direct financial markets for stocks and bonds are still underdeveloped or nonexistent. Thus, central banks cannot easily conduct open market operations. Banks are the core of the financial system, but many are still weighed down with large NPLs and lack skilled personnel. Here, too, dollarization matters. In Cambodia, most deposits and loans are denominated in dollars. If banks get into trouble, they need dollars rather than local currency. This means that the central bank cannot necessarily function as the lender of last resort,⁵ and therefore has to be cautious about implementing direct measures to expand credit.

7.2.2 Actual Policy Operations

To illustrate the characteristics of the policy operations in the CLV economies, we have made an estimate of how the monetary policy reaction functions in Viet Nam. We chose Viet Nam because it is the only country for which monthly data on output are available. We used the simple Taylor rule-type reaction function with two additional variables—the exchange rate and the US federal funds rate. We used regression analysis to find out how the Viet Nam interest rate (VIR) is affected by the output gap, the

⁴In the Lao PDR and Cambodia, domestic liability dollarization is important. Domestic loans are mostly denominated in dollars and their interest rates are therefore harder for the central banks to control.

⁵Calvo (2006) argues that the central banks may borrow dollars from the markets for lending to troubled institutions.

Table 7.1: Monetary Policy Reaction Function: Estimation Results

Dependent variable: Viet Nam interest rate (VIR)		
Hodrick-Prescott filter	R-squared	0.96
Sample: 1999M02 2006M03	Adjusted R-squared	0.96
Included observations: 86	Standard error	0.27
Variable	Coefficient	P-value
Constant	1.149	0.056
IIP gap	0.119	0.299
FR gap	1.230	0.857
Inflation Gap	(0.001)	0.863
FF rate	0.838	0.000
VIR (-1)	0.048	0.023
Quadratic Trend		
	R-squared	0.96
Sample: 1999M02 2006M03	Adjusted R-squared	0.96
Included observations: 86	Standard error	0.27
Variable	Coefficient	P-value
Constant	1.181	0.045
IIP gap	0.127	0.264
FR gap	(4.300)	0.536
Inflation Gap	(0.001)	0.850
FF rate	0.834	0.000
VIR(-1)	0.047	0.011

FF = US federal funds rate, IIP = index of industrial production, () = negative value.

Source: Author's estimates.

inflation gap, the lagged dependent variable, the exchange rate gap, and the US federal funds (FF) rate.⁶

$$\text{VIR}_t = \alpha \text{constant} + \beta_1 \text{IIP gap}_t + \beta_2 \text{ER gap}_t + \beta_3 \text{inflation gap}_t + \beta_4 \text{FF rate}_t + \gamma \text{VIR}_{t-1} + \text{Error term}_t$$

Output was measured with the index of industrial production (IIP); inflation, through the use of changes in the consumer price index (CPI). The exchange rate (ER) was measured in kip per US dollar. All the gaps

⁶I would like to thank Kunihiro Hanabusa for the estimation in section 7.2.2, as well as in section 7.3.2.

were calculated as deviations of these variables from their respective trends. Trends were estimated with the Hodrick-Prescott filter or the quadratic function.

The estimation results are shown in Table 7.1. The explanatory power of the equation is quite high, but only two variables matter significantly—the US federal funds rate and the lagging VIR. We may improve the reaction functions by examining their appropriateness more carefully. However, this simple estimation gives us the main story. The short-run management of Viet Nam’s monetary policy is concerned with keeping the VIR in line with the dollar interest rate and with smoothing interest rate fluctuations.

7.2.3 Policy Recommendations

Given the current realities, we cannot expect too much from monetary policy in these three economies. Without high-frequency data on the real economy, active countercyclical policy management is simply impossible. If the central banks dare to make a move, misjudgments of cyclical phases are a real danger. Thus, the policy goal should be price stability in the medium to long run. While the central banks in these economies define price stability as a top priority, they are also saddled with other goals. These other goals should be given lower priority.

Policy management would be simplified, as long as the politicians do not interfere. The central banks should be given more independence from government for this purpose. Even if they were independent they could still coordinate monetary policy operations with other economic policies. This move would also build confidence in local currencies and contribute to future de-dollarization.

More data should be made available. The central banks should start doing business surveys on their own, even limited ones at first. Even a partial business survey would improve real-time information on the real economy. Without these data, the influence of policy actions will remain highly uncertain. Policy actions are also often delayed and, once delayed, they are likely to be excessive—a particularly dangerous tendency in economies with fragile finance sectors and partial dollarization.

Dollarization has limited the monetary policy operations of the CLV economies and reduced seigniorage. However, as discussed in earlier chapters, it has also had positive effects. In particular, it has discouraged the monetization of fiscal deficits.⁷ This effect is important for the CLV economies, where tax revenues during the transition have proven unreliable. By keeping local currency interest rates in line with dollar interest rates,

⁷Edwards (2001) shows that evidence might not support this. However, his sample is quite limited.

monetary policy operations have so far been stabilizing. Inflation has been low and stable in recent years for this reason. Considering the current environment for monetary policy operations in the three economies, such as weak central bank independence and insufficient economic data, this positive effect should not be undervalued. Dollarization itself, after all, reflects a lack of confidence in local currencies, as Menon points out in Chapter 9 of this book.

Thus, one realistic strategy would be to keep the current monetary policy stance of accepting dollarization and stabilizing the dollar exchange rate while dealing with other shortcomings. For each country, de-dollarization should be a long-term goal, which can be achieved only after other reforms, including improvements in tax collection, are implemented. Future challenges could include US monetary policy moving against the domestic economic cycle. In that case, a rigorous peg to the dollar may not be fruitful, as the Asian financial crisis showed. The CLV countries should then accept adjustments in the exchange rate. But proper timing of adjustments requires accurate economic data. In addition, to keep the local currency from depreciating rapidly, the central banks should make their policy operations more transparent and predictable. Local currencies would improve their standing and financial institutions would become more stable.

Another strategy would be for the CLV countries to move toward regional monetary cooperation and integration. As discussed in other chapters, although this would also require considerable additional reform and adjustment, it would solve many problems. The countries would regain seigniorage, their central banks could function as the lender of last resort, and CLV-wide monetary policy could operate more according to the business cycles of the three economies.

7.3 Exchange Rate Policy

Exchange rate policies in the three economies are part of the monetary policy framework. As discussed earlier, under the multiple-currency phenomenon, monetary policy is managed mainly to stabilize the relative prices between the local currency and foreign currencies in circulation. As a result, the exchange rate policies are also aimed at stabilizing fluctuations in those exchange rates.

7.3.1 Policy Framework

In essence, all CLV economies have adopted a managed-floating exchange rate regime. However, their exchange rates have been quite stable against the dollar or a basket of foreign currencies. These regimes are not far from

a peg, although the specific levels of the exchange rates are not targeted explicitly.

Instead, they restrict the daily volatility of the exchange rate by setting the band within which market rates are allowed to fluctuate. The center of the band is the (official) daily reference rate. In Viet Nam, this reference rate is determined almost mechanically: it is equal to the average of the market rates of the previous day. However, in Cambodia and the Lao PDR, the method of determining the reference rate is not clear.

To maintain the band, the central banks must sometimes intervene in the market. Although they do not target specific exchange rate levels, they try to smooth the fluctuations. However, the process of deciding on interventions is opaque.

7.3.2 Actual Policy Management

In this section, we examine the extent to which those exchange rates fluctuate against the dollar. We follow the simple conventional method, estimating the changes in the external value of local currencies in relation to changes in the external value of major currencies (the dollar, the yen, and the euro). We measure the external values in terms of special deposit rights (SDR).

$$\Delta \log(\text{Local Currency}_t/\text{SDR}) = \alpha \text{constant} + \beta_1 \Delta \log(\text{Dollar}_t/\text{SDR}) \\ + \beta_2 \Delta \log(\text{Yen}_t/\text{SRR}) + \beta_3 \Delta \log(\text{Euro}_t/\text{SRR}) + \text{Error term}_t$$

The results of the estimation are shown in Table 7.2. For all three economies, the dollar coefficient is statistically significant, but the yen and euro coefficients are not. In addition, for Cambodia and Viet Nam, the dollar coefficient is not statistically different from unity and the explanatory power of the equations is quite high. Thus, their exchange rate policy is close to a dollar peg.

On the other hand, the situation for the Lao PDR is quite different. The equation does not do much to explain the kip's fluctuations, and the estimated dollar coefficient is away from unity. For the kip, though, we should take the Thai baht into consideration, because the baht also functions as money in the Lao PDR and Thailand is the country's main trading partner. Adding the Thai baht into the regression equation improved the fit significantly. The results of the estimation are presented in Table 7.3. The estimated Thai baht coefficient is about 0.58, highly significant with the dollar coefficient of 0.32. Thus, the Lao PDR seems to stabilize the kip's external value against a basket of Thai baht and dollars. However, the explanatory power of the estimated equation is still rather low compared with the explanatory power of the equations for Viet Nam and Cambodia. Clearly, the Lao PDR has not stabilized the external value of its currency as much as the other two countries have.

Table 7.2: External Values of CLV vs. Major Currencies: Estimation Results

Panel A. Cambodia				
Dependent variable: Riel		R-squared		0.82
Sample: 1999M02 2006M11		Adjusted R-squared		0.81
Included observations: 94		Standard error		0.59
Variable	Coefficient	Std error	t-value	P-value
Constant	0.09	0.06	1.54	0.13
Dollar	0.84	0.11	7.68	0.00
Yen	(0.02)	0.05	(0.41)	0.69
Euro	(0.12)	0.09	(1.33)	0.19
Panel B. Lao People's Democratic Republic				
Dependent variable: Kip		R-squared		0.37
Sample: 2000M02 2006M06		Adjusted R-squared		0.34
Included observations: 77		Standard error		0.01
Variable	Coefficient	Std error	t-value	P-value
Constant	0.00	0.00	2.56	0.01
Dollar	0.57	0.27	2.09	0.04
Yen	(0.02)	0.12	(0.15)	0.88
Euro	(0.19)	0.23	(0.83)	0.41
Panel C. Viet Nam				
Dependent variable: Dong		R-squared		0.96
Sample: 1999M02 2006M03		Adjusted R-squared		0.96
Included observations: 86		Standard error		0.27
Variable	Coefficient	Std error	t-value	P-value
Constant	0.16	0.03	5.57	0.00
Dollar	0.99	0.05	19.41	0.00
Yen	0.01	0.02	0.53	0.60
Euro	0.00	0.04	(0.05)	0.96

() = negative value.

Source: Author's estimates.

Table 7.3: External Value of the Kip vs. Major Currencies including the Baht: Estimation Results

Dependent Variable: Kip		R-squared	0.60	
Sample: 2000M02 2006M06		Adjusted R-squared	0.58	
Included observations: 77		Standard error	1.10	
Variable	Coefficient	Std error	t-value	P-value
Constant	0.36	0.13	2.79	0.01
Dollar	0.32	0.22	1.44	0.15
Yen	(0.16)	0.10	(1.59)	0.12
Euro	(0.29)	0.18	(1.57)	0.12
Baht	0.58	0.09	6.45	0.00

() = negative value.

Source: Author's estimates.

7.3.3 Evaluations and Recommendations

In recent years, exchange rate policies in the three countries have maintained stable exchange rates between local currencies and foreign currencies in domestic circulation. The overall balance of payments is positive, although the current account is modestly negative in Cambodia and the Lao PDR. External debt is still small relative to GDP. These policy outcomes seem quite satisfactory.

They may not be robust enough, however. Once their business cycles start to move differently from the US business cycle,⁸ the CLV countries will be confronted with trade-offs in policy management. If they pursue internal balance, the exchange rates will move. In addition, a significant movement in the dollar against other major currencies could lead to volatile effective rates. There could be financial turmoil, and a “sudden stop” scenario could become a reality. If the capital inflow were to stop for some reason, people may try to withdraw their foreign currency deposits from banks, anticipating a depreciation of the local currency. Thus, the banks may run short of foreign currencies. If the central banks cannot supply foreign currencies to the banks, a financial crisis could arise. Some argue that the current exchange rate regime should be switched from a floating to a fixed rate regime in these situations, and that this should be decided on and announced in advance to the public as a contingent policy.⁹

Introducing some form of regional monetary cooperation among the CLV countries will change the entire framework of the monetary and

⁸For the Lao PDR, Thai business cycles matter too.

⁹Calvo (2006).

exchange rate policies. The stability of the local currency against the dollar will decline significantly in importance in the management of policy. But for regional cooperation to happen, the central banks and governments of the three countries will have to undergo further necessary reforms to gain credibility.

7.4 Summary

All CLV economies face many problems common to the transition from a centrally planned to a market-oriented economy. In particular, financial institutions are fragile, financial markets are not well developed, and foreign currencies circulate alongside local currencies. Monetary policies are restricted by weak central bank independence and insufficient data. All three countries have therefore chosen to stabilize the external value of their currencies as a key monetary and exchange rate strategy. This strategy has helped strengthen economic performance, lower inflation, and stabilize exchange rates. But this may not be good enough for the future. Each country has no option but to work on the many shortcomings of its monetary policy operations and improve those operations steadily. However, as a group, the CLV countries could opt for some form of regional cooperation.

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PART TWO

Issues for Monetary Cooperation

Monetary Frameworks and Exchange Rate Regimes

Patricia Alvarez-Plata and Alfred Steinherr

In the last decade, more than a dozen emerging economies experienced financial crises, with often devastating economic consequences. Most of these economies had chosen an “intermediate” exchange rate arrangement, also known as a “soft peg” arrangement.¹ Consequently, an intense debate has emerged on how the choice of exchange rate regime might have contributed to these crises. A conventional view has it that soft peg arrangements for countries open to international capital flows are not sustainable. Supporters of this view expect that exchange rate arrangements would move in a bipolar manner to the extremes of hard pegs—such as full dollarization, currency unions, and currency boards—or floating regimes.²

In fact, several emerging economies announced their intentions to allow their currencies to float. However, *de jure* announcements to float, reported by member countries to the International Monetary Fund (IMF), did not typically become *de facto* floats of exchange rates. Calvo and Reinhart (2002) showed that many emerging economies claiming to have floating exchange rate regimes did not actually allow their exchange rate to float freely.³ This is also the case for several Asian countries that did not abandon the middle ground of heavily managed exchange rates.⁴ Indeed, only a short time after the Asian financial crisis, the exchange rate

¹“Soft peg” arrangements include conventional fixed peg arrangements, crawling peg arrangements, horizontal band arrangements, and crawling band arrangements.

²This is the bipolar, or two-corner, solution.

³Reinhart and Rogoff (2004) reclassified the historical exchange rate regimes of 153 countries, and showed that 53% of the exchange rate regimes officially labeled as “managed floating” were *de facto* “soft peg.”

⁴This was also found by others, such as McKinnon (2000) and Hernández and Montiel (2001).

arrangements of these countries returned to a de facto soft peg despite the official announcements of floating exchange rates.⁵

There has been an intense debate under way over the appropriate exchange rate arrangement for the region's economies, and a number of different regimes have been proposed since the crisis, which began in mid-1997 and had ended by early 1999. While various policy options are discussed in Chapter 13, the aim of this chapter is to analyze various types of actual exchange rate regimes used by ASEAN+3⁶ countries. Furthermore, by analyzing key macroeconomic variables, such as inflation, gross domestic product (GDP) growth, and current account balances, we draw some conclusions regarding the performance of the alternative regimes. The findings indicate that, in the case of the ASEAN+3 countries, there are no systematic differences that can be attributed to the exchange rate regimes adopted by these countries. In fact, countries with managed floating regimes have not fared any worse than countries with pegged exchange rates or with independent floating arrangements. Of course, when drawing conclusions from this analysis, it is important to remember that economic performance influences the choice of regimes as much as the choice of regimes influences economic performance.

8.1 Options for Exchange Rate Regimes

At one end of the spectrum of exchange rate regimes are flexible exchange rates without interventions by the central bank other than for daily smoothing. At the other end are fixed exchange rates with rigorous structures such as currency boards, dollarization, or monetary unions. In between are various regimes with different degrees of official intervention and organizational setups. One is managed floating with no predetermined path for the exchange rate. This arrangement is usually assigned to the category of floating exchange rate arrangements, and so is not grouped with the intermediate solutions (Razo-García and Eichengreen 2006; Fischer 2001). However, as soon as monetary authorities tightly manage the exchange rate by having a target range,

⁵This phenomenon can be attributed to the widespread idea that exchange rate stability promotes trade and to the fact that most of these economies are highly indebted in dollars.

⁶ASEAN+3 includes members of the Association of Southeast Asian Nations—Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic (Lao PDR), Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam—plus the People's Republic of China (PRC), Japan, and the Republic of Korea.

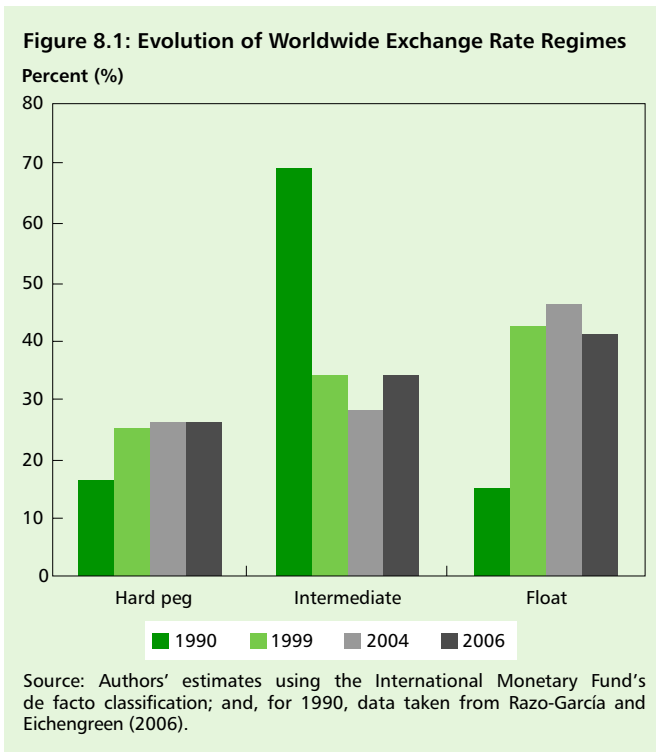
and by intervening in the exchange market to steer the rate close to that target, the arrangement is deemed as soft peg. If the target exchange rate is time-invariant, then a fixed exchange rate regime can be adopted and, in line with experience, the peg can be changed (a regime of fixed but adjustable rates). If the target is not time-invariant, then a crawling peg may be preferred, in which the authorities define in advance adjustments to the peg. This has the advantage of sending clear signals to the market, as opposed to a regime of fixed-but-adjustable rates, in which adjustments can come as a surprise in terms of timing and magnitude.

The choice of regime is surely the most important decision for a country's foreign exchange market. But it is not the only one. Of nearly equal importance is the standard to which a currency is pegged. Pegging to the yen or dollar has different implications for exchange rate movements relative to other currencies in the world, and for imported inflation. The alternative to pegging to a national currency with an international standard is to peg to a basket of currencies or to a composite standard. This has the advantage of not being bound to the possibly strong value variations of a single currency. Also, in cases where no obvious currency choice for a peg exists, a composite standard may be the only solution. For example, in Europe the obvious choice for most countries is the euro, whereas in Asia no such obvious choice exists. A composite of regional currencies is an alternative.

8.2 Some Stylized Facts

Figure 8.1 summarizes the evolution of exchange rate regimes. Since we want to analyze actual exchange rate arrangements, we focus on de facto arrangements. Therefore, we employ data from Razo-García and Eichengreen (2002) and from the IMF De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework (2006a). Until 1999, the IMF classifications were based on de jure regimes. However, after the debate on de jure versus de facto classifications had intensified in the late 1990s, and several studies proposed a number of new de facto classifications, the IMF moved to a de facto classification system.

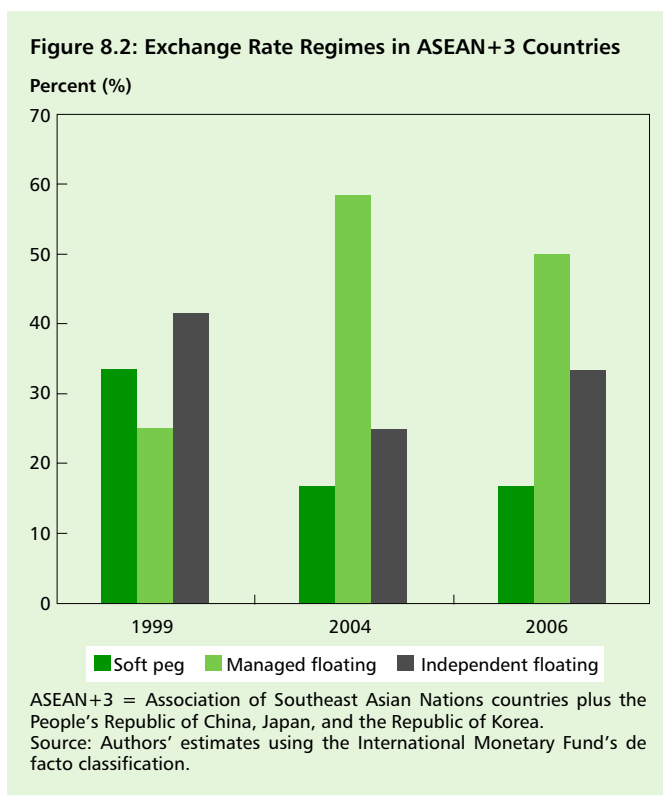
According to Figure 8.1, until recently more and more countries have been abandoning intermediate exchange rate regimes in favor of corner



solutions, as predicted by the adherents of the bipolar view.⁷ However, the most recent data suggest that this trend of a “vanishing middle” has been interrupted, if not reversed.

Whereas in 1990 around 16% of IMF member countries worldwide had hard pegs, and 15% had floating exchange rates, a whopping 69% had intermediate exchange rate arrangements. By 2004, the share of intermediate exchange rate arrangements had come down to only 29%, while the share of hard pegs increased to 25%. Free floating regimes, meanwhile, increased to 46%. According to the analysis of Razo-García and Eichengreen (2006), it was primarily emerging market countries that moved to floating exchange rates.

⁷The group of hard pegs includes economies with currency board arrangements, that are fully “dollarized,” and that are part of a currency union. The group of intermediate regimes includes economies with conventional fixed peg arrangements, pegged exchange rates within horizontal bands, crawling pegs, and exchange rates with crawling bands. The group of floating regimes includes economies with independently floating regimes and with managed floating regimes with no predetermined path for their exchange rates. The definitions of these groups follow the relevant literature. See, for example: Fischer (2001) and Razo-García and Eichengreen (2006).



However, this worldwide tendency of exchange rate regimes to crystallize at the extreme ends of the spectrum has apparently not persisted into the present. Compared with exchange rate regimes in 2004, the share of intermediate arrangements in 2006 did not decline further, but rather increased. At the same time, the number of countries with floating exchange rates fell substantially, dipping below the levels of 1999. There are several reasons why countries with floating exchange rate arrangements might have moved to intermediate regimes. One of them is that heavy currency fluctuations, if associated with real exchange rate fluctuations, can discourage trade and investment.

In Figure 8.2, we take a closer look at the evolution of exchange rate regimes in the ASEAN+3 countries. In recent years, most of them have moved from fixed pegs to more flexible exchange rate arrangements. However, it is very important to ask what form that flexibility has taken. Figure 8.2 shows the distribution of exchange rate regimes among the ASEAN+3 countries, divided into managed floating and independent floating regimes. As with the developments shown in Figure 8.1, soft

pegs have recently become less popular. However, most of the ASEAN +3 countries have moved to managed floating regimes with no predetermined path for the exchange rate, rather than to independent floating exchange rate regimes. Because the distinction between managed floating arrangements and soft pegs is quite fuzzy, in the following section we look at other indicators, such as the behavior of exchange rates, to obtain better insights into actual exchange rate policies.

8.3 Actual Exchange Rate Regimes in ASEAN+3 Countries

The official stated positions of central banks regarding their exchange rate arrangements are not always consistent with their actual practices. Thus, to assess the actual regimes operated by several ASEAN countries, we look at both the IMF de facto classification and the exchange rate variability. Because intervention in foreign exchange markets has become a common practice in most Asian countries, we further calculate and analyze the growth of international reserves.

Table 8.1 shows the exchange rate regimes in the ASEAN+3 countries, as well as some selected indicators usually seen as important for the choice of an exchange rate regime.⁸ One indicator is the openness of a country, defined as the sum of exports and imports as a percentage of GDP. Countries with substantial international trade are expected to have a greater interest in keeping the fluctuations of their exchange rates rather small. This is especially true for developing and emerging countries because the lion's share of their international commerce is denominated in currencies of major industrial countries, rather than in their own. The size of an economy can also be a useful indicator, since the exchange rate arrangements of smaller countries have evolved differently from those of larger countries. As shown by Mussa et al. (2000), smaller economies tend to peg their exchange rates to a single currency. There are several reasons for this. First, smaller economies tend to be very open, so traded goods and services play an important role in domestic production and consumption. As a result, the benefits of pegging their exchange rate, and thereby reducing transaction costs and exchange rate risks, can be substantial. Furthermore, even though increased capital mobility could make it difficult to maintain fixed pegs, most small economies are not that deeply integrated into international capital markets, and thus might be less vulnerable to sudden speculative attacks. Small countries, moreover,

⁸Due to a lack of data, Brunei Darussalam is not taken into account in the following analysis.

Table 8.1: ASEAN+3 Countries: Exchange Rate Regimes and Selected Indicators

Economy	De facto exchange rate ^a	Economy size (\$ billion) ^b	Trade as share of GDP ^c	Largest export partner
Cambodia	Managed floating	6.4	42	US
PRC	Fixed peg	2,225.2	64	US
Indonesia	Independent floating	281.2	55	Japan
Japan	Independent floating	4,562.6	24	US
Korea, Rep. of	Independent floating	787.5	69	PRC
Lao PDR	Managed floating	2.9	46	Thailand
Malaysia	Managed floating	130.8	195	US
Myanmar	Managed floating	9.6	48	Thailand
Philippines	Independent floating	98.4	88	US
Singapore	Managed floating	116.8	368	Malaysia
Thailand	Managed floating	175.9	130	US
Viet Nam	Fixed peg	52.9	129	US

ASEAN+3 = Association of Southeast Asian Nations countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; GDP = gross domestic product; Lao PDR = Lao People's Democratic Republic; US = United States; \$ = US dollar.

^aAs of August 2006, according to the International Monetary Fund's de facto classifications. ^bFor size of economy: GDP at market exchange rates. ^cSum of exports and imports as percentage of GDP.

Source: Authors' calculations based on the International Monetary Fund's *International Financial Statistics and Direction of Trade Statistics* data.

usually have one dominant trading partner, so it makes sense to peg their currencies to that partner's currency.

In Table 8.1, it is interesting to observe that neither the smallest countries nor the most open countries are the ones with fixed peg arrangements. Only the People's Republic of China (PRC) and Viet Nam still had exchange rates pegged to the dollar in 2006, according to the IMF. While both of them officially claim to have managed-floating exchange rate regimes, this does not seem to be the case, as suggested by their respective exchange rate variabilities. Half of the ASEAN+3 countries have managed-floating regimes, but the degree to which they manage their exchange rates is quite different. To get a better understanding, we now turn to the variability of exchange rates.

Table 8.2 shows the average variability of monthly nominal and real exchange rate changes. The nominal exchange rates of the two countries classified by the IMF as having de facto fixed peg arrangements vary by less than 0.2%. Although the variance of Cambodia's and Malaysia's currencies (both countries classified as managed floaters) is slightly higher, these currencies appear to vary by amplitudes relatively close to those of the

Table 8.2: ASEAN+3 Countries: Average Monthly Exchange Rate to the Dollar (2005–2006)

	Nominal exchange rate (%)	Real exchange rate (%)
Cambodia	0.32	0.57
PRC	0.13	1.96
Indonesia	3.53	7.27
Japan	4.07	4.37
Korea, Rep. of	2.12	2.49
Lao PDR	1.16	1.05
Malaysia	0.33	0.63
Myanmar	1.29	3.92
Philippines	1.78	2.37
Singapore	0.92	1.22
Thailand	2.03	1.72
Viet Nam	0.01	0.82
Euro area	4.12	3.96

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: For Cambodia, the Lao PDR, and Myanmar, consumer price index (CPI) data was only available until March 2006. CPI is used for calculating real exchange rates.

Source: Authors' calculations based on the International Monetary Fund's *International Financial Statistics* data.

fixed currencies. Among the independent floaters, the Philippines shows the lowest variability in its nominal exchange rate. With a volatility of less than 2%, the Philippine peso is even less variable than Thailand's currency, although Thailand is classified as a managed floater. Japan and Indonesia have the highest exchange rate variances. In fact, comparing the variabilities of the yen-dollar and euro-dollar exchange rates, it would seem that Japan's exchange rate regime could indeed be classified as an independent floater. However, changes in international reserves should also be taken into consideration because they reflect central bank interventions in the foreign exchange market aimed at maintaining target exchange rates. Altogether, the average variability of the nominal exchange rates of the ASEAN+3 countries is less than 1.5%, which indicates that these countries are limiting the degree of exchange rate fluctuations quite strongly.

Given the openness of most ASEAN+3 economies, real exchange rate variability seems to be particularly important. When it comes to real

Table 8.3: ASEAN+3 Countries: International Reserve Accumulation

	Foreign exchange reserves, end-2006 (\$ billion)	Share of total ASEAN+3 reserves (%)	Growth rate (2005–2006)
Cambodia	1.01	0.04	5.00
PRC	990.45	40.50	32.76
Indonesia	40.66	1.66	10.40
Japan	866.53	35.43	1.72
Korea, Rep. of	225.64	9.23	6.02
Lao PDR	0.25	0.01	15.41
Malaysia	79.22	3.24	2.72
Myanmar	0.94	0.04	14.94
Philippines	18.85	0.77	29.43
Singapore	129.20	5.28	7.83
Thailand	60.00	2.45	12.97
Viet Nam	10.74	0.44	35.57

ASEAN+3 = Association of Southeast Asian Nations countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic.

Source: Authors' calculation based on the International Monetary Fund's *International Financial Statistics* data.

exchange rates, however, the picture differs somewhat compared to that for nominal exchange rates.

In all countries except Thailand and the Lao People's Democratic Republic (Lao PDR), the variability of real exchange rates exceeds the variability of nominal exchange rates. This, by definition, is typical of fixed exchange rate systems. One oft-cited advantage of a flexible exchange rate regime is that the real exchange rate can be stabilized if the nominal exchange rate is driven by inflation differentials. However, the interesting point shown in Table 8.2 is that, regardless of the exchange regime, real exchange rate volatility exceeds nominal exchange rate volatility. Among the countries included in Table 8.2, Cambodia's real exchange rate fluctuates the least. This country is thus very successful in managing not only its nominal but also its real exchange rate. The Lao PDR also has a rather stable real exchange. Because both economies are highly dollarized, this observation suggests that dollarization is the cause of small real exchange rate volatility. Myanmar, a country with managed floating, appears not to be that successful because while the nominal exchange rate has modest variability, the real exchange rate variability is relatively high—basically as high as the euro-dollar real exchange rate variance. The real exchange rate of Indonesia's rupiah is the most volatile of all.

Policy makers can also target exchange rates through intervention in the foreign exchange market. Table 8.3 shows the accumulation of

international reserves up to the end of 2006. Accumulation is particularly significant in the PRC, Japan, and, to a lesser extent, in the Republic of Korea. A look at the growth rate during 2005 and 2006 reveals that Japan has not intervened too much one way or the other during that period. By contrast, the PRC's reserves grew by more than 30%, reflecting strong and continued intervention in the foreign exchange market by the PRC monetary authorities, even though they officially claim to have had a managed float since 2005. Viet Nam, the other country classified as having a de facto peg, shows an even higher growth in reserves. It is surprising that the Philippines, a country classified as an independent floater, would have such a high growth in reserves. To be sure, the country accounts for less than 1% of total ASEAN+3 reserves, but this growth nevertheless indicates that the Philippine monetary authorities might be intervening to prevent an appreciation. The claim that the Philippines and Indonesia have practiced independent floating regimes in recent years is clearly contradicted by the strong increases in their foreign reserves.

Of course, huge exchange reserves, such as those held by the PRC, Japan, and the Republic of Korea, imply very high costs. Instead of investing resources for national development at social rates of return—typically in excess of 10%—they earn much less from their foreign exchange reserves and are exposed to considerable foreign exchange risks. In any analysis of exchange rate regime choices, these costs also need to be taken into account.

8.4 Monetary Regimes and Capital Controls in ASEAN+3 Countries

Domestic monetary policy is deeply influenced by the choice of exchange regime. The choice of a fixed exchange rate, together with free capital flows, implies that domestic interest rates cannot deviate substantially from foreign rates. If monetary authorities lower interest rates to stimulate economic activity, financial arbitrageurs would rapidly shift their funds abroad to get better returns. Hence, the monetary base would shrink and domestic interest rates would return approximately to their initial level. This implies that, under these conditions, domestic monetary policy loses all its influence and the money supply becomes largely endogenous.

This is not necessarily a bad thing. Any country would in fact duplicate the monetary policy of the country to which it has pegged its currency. If another country maintains price stability, then anchoring to its currency would be a cheap way to achieve price stability at home. Of course, because domestic business cycles are never perfectly correlated with the business cycles of the country to which the currency is pegged,

there will be situations of conflict. In particular, with fixed exchange rates, external real shocks are a thorny problem. If, for example, foreign demand for domestic products declines, domestic production declines (step 1), and hence the demand for money declines. As a result, interest rates decline and domestic money managers will transfer their funds abroad. The central bank will lose exchange reserves due to capital being transferred abroad and due to a current account deficit, which would have resulted from the drop in external demand. This leads to a reduction in the money supply until domestic interest rates are back to their initial level. However, domestic production will then decline even further (step 2).

A country trying to escape the straitjacket of fixed exchange rates with free capital flows has two means of regaining some leeway. One is to introduce capital controls. However, there are three potential problems associated with this policy. The first is that the efficiency of the worldwide allocation of resources would be compromised. The country in question would not receive as much capital from abroad as it could otherwise have. It would also forgo the control mechanism of the international capital market. This is the textbook argument, although it needs to be reconsidered in light of the various complications associated with free capital movements, particularly in countries with weak domestic supervision of financial transactions. What a country might instead aim for is a transparent and easily enforceable system of capital controls (Steinherr et al. 2006). The second potential problem is that most controls can be circumvented, making them ineffective and incurring additional costs. The third problem becomes apparent once we look again at the example of a foreign real shock. Capital controls would prevent the loss of production in step 2, but not in step 1, described above.

The other means of escaping from the rigidity of fixed exchange rates is to opt for flexible rates. Domestic monetary policy would regain complete independence, even with free capital movement. To replay the shock of reduced foreign demand: The exchange rate depreciates, thereby rendering domestic substitutes for imports and domestic exports more competitive, thus compensating for the exogenous drop in demand. But domestic production would not change much.

It needs to be recognized, however, that this picture is too simple to be true. First, while flexible rates deal more efficiently with real shocks, they do not cope as well as fixed rates with monetary shocks. Second, the recovery of monetary policy independence has a price tag: the loss of fiscal policy effectiveness. Suppose that fiscal deficit financing is used to stimulate output. Interest rates will increase and attract foreign capital inflows. This will lead to an appreciation of the exchange rate and a loss of domestic competitiveness. Real output will not change much. By contrast, with fixed exchange rates, fiscal policy reaches its maximum effectiveness with a minimum of crowding out.

If a country has fixed exchange rates and free capital flows, its monetary policy will be significantly constrained. It still has a choice, however, as to which foreign currency to peg the domestic currency. If stability is not the top priority, the currency should be pegged to a major trading partner, even if there is no price stability. Under the same precondition, monetary policy can be active by accepting adjustments to the peg, but the cost is a loss of credibility, repeated currency crises, and the risk of increasing instability.

A regime with capital controls would be preferable, especially transparent and flexible controls with a minimum of rules and institutions involved (see Steinherr et al. 2006). If controls are rigid or flexible depending on the circumstances during periods of excessive inflows or outflows, the advantages of fixed and of flexible rates are combined. This is the situation that predominates in the ASEAN+3 countries.

With flexible exchange rates, the need for capital controls does not completely disappear. Emerging market countries often suffer from excessive inflows motivated by the expectation of high returns. This tends to appreciate the currency more than what the real sector of the economy can stomach, and is therefore best avoided.

With flexible rates, with or without capital controls, the authorities must define the rules of the game. Do they attach priority to price stability? If so, it would be best to make the central bank independent of the government and entrust it by law to maintain price stability. In small and less diversified economies, which are exposed to frequent external shocks, it would be wise to avoid defining price stability too restrictively. An upper range of 3%–4%, or a 3-year moving average of 2.5%, seems reasonable.

If authorities attach less importance to price stability, it would still be useful to limit by law the access of the government to central bank funding, regardless of the degree of independence of the central bank. Not to do so would mean that the central bank would have to manage the trade-off between growth and price stability.

Technically, a central bank can reach its final goals by pursuing different intermediate targets. It could base its policy on the monetary base (currency in circulation and bank deposits with the central bank), on short-term interest rates, or on the inflation rate. Table 8.4 summarizes the situation in the ASEAN+3 countries.

Table 8.4: ASEAN+3 Countries: Monetary Frameworks

	De jure monetary framework	De facto monetary framework
Cambodia	Monetary aggregate anchor	Monetary aggregate anchor
PRC	Monetary aggregate anchor	Exchange rate anchor/ Monetary aggregate anchor
Indonesia	Inflation targeting	Monetary aggregate anchor
Japan	No explicitly stated nominal anchor	No explicitly stated nominal anchor
Korea, Rep. of	Inflation targeting	Inflation targeting
Lao PDR	Monetary aggregate anchor	Monetary aggregate anchor
Malaysia	No explicitly stated nominal anchor	No explicitly stated nominal anchor
Myanmar	No explicitly stated nominal anchor	No explicitly stated nominal anchor
Philippines	Inflation targeting	Inflation targeting
Singapore	No explicitly stated nominal anchor	No explicitly stated nominal anchor
Thailand	Inflation targeting	Inflation targeting
Viet Nam	na	Exchange rate anchor

ASEAN+3 = Association of Southeast Asian Nations countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic; na = not applicable.
Source: Various publications of respective central banks and the International Monetary Fund.

8.5 Performance of the Different Exchange Rate Regimes

In this chapter, we have analyzed the performance of the different exchange rate regimes based on the experiences of the ASEAN+3 countries. While some conclusions can be drawn from this exercise, it is important to recognize the limitations of this analysis. In particular, whereas the choice of exchange rate regime might influence the economic performance of a country, it is also the case that the performance of a country might have an impact on the choice of the exchange rate regime. Furthermore, because some countries might have changed their regimes over time, looking only at the ongoing regimes might be misleading.

Most of the ASEAN+3 countries, with the exception of Indonesia, Malaysia, and Viet Nam, did not change their de facto exchange rate arrangement during the period under consideration (2002–2006). Malaysia, which used to have a soft peg, moved to a managed floating arrangement; and Indonesia moved in 2006 from a managed floating to an independent floating arrangement. Viet Nam, classified before as a managed floater, was reclassified as having a de facto peg in the second half of 2005.

Table 8.5 summarizes the inflation rates of the ASEAN+3 countries. A common finding in the empirical literature on exchange rate arrangements is that fixed exchange rate regimes deliver lower inflation. However, according to Rogoff et al. (2004), it is very important to distinguish between the types of countries in question because pegs indeed have delivered significantly lower inflation rates than flexible exchange rate regimes, but primarily to developing economies, not to emerging or advanced economies.⁹ The PRC and Malaysia, both countries that have pegged their currencies to the dollar during various years, do in fact have the lowest inflation rates. However, Viet Nam, which is classified as having had a soft peg arrangement since 2005, has one of the highest inflation rates. Of course, this could be one of the reasons why Viet Nam decided to narrow its exchange rate fluctuations, but the fact that its inflation rate was so high in 2005 already shows that pegging the currency does not necessarily help in combating domestic inflation. The Philippines and Indonesia, both classified as having independent floating exchange rate regimes, show above-average inflation rates. However, the Republic of Korea and Japan, also classified as independent floaters, show very low inflation, and even deflation. Thus, the rate of inflation does not seem to have a significant relationship with greater exchange rate flexibility.

In general, it is difficult to detect a significant difference among the various regimes. Although inflation is high in Indonesia and Viet Nam, despite the fact that both countries chose one of the corner solutions, all of the ASEAN+3 countries are quite successful in maintaining monetary stability.

The second indicator we look at is the current account deficit as a percentage of GDP (Table 8.6). One advantage of pegging the exchange rate to a foreign currency is that transaction costs and exchange rate risks are reduced. If a country's growth strategy is export-oriented, having a peg to the currency of its major trading partner is very sensible. Thus, countries that decide to have a fixed exchange rate can be expected to run substantial current account surpluses. In fact, the PRC and Malaysia, both countries with soft pegs during almost the entire period under review, have huge current account surpluses. In the group of managed floaters, there are countries that have surpluses, even very high ones, such as Singapore, and countries that have significant deficits, such as Cambodia.

⁹They distinguish between developing economies, emerging economies, and advanced economies. Emerging economies are those included in the Morgan Stanley Capital International (MSCI) index. The following ASEAN+3 countries are classified as having emerging economies: the PRC, Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand. Japan and Singapore have the only advanced economies, while Cambodia, the Lao PDR, Myanmar, and Viet Nam are classified as having developing economies.

Table 8.5: ASEAN+3 Countries: Inflation Rates (%)

	Cambodia	PRC	Indonesia ^a	Japan	Korea, Rep. of	Lao PDR	Malaysia ^a	Myanmar	Philippines	Singapore	Thailand	Viet Nam ^a
2002	3.2	(0.8)	11.8	(0.9)	2.8	10.6	1.8	57.1	3.0	(0.4)	0.6	3.8
2003	1.2	1.2	6.8	(0.3)	3.5	15.5	1.1	36.6	3.5	0.5	1.8	3.1
2004	3.9	3.9	6.1	(0.0)	3.6	10.5	1.4	4.5	6.0	1.7	2.8	7.8
2005	5.7	1.8	10.5	(0.3)	2.8	7.2	3.0	9.4	7.7	0.5	4.5	8.3
2006	na	1.4	13.1	na	2.3	na	3.6	na	6.3	na	4.6	na

ASEAN+3 = Association of Southeast Asian Nations countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic; na = no data available; () = negative value.

^aIndonesia, Malaysia, and Viet Nam changed their exchange rate regimes during this period.
Source: International Monetary Fund, *International Financial Statistics*, various issues.

Table 8.6: ASEAN+3 Countries: Current Account Balance as % of GDP

	Cambodia	PRC	Indonesia ^a	Japan	Korea, Rep. of	Lao PDR	Malaysia ^a	Myanmar	Philippines	Singapore	Thailand	Viet Nam ^a
2002	(2.5)	2.4	4.0	2.9	1.0	na	8.4	1.3	(0.4)	13.4	3.7	(0.5)
2003	(5.1)	2.8	3.5	3.2	2.0	na	12.9	(0.3)	0.4	24.1	3.3	0.8
2004	(3.5)	3.6	0.6	3.7	4.1	na	12.6	1.2	1.9	24.5	1.7	na
2005	(5.6)	7.2	0.3	3.6	1.9	na	15.0	na	2.0	28.5	(4.4)	na
2006	na	na	na	na	na	na	na	na	na	na	na	na

ASEAN+3 = Association of Southeast Asian Nations (ASEAN) countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; GDP = gross domestic product; Lao PDR = Lao People's Democratic Republic; na = no data available; () = negative value.

^aIndonesia, Malaysia, and Viet Nam changed their exchange rate regimes during this period.
Source: International Monetary Fund, *International Financial Statistics*, various issues.

Table 8.7: ASEAN+3 Countries: GDP Growth Rates (%)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Brunei Darussalam	2.9	2.7	3.9	2.9	0.5	0.4	4.4	0.6	(1.5)
Cambodia	8.8	8.1	6.6	8.5	10.3	13.3	10.8	10.2	6.7
PRC	8.4	8.3	9.1	10.0	10.1	10.4	11.6	13.0	9.0
Indonesia	5.4	3.6	4.5	4.8	5.0	5.7	5.5	6.3	6.1
Japan	2.9	0.2	0.3	1.4	2.7	1.9	2.0	2.3	(0.7)
Korea, Republic of	8.5	4.0	7.2	2.8	4.6	4.0	5.2	5.1	2.2
Lao PDR	5.8	5.7	5.9	6.1	6.4	7.1	8.4	7.5	7.2
Malaysia	8.7	0.5	5.4	5.8	6.8	5.3	5.8	6.2	4.6
Myanmar	13.7	11.3	12.0	13.8	13.6	13.6	13.1	11.9	4.0
Philippines	6.0	1.8	4.4	4.9	6.4	5.0	5.3	7.1	3.8
Singapore	10.1	(2.4)	4.1	3.8	9.3	7.3	8.4	7.8	1.1
Thailand	4.8	2.2	5.3	7.1	6.3	4.6	5.2	4.9	2.6
Viet Nam	6.8	6.9	7.1	7.3	7.8	8.4	8.2	8.5	6.2
ASEAN+3 average	4.5	2.1	3.1	3.9	5.0	4.6	5.4	6.4	3.5

Note: Regional average was derived using Gross National Income Atlas Method in current \$ as weights. ASEAN+3 = Association of Southeast Asian Nations (ASEAN) countries plus the People's Republic of China (PRC), Japan, and the Republic of Korea; GDP = gross domestic product; Lao PDR = Lao People's Democratic Republic; () = negative value, \$ = US dollar.
Source: World Economic Outlook Database (October 2009), International Monetary Fund; and World Development Indicators, World Bank. Various issues.

Although the independent floaters all have current account surpluses, the magnitudes of their surpluses are definitely lower. Altogether, these findings suggest that ASEAN+3 countries with less flexible exchange rates indeed exhibit higher current account surpluses.

Whether exchange rate regimes make any difference to GDP growth is a question that has been widely analyzed. While Dornbusch (2001) suggests that pegged exchange rate regimes might promote growth through reduced interest rates and lower uncertainty, Eichengreen (2001) concludes that the exchange rate arrangement does not make a difference at all. Rogoff et al. (2004) analyze the relationship between per capita GDP growth and exchange rate regimes, and find that for advanced economies, free floats do significantly better than other regimes in terms of growth. However, for developing and emerging economies, no significant relationship can be found. Looking at the GDP growth in the ASEAN+3 countries (Table 8.7), we also do not find any systematic relationship between growth and the exchange rate system.

8.6 Summary

After analyzing the exchange rate regimes in the ASEAN+3 countries over a period of several years, we have concluded that, although most of them have been classified by the IMF as de facto managed floating regimes, the regimes actually differ substantially from country to country. This is because the countries in question have displayed varying degrees of commitment to their floating arrangements. Most of them have seemed reluctant to let their currencies float freely. Indeed, because imports and exports represent a large share of their GDPs, this attitude seems reasonable. Furthermore, many of these countries have high “dollarization liabilities,” which also make large exchange rate fluctuations risky. Regarding the exchange rate variability and the growth of international reserves, we see some evidence that a few of the managed floaters have behaved in ways very similar to the peggers. We have also found that some of the independent floaters, such as Indonesia and the Philippines, could actually be classified as managed floaters.

Moreover, by analyzing inflation, GDP growth, and current account balances, we have tried to draw some lessons from the performance of the regimes. The findings indicate that there are no systematic differences in inflation and GDP that can be attributed to the various exchange rate regimes adopted by these countries. Concerning current account balances, however, it seems that less flexibility does indeed lead to higher surpluses. Thus, a strategy of export-led growth is supported by limited exchange rate fluctuation. To summarize, countries with managed floating regimes have not fared worse than countries with pegged exchange rates, or those with independent floating arrangements.

Appendix

Table A8.1: ASEAN+3 Countries: Most Important Trading Partners

Country	Top 3 trading partners	Shares (% of total trade)
Cambodia	United States (US)	25.9
	Hong Kong, China	20.4
	PRC	6.8
China, People's Republic of (PRC)	US	14.9
	Japan	13.0
	Hong Kong, China	9.6
Indonesia	Japan	14.4
	Singapore	12.1
	US	9.6
Japan	US	18.2
	PRC	17.0
	Korea, Rep. of	6.4
Korea, Republic of	PRC	18.4
	Japan	13.3
	US	13.3
Lao People's Democratic Republic	Thailand	53.5
	Viet Nam	8.2
	PRC	7.1
Malaysia	US	16.7
	Singapore	13.9
	Japan	11.7
Myanmar	Thailand	33.0
	PRC	17.6
	Singapore	10.4
Philippines	US	18.7
	Japan	17.2
	PRC	8.0
Singapore	Malaysia	14.5
	US	11.9
	PRC	10.1
Thailand	Japan	18.0
	US	11.2
	PRC	8.9
Viet Nam	PRC	12.5
	Japan	12.3
	US	9.8

Source: Authors' calculations based on the International Monetary Fund's *Direction of Trade Statistics Yearbook 2006*.

Table A8.2: ASEAN+3 Countries: Most Important Export Partners

Country	Top 3 exports partners	Shares (% of total exports)
Cambodia	United States (US)	48.7
	Hong Kong, China	24.4
	Germany	5.7
China, People's Republic of (PRC)	US	21.4
	Hong Kong, China	16.3
	Japan	11.0
Indonesia	Japan	21.1
	US	11.6
	Singapore	9.2
Japan	US	22.9
	PRC	13.5
	Korea, Rep. of	7.9
Korea, Republic of	PRC	21.8
	US	14.6
	Japan	8.5
Lao People's Democratic Republic	Thailand	19.7
	Viet Nam	15.6
	France	6.0
Malaysia	US	19.7
	Singapore	15.6
	Japan	9.4
Myanmar	Thailand	43.9
	India	12.1
	PRC	6.7
Philippines	US	18.0
	Japan	17.5
	PRC	9.9
Singapore	Malaysia	14.7
	US	11.5
	Indonesia	10.7
Thailand	US	15.4
	Japan	13.6
	PRC	8.3
Viet Nam	US	18.3
	Japan	13.6
	PRC	9.0

Source: Authors' calculations based on the International Monetary Fund's *Direction of Trade Statistics Yearbook 2006*.

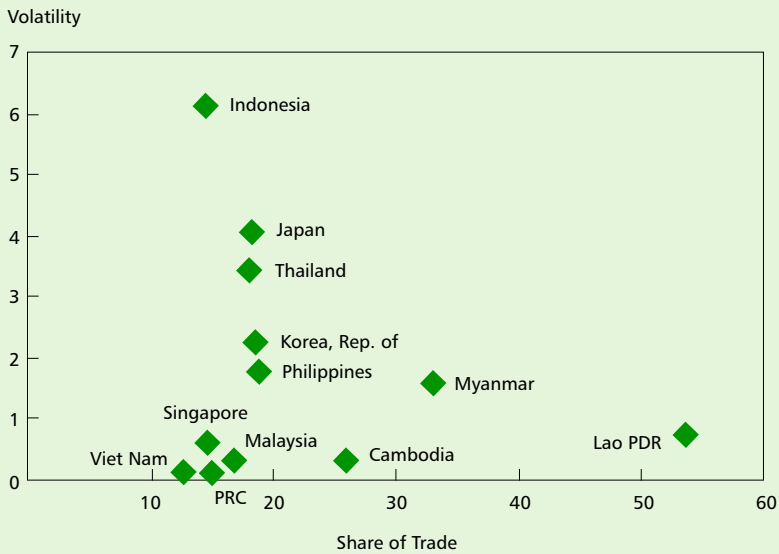
Table A8.3: ASEAN+3 Countries: Trade Weights and Exchange Rate Volatility

	Largest trade	Trade weight	Volatility
Cambodia	United States	25.90	0.320
PRC	United States	14.93	0.128
Indonesia	Japan	14.41	6.148
Japan	United States	18.15	4.071
Korea, Rep. of	PRC	18.43	2.258
Lao PDR	Thailand	53.55	0.767
Malaysia	United States	16.71	0.334
Myanmar	Thailand	33.01	1.576
Philippines	United States	18.66	1.779
Singapore	Malaysia	14.54	0.655
Thailand	Japan	17.96	3.466
Viet Nam	PRC	12.53	0.126

Lao PDR = Lao People’s Democratic Republic, PRC = People’s Republic of China.

Source: International Monetary Fund, *International Financial Statistics*, and *Direction of Trade Statistics*, various issues.

Figure A8.1: Volatility of Bilateral Nominal Exchange Rate and Trade Weights



Lao PDR = Lao People’s Democratic Republic, PRC = People’s Republic of China.
 Source: Authors’ computations.

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Monetary Policy Issues in Multiple-currency Economies

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The monetary situation in most transitional economies is characterized by the multiple-currency phenomenon (MCP). The literature on the use of multiple currencies in a domestic economy distinguishes between two concepts: currency substitution and dollarization (Bruno 1993; Calvo and Vegh 1995; Sahay and Vegh 1995). Currency substitution is defined as the use of a foreign currency as a medium of exchange in a domestic economy. Dollarization is defined as the widespread use of the dollar, and perhaps one or more other currencies, as both a medium of exchange and a store of value alongside the national currency.

The transitional economies of the Greater Mekong Subregion—Cambodia, the Lao People’s Democratic Republic (Lao PDR), and Viet Nam, or the CLV—provide interesting case studies of the MCP. The monetary situation in Cambodia and the Lao PDR are closer to the dollarization definition than to the currency substitution definition. In Cambodia, the dollar serves all the three functions of money: as a medium of exchange, a store of value, and a unit of account. Cambodia’s riel is hardly ever used as a store of value: Almost all time deposits are denominated in dollars. And even the riel’s use as a medium of exchange and unit of account is not as widespread as that of the dollar. Essentially, it is the dollar, rather than the riel, that serves the function of money in Cambodia’s economy.

In the Lao PDR, there are two foreign currencies that are widely used as a substitute for the national currency, the kip: the dollar and the Thai baht. In addition, Viet Nam’s dong and the yuan of the People’s Republic of China (PRC) are used in cross-border trade in the provinces that border Viet Nam and Yunnan Province of the PRC, but only as a medium of exchange. Both the baht and the dollar serve all three functions of money in the Lao PDR. So does the kip, but its use as a store of value is arguably less significant than that of the baht and the dollar.

In Viet Nam, the use of foreign currencies as a medium of exchange or unit of account is now almost negligible, although the United States’ (US) currency is used as a store of value through dollar deposits. Even by this account, among the CLV countries, the share of foreign currency

deposits in M2 is the lowest in Viet Nam. In 2004, for instance, the share was less than a quarter, compared to around two-thirds in both Cambodia and the Lao PDR. Even in the immediate aftermath of the Asian financial crisis of the late 1990s, this share never rose beyond one-third in Viet Nam, while it peaked at 70% in Cambodia in 2001 and 80% in the Lao PDR in 1999 (see Watanabe 2006). For this reason, the discussion that follows will focus on the experiences of Cambodia and the Lao PDR.

9.1 Monetary Policy

9.1.1 Loss of Autonomy

The MCP impairs the ability of central banks to conduct an independent monetary policy because, when a foreign currency can be used as a medium of exchange, capital inflows and outflows automatically change the money supply. An outflow of foreign currency contracts the money supply, while an inflow expands it. An outflow of foreign currency could be deflationary, while an inflow could be inflationary.

The impact of these movements of capital on the money supply, and on domestic activity, could be offset if the central banks were to conduct open-market operations. The lack of monetary instruments in the form of riel- or kip-denominated interest-bearing assets, however, prevents the banks from doing so. Even if they could use such assets, the lack of confidence in these currencies would limit their subscriptions. Other instruments of monetary policy, such as changes in reserve requirements, are unlikely to be effective because the MCP allows capital inflows to become part of the money stock while bypassing the financial system. Thus, the ability to conduct an independent monetary policy depends on both addressing the MCP and improving the financial systems in these countries.

9.1.2 Lender of Last Resort

The lender-of-last-resort function of central banks is also somewhat impaired by the MCP. In the case of a generalized loss of confidence in the banking system, the monetary authorities would not be able to guarantee the whole payments system or to back bank deposits fully. The ability to print money as required is, after all, what allows a central bank to guarantee that all claims in domestic currency will be met. The MCP reduces the capacity of the central bank to print money, and thus impairs its ability to perform its function as guarantor and lender of last resort.

Calvo's (2001) qualification that domestic banks can have access to liquidity through sources other than the printing press of the central bank would not apply in Cambodia or in the Lao PDR because of the weakness of their financial systems.

9.1.3 Inflation Tax

There is a potentially positive side to the inability of governments to conduct discretionary monetary policy in the context of the MCP. An issue related to seigniorage, and which operates through a government's ability to issue money that is accepted by the public, is inflation tax. This is a hidden tax that redistributes resources from the public to the government, but without any net change in the economy.

To illustrate how this works, assume that Cambodia is free of the MCP and that the riel is the only money used in the economy. The government decides to run a budget deficit by printing money rather than by raising taxes. In a riel economy, the government could now purchase additional goods and services without increasing taxes because it would be the first to spend the money that it prints. The government's additional purchases would be paid for by the citizens who hold their wealth in nominal balances.

If the printing of money resulted in a doubling of the money supply, say, then eventually the general price level would also have to double. Citizens who held nominal balances, or whose incomes were not indexed to the inflation rate, would find that their purchasing power had been halved as a result of the doubling of prices. Their loss of purchasing power would, in effect, be their inflation tax.

Transitional economies like Cambodia, the Lao PDR, and Viet Nam cannot use inflation tax to finance higher government spending because the opportunities offered by the MCP for foreign cash transactions reduce the costs of tax evasion and facilitate participation in the "black" economy. This weakens a government's ability to command real resources from the private sector, and causes or deepens fiscal deficits (Feige and Dean 2002).¹ Indeed, persistent fiscal deficits are a characteristic of all three economies, so they benefit from the safeguard provided by the MCP against inflationary financing.

In this respect, the MCP imposes a certain discipline on monetary policy. Moreover, eliminating access to inflationary finance of this type can decrease the risk of currency and balance-of-payment crises, reduce the level and volatility of interest rates, and ultimately stimulate growth. It can also avoid distributional or equity concerns associated with the impact of government-induced inflation on different groups in society.

¹The shifting of economic activity toward the unreported economy distorts macroeconomic information systems, thereby adding to the difficulty of formulating macroeconomic policy. See Feige (1990).

9.2 Exchange Rate Policy

9.2.1 Defining the Exchange Rate in Multiple-currency Economies

The first point to note about exchange rate policy is that the MCP complicates the definition and measurement of the exchange rate itself. In the Lao PDR, for instance, there are at least three possible definitions of the nominal exchange rate: (i) the kip–dollar exchange rate, (ii) the kip–baht exchange rate, and (iii) “no exchange rate.”

The kip–dollar exchange rate is the benchmark exchange rate. But the kip–dollar market is relatively thin, with a limited turnover compared with foreign exchange markets in most other countries because the kip is not traded internationally. In such a thin market, the Bank of the Lao PDR can intervene to influence this rate. But is this exchange rate policy? This question is tantamount to asking if the kip–dollar rate is the relevant definition of the exchange rate in the Lao PDR. It would have been the most relevant if there were no MCP. With the MCP, however, it is perhaps the least relevant definition in the Lao PDR.

The kip–baht exchange rate is the closest proxy to a trade-weighted exchange rate in the Lao PDR because most of the country’s trade is conducted with Thailand. Again, this exchange rate is less important than it would have been without the MCP.

In the “no exchange rate” scenario, the MCP could produce an outcome similar to that of a permanently fixed exchange rate. How could such a situation arise? If prices charged by exporters to the Lao PDR were set in dollars (or baht), and the prices of these goods in the domestic market were also set in dollars (or baht), then movements in the kip–dollar exchange rate, the kip–baht exchange rate, or any other definition of the exchange rate would not enter into the pricing decisions regarding imports into the Lao PDR. Similarly, if prices of Lao PDR exports were determined in world markets in dollars or baht, movements in the exchange rates described above would not affect prices. In these situations, even the term “exchange rate” would be a misnomer because trade would occur as if there were no exchange rate.

9.2.2 The “No Exchange Rate” Scenario

The “no exchange rate” definition is likely to be the most relevant to the Lao PDR. If this definition does apply, adjustments to economic shocks will require direct changes to prices because the nominal exchange rate will not be able to adjust. In other words, the pass-through of exchange rate changes to prices of imports will be complete, while the pass-through of

changes to prices of exports will be zero.² This is the same as assuming that prices of traded goods are set in dollars.³ (Table A9.1, in the Appendix, considers this scenario in more detail, as well as alternative scenarios in which prices are set in baht and kip.) In this context, the *real* exchange rate movements required to move the economy back toward equilibrium following an economic shock will have to be induced by price changes rather than by nominal exchange–rate changes. This will have to involve adjustments in the rewards paid to the factors of production, and it will most likely be wages that will have to bear the brunt.

If adjustments to economic shocks must occur through changes in wages, rather than through changes in nominal exchange rates, there will be policy implications. For one thing, there are likely to be nominal rigidities in the labor markets that limit—or at least slow down—the adjustments to external shocks. Even when there is significant unemployment, wages rarely adjust quickly, or indeed fully, to demand–supply imbalances. There may also be an asymmetry in the response of wages. Depending on labor market conditions, and on such factors as the level and strength of unionization, nominal wages may be resistant to downward adjustments.

If nominal wages are initially close to subsistence levels, then any downward adjustment in response to an external shock will be especially difficult. Thus, an adjustment mechanism that requires changes in wages instead of changes in nominal exchange rates is a relatively inefficient instrument. It could result in social costs arising from the under-utilization of resources such as labor and capital.

²The term “exchange rate pass-through” refers to the degree to which exchange rate changes are reflected in the destination currency prices of traded goods. To illustrate, consider the case in which the small-country assumption holds for a non-MCP country like Australia. On the export side, it is the prices received by Australia’s exporters in Australian dollars (A\$) that must adjust to the exchange rate change, so that the selling price of exports in foreign currency remains unchanged. Export price pass-through is said to be zero. On the import side, we would expect the selling prices of imports in A\$ to reflect fully the exchange rate change, and in this instance import–price pass-through is said to be complete, or 100%. For a detailed discussion on the relationship between exchange rates and the prices of internationally traded goods, see: Menon (1995, 1996).

³It is important to clarify what we mean when referring to a currency in which prices are set. Note that this concept is independent of which currency (baht, kip, or dollar) is used in transactions or contracts; it only requires that prices be set (although not necessarily paid) in that currency. When a price is said to be set in dollars, for instance, this implies that the dollar price before and after an exchange rate movement remains unchanged. Thus, the exporter’s receipts in dollars—and the importer’s payments in dollars—are unaffected by the change in the exchange rate. Having noted this, we will assume for the sake of simplicity, that the currency in which prices are set and the currency in which prices are paid are the same. This will presumably facilitate the connection between the definition of the exchange rate and the currency in which prices are set (Appendix).

9.2.3 Other Definitions of the Exchange Rate

If the most relevant exchange rate in the Lao PDR is the kip–baht (or trade-weighted) index, then economic and financial conditions in the country's trading partners, rather than conditions within the Lao PDR itself, will be the main determinant of the Lao PDR's international competitiveness. Domestic policy autonomy will be greatly compromised as a result.⁴

It should be noted that, no matter which definition of the exchange rate applies, exchange rate policy will not be an effective option for the Lao PDR in the presence of the MCP. Even if the exchange rate were not "fixed," the loss in domestic autonomy associated with the trade-weighted index would limit any discretionary power to conduct exchange rate policy. In other words, the inability of the Bank of the Lao PDR to maintain an independent monetary policy, as noted above, would make it pointless to pursue an exchange rate policy.

Although the kip–dollar exchange rate is unlikely to affect the Lao PDR's terms of trade, retail prices in domestic markets might respond to changes in this rate (Appendix, Table A9.1). Such a change would affect the purchasing power of incomes, depending on whether they are paid in kip or dollars. Recently, the trend has been for the kip to depreciate against the dollar. If domestic prices are determined (or fixed) in dollar terms, then the purchasing power of workers and owners of capital receiving their wages or revenues in dollars will remain unchanged, while that of workers and capitalists receiving their incomes in kip will fall (in the absence of indexation).

If domestic prices are set in kip, then the purchasing power of workers and owners of capital receiving their wages or revenues in dollars will increase, while that of workers and capitalists receiving their incomes in kip will remain unchanged. In either case, income distribution would likely become more unequal, favoring those paid in dollars. Thus, the MCP may be contributing to increasing inequality in the distribution of income in the Lao PDR.

9.2.4 Positive Aspects of the Multiple-currency Phenomenon in Relation to Exchange Rates

The discussion so far has emphasized the negative aspects of the inability to pursue exchange rate policies in a monetary environment characterized by the MCP. But are there any advantages in all of this? There are at least two. The first relates to price stability and the second to exchange rate protection.

⁴While very few small trading nations are insulated from economic and financial conditions in the global economy, the existence of this type of exchange rate would mean almost no domestic autonomy. The loss of autonomy would be much greater than that implied by the status of a "small" country in the international trading sense.

PRICE AND EXCHANGE RATE STABILITY

Floating exchange rates have displayed considerable variability, often characterized by the short-run volatility (sometimes on a day-to-day basis) and medium- to long-term misalignments of currencies. Both effects can increase the risks associated with international trade and investment (Williamson 1983; IMF 1984). By contrast, fixed exchange rates offer some benefits in a multiple-currency economy, including exchange rate and price stability. Thus, to the extent that domestic and international transactions are conducted in the same currency, thus mimicking a fixed or even a nonexistent exchange rate, the MCP dampens the effects of short-run volatility associated with floating exchange rates.

EXCHANGE RATE PROTECTION

The concept of exchange rate protectionism was introduced by Corden (1981), and usually refers to the idea that, if a country's exchange rate is artificially undervalued, the country will import less and export more than it would with a market-determined exchange rate. An undervalued currency stimulates demand for all domestically produced tradable goods, and improves the competitiveness of the country's exports. At the moment, the US accuses the PRC of doing this by refusing to allow its currency to float freely. Like any form of protection, exchange rate protectionism results in inefficiencies that distort the allocation of resources—in this case, the allocation between tradable and non-tradable sectors.⁵ Lacking the ability to manipulate the exchange rate artificially, MCP economies cannot engage in exchange rate protectionism.

9.3 Summary and Conclusions

The MCP involves the use of foreign currencies in the presence of a domestically issued currency. Foreign currencies fulfill all three functions of money in Cambodia and in the Lao PDR, but only the store-of-value function in Viet Nam.

The MCP has implications for both monetary and exchange rate policies. It significantly curtails the ability of central banks to implement independent monetary policies, and limits their capacity to act as lender of last resort in the event of a crisis. On the positive side, the MCP imposes a discipline on governments by limiting their ability to finance government over-spending through the inflation tax. Given the chronic deficits in

⁵This form of protection, unlike tariff protection, can only be provided to the tradable sector as a whole, not to individual industries.

these transitional economies, this constraint serves as a particularly useful safeguard.

The inability to conduct an independent monetary policy implies the same for exchange rate policy. Furthermore, given that the MCP may result in a situation where there is effectively “no exchange rate,” the role that the exchange rate could play in macroeconomic adjustments is nonexistent. When real exchange rate changes have to be accommodated through changes in wages, the adjustment can be slow and painful. On the positive side, however, the MCP effectively offers the benefits of a fixed exchange rate in terms of stability and certainty. Moreover, the MCP prevents the manipulation of the exchange rate to protect or artificially promote the tradable goods sector.

Appendix

Exchange Rates and Prices in Multiple-currency Economies: A Taxonomy

To understand the relationship between exchange rates and prices in multiple-currency economies, we provide in this Appendix a taxonomy that focuses on the currency in which prices of traded goods are set. We employ the Lao People’s Democratic Republic (Lao PDR) as a case study, and consider only imports because the pattern for exports is symmetrical.

Assume that there is a one-time depreciation of the kip against the baht and the dollar.⁶ Assume further that the kip depreciates by 10% against the baht and 80% against the dollar. This would imply that the depreciation of the baht against the dollar is about 70%. How do these currency movements affect: (i) the receipts of the Thai exporter? (ii) the prices paid by the Lao PDR importer? and (iii) the retail prices of imports in the Lao PDR market? The answer to these questions largely depends on the currency in which prices are set.

Table A9.1 summarizes the outcomes in relation to different scenarios involving price setting. In this table, there are two prices and three currencies. The two prices are the export price, set by the exporter, and the retail price of the import, set by the domestic retailer in the Lao PDR. We assume that the importer must accept the price charged by the exporter, and that the importer pays in either baht or dollars (i.e., the kip is not accepted by the exporter in payment). The exporter can set the price

⁶We assume a one-time depreciation, rather than a staggered depreciation, to avoid the complications that can arise from having to model expectations. In our simple analysis, introducing expectations would complicate the analysis without offering any compensating insights.

Table A9.1: Effect of Currency Price Setting on Prices in Multiple-currency Economies

Currency that prices are set in	Exporter's receipts (Thai baht)	Importer's (US dollar)	Payment (Thai baht)	Retailer's		Price (Lao PDR kip)
				(US dollar)	(Thai baht)	
Thai baht	No change	Decrease	No change	Decrease	No change	Increase
		Change (baht-dollar)		Change (baht-dollar)		Change (kip-baht)
US dollar	Increase	No change	Increase	No change	Increase	Increase
	Change (baht-dollar)		Change (baht-dollar)		Change (baht-dollar)	Change (kip-dollar)
Lao PDR kip	Decrease	Decrease	Decrease	Decrease	Decrease	No change
	Change (kip-baht)	Change (kip-dollar)	Change (kip-baht)	Change (kip-dollar)	Change (kip-baht)	

Lao PDR = Lao People's Democratic Republic.

Note: "Change" relates to the percentage change in the exchange rate identified. For example, Change (kip-dollar) refers to the change in the value of the Lao PDR kip in terms of US dollars.

Source: Author's formulation.

in one of three currencies: the currency of the importing country (i.e., the kip);⁷ the currency of the exporting country (i.e., baht); or a third-country currency (i.e., dollars). These cases correspond to the different definitions of the nominal exchange rate in the Lao PDR discussed earlier, in Section 9.2.1.

If prices of exports are set in kip, then the most relevant exchange rate is the kip-dollar rate. If export prices are set in the currency of the exporting country (i.e., baht), then the exchange rate that matters most is the trade-weighted exchange rate, which we proxy here as the kip-baht exchange rate. If a third currency such as the dollar is used to set prices, then the kip-dollar exchange rate is likely to be relevant. Since both dollars and baht continue to be widely used as money in the Lao PDR, a situation could arise in which the "no exchange rate" scenario discussed in Section 9.2.2 could apply. If export prices are set in dollars (or baht), and retail prices are also set in dollars (or baht), then movements in the kip-dollar (or kip-baht) exchange rate may not matter. This is because dollars (or

⁷The case of the Thai exporter setting his price in kip is the least likely outcome, and is included in Tables A9.1 and A9.2 for completeness only.

Table A9.2: Indicative Percentage Changes in Prices based on Currency Price Setting

Currency that prices are set in	Exporter's receipts (Thai baht)	Importer's payment ^a		Retailer's		Price (Lao PDR kip)
		(US dollar)	(Thai baht)	(US dollar)	(Thai baht)	
Baht	0	-70	0	-70	0	10
		-10	-10			
Dollar	70	0	70	0	70	80
		-80	-80			
Kip	-10	-80	-10	-80	-10	0
		-0	-0			

Lao PDR = Lao People's Democratic Republic.

Note: In the table above, we assume that the percentage changes in the following three exchange rates are: Thai baht-US dollar = -70; Lao PDR kip-US dollar = -80; and Lao PDR kip-Thai baht = 10. These percentages changes are indicative values only. A negative (positive) value indicates depreciation (appreciation).

^aThe figures in parentheses in the two columns headed "Importer's Payment" refer to the kip-equivalent of the payment made by the importer. In other words, if the importer does not already hold a stock of Thai baht or US dollars for payment, then this is the number of Lao PDR kip that needs to be exchanged to obtain the requisite amount of foreign currency to be used in payment for the imports (since PDR Lao kip is not accepted in payment for imports).

Source: Author's formulation.

baht) operate, to some extent, as "domestic" units of medium of exchange, and thus any movement in its relative value may not matter in terms of pricing.

The retailer can set a selling price in dollars, baht, or kip.

For illustrative purposes, Table A9.2 presents indicative percentage changes in prices based on the exchange rate movements assumed earlier. (It should be stressed that these are indicative changes, and are presented for illustrative purposes only).

In the first row of Table A9.1, we consider the case of the exporter setting the price in baht. In this scenario, the exporter wishes to preserve his receipts in his home currency (baht), and any change in the exchange rate is reflected in the foreign currency (dollar) price. We find that this results in a sharp decrease in the dollar price paid by the importer. From Table A9.2, we see that this reduction is equivalent to a 70% reduction in dollar terms. If the retailer sets the price in dollars, then the selling price of the import in the Lao PDR market would have fallen by 70%. If the retailer sets the price in kip, then the selling price of the import in the Lao PDR market would have increased by 10%. This is because the baht has appreciated against the kip. Retail prices will remain unchanged if set in baht, but will fall quite significantly if set in dollars.

In the second row of Table A9.1, we assume that the Thai exporter sets the price in dollars. This is the case commonly referred to as the "small-

country assumption” in economic textbooks. In this scenario, the exporter accepts the world price denominated in foreign currency (dollars), and any change in the exchange rate is reflected in his receipts measured in his home currency (baht). The benefit from the nominal depreciation accrues to the exporter, and the Lao PDR importer continues to pay the same dollar price as before the exchange rate movement. If payment is made in baht, which is not uncommon in cross-border trade, then the amount that the Lao PDR importer would have to pay will increase. With respect to retail selling prices in the Lao PDR market, they will either remain unchanged (if set in dollars) or fall (if set in baht or kip).

In the final row of Table A9.1, we look at the case where the exporter sets his price in kip. This is what the textbooks commonly refer to as the “large-country assumption.” In this scenario, the exporter wishes to preserve a price which is fixed in kip, and any change in the exchange rate is reflected in the receipts measured in the home currency (baht). Because the baht has appreciated against the kip, this export pricing rule produces a terms of trade gain for the Lao PDR at the expense of the exporter (in terms of baht receipts). The export receipts in baht decrease by 10%. The importer, however, pays 80% less in terms of dollars, and 10% less in terms of baht. The 80% reduction in dollar import prices is passed-through to retail selling prices if the retailer sets his price in dollars. Similarly, the 10% reduction in baht import prices is passed through to retail selling prices if the retailer sets his price in baht. If the retailer sets his price in kip, however, then there is no change in the retail prices of imports in the Lao PDR market.

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Dollarization and Monetary Stability

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Since the late 1990s, several emerging economies have experienced severe financial crises. This has led to recognition of the need to revise exchange rate and monetary theory, taking into account the conditions under which these economies now operate. Topics such as dollarization and balance sheet effects have become central to the formulation of monetary policy and exchange rate regimes. This is especially relevant for the countries that are the focus of this book: As members of the Association of Southeast Asian Nations (ASEAN), and as economies in transition, Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam save and borrow largely in dollars and, in some cases, also use hard currencies as a means of payment.

The aim of this chapter is to review the experience of various dual-currency economies and analyze the main challenges faced by governments in formulating and conducting monetary policy. To that end, it distinguishes between countries with growing dollarization and those that have managed to revert such trends. In addition to the Asian countries of interest, we look at a number of Latin American countries, Israel, and the Russian Federation. All of these countries have experienced—and in some cases still do experience—a high degree of dollarization. Although there are several other countries within central and eastern Europe where a hard currency (the euro) is frequently used for financing and savings, an important difference between them and the ASEAN countries in transition is that the latter are nowhere close to adopting the dollar as an official currency or to entering into a monetary union. Israel is chosen as a case study because it is one of the few countries in the world that were highly dollarized, and then successfully de-dollarized. The Russian Federation has been trying to de-dollarize in the last 2 years. However, as we will discuss below, it has not managed to lower the deposit dollarization ratio on a sustained basis.

Two issues of special relevance for monetary policy are analyzed in detail: first, whether there is a higher exchange rate pass-through in partially dollarized economies, and, second, how dollarization influences

the design and implementation of monetary policy. When there is a monetary aggregate anchor, for example, an important issue is whether the appropriate concept of money in a dollarized economy should include foreign currency–denominated assets.

10.1 Dollarization

Dollarization can be defined as the holding by residents of a significant share of their assets in foreign currency–denominated instruments.¹ Usually, a distinction is made between official (*de jure*) and unofficial (*de facto*) dollarization. The former refers to cases in which foreign currency is given (typically exclusive) status as legal tender. This implies that the foreign currency fulfills the typical roles of a local currency, for instance, as a unit of account for public contracts. *De facto* dollarization represents situations in which a foreign currency is used alongside the domestic currency as a means of exchange (for transaction purposes, i.e., as currency substitution) or as a means of saving in hard currency (i.e., as asset substitution).² A distinction is also made between domestic dollarization, referring to financial contracts between domestic residents, and external dollarization, which covers financial contracts between residents and non-residents.

Standard models of currency substitution explain the ratio between local and foreign currency nominal balances as a function of the nominal interest rates in each currency. Assuming that uncovered interest parity holds and that inflation is ultimately reflected in the nominal exchange rate, expected inflation should foster currency substitution (Levy-Yeyati 2006). Asset substitution depends on risk and return considerations regarding domestic and foreign assets, but also on the regulatory framework, which may foster one or the other type of investment.

The driving force for currency and asset substitution has generally been economic instability and high inflation. In many emerging economies experiencing hyperinflation, dollarization has become very widespread, as the public has sought to insulate itself from the cost of holding domestic-currency assets (Baliño et al. 1999). An interesting fact is that in many countries inflation has been tamed but dollarization has continued. Only a few have managed to de-dollarize, and mostly only partially.

The so-called hysteresis effect in the dollarization process probably applies more to asset substitution than to currency substitution. This is because foreign currency–denominated assets still provide insurance

¹See Baliño et al. (1999).

²See Levy-Yeyati (2006).

against the possibility of a return to inflation and devaluation of the local currency. The increase in foreign currency–denominated assets in the 1990s, for example, resulted from the return of capital held by residents abroad and of re-monetization, following changes in the law to allow the holding of foreign currency deposits (FCD) in the domestic banking system (Berg and Borensztein 2000). Remittances may also induce asset dollarization if they are kept in foreign currency. This is, for example, the case for Cambodia, the Lao PDR, and Viet Nam (Watanabe 2006).

For many years, the literature on the use of foreign currency as a store of value looked only at asset substitution—that is, situations in which domestic residents hold foreign currency financial assets rather than liabilities. However, after the Asian financial crisis of 1997/98 and the Argentinean crisis of 2001/02, the concept of “liability dollarization” gained momentum. In fact, the private and public sectors in emerging economies often borrow in foreign currency, which can increase the vulnerability of their economies to external shocks. In Indonesia, for example, the private sector was highly exposed to short-term foreign currency–denominated debt, which exceeded the country’s stock of international reserves. Because these loans were mainly used to invest in the non-tradable sector, the large exchange rate devaluations during the crisis led to an explosion in the domestic currency value of the dollar debt—the so-called balance sheet effects—and thus to severe balance-of-payment problems.³

The term “financial dollarization,” which has been adopted in recent years, therefore refers to both assets and liabilities that are denominated in foreign currency.

10.2 Trends in Dollarization: Some Stylized Facts

Since the policy debate in the last 2 years has focused on financial dollarization, we also concentrate on this aspect of dollarization. However, because we could not get data on foreign currency–denominated loans, we only look at foreign currency–denominated deposits in domestic banks. In countries where the number of such deposits is large, bank loans are also expected to be heavily dollarized, because the standard regulation requires banks to match the currency denomination of their assets and liabilities to avoid currency mismatches.⁴

Asset substitution can be measured in different ways, including (i) foreign currency–denominated deposits as a share of total domestic

³Berganza et al. (2004). They analyze the nature of balance sheet effects stemming from foreign currency–denominated liabilities.

⁴See also Rennhack and Nozaki (2006), and Galindo and Leiderman (2005).

Table 10.1: Degrees of Dollarization: Foreign Currency Deposits to Total Deposits in Selected Countries

	1990	1995	1998	1999	2000	2001	2002	2003	2004	Average 1995–2004
High degree										
Cambodia	na	92	93	92	93	95	94	95	96	94
Bolivia	82	78	92	93	92	92	92	93	87	90
Uruguay	86	79	79	81	82	85	88	89	88	84
Ecuador	13	19	37	54	100	100	100	100	100	76
Lao PDR	18	57	76	90	85	83	71	31	33	66
Peru	46	65	64	66	68	66	73	70	68	68
Argentina	47	57	58	62	65	74	1	2	4	40
Moderate degree										
Viet Nam	na	35	37	39	40	42	39	30	30	37
Russian Federation	na	29	44	41	37	34	35	27	28	34
Philippines	21	25	33	32	32	31	30	31	32	31
Indonesia	na	20	22	19	21	20	17	16	15	19
Israel	28	19	21	19	19	19	na	na	15	19
Low degree										
Chile	19	5	6	9	9	11	11	12	10	9
PRC	na	na	8	8	9	8	7	6	5	7
Korea, Rep. of	1	1	5	3	3	4	na	na	na	3
Malaysia	na	na	2	3	3	4	3	3	3	3
Thailand	0.1	0.3	1	1	1	1	na	na	na	1

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, na = not available.
Source: Data from Levy-Yeyati (2006) and authors' calculations.

bank deposits, or as a share of broad money (M2); and (ii) the ratio of residents' FCD to the sum of residents' domestic currency deposits and domestic currency in circulation.⁵ Since there was only reliable data for the first ratio, this will be the focus of our country comparison.⁶

Table 10.1 shows the ratio of foreign currency–denominated deposits to total bank deposits for a selected group of countries in Asia and Latin

⁵It should be noted that offshore dollar deposits are not included in this measure, even if held by residents. As long as those dollar deposits are not intermediated domestically, they should not bias our measure. This is not always the case, however, particularly in some emerging economies.

⁶The data on foreign currency–denominated bank deposits are mainly taken from Levy-Yeyati and Sturzenegger (2005).

America, as well as Israel and the Russian Federation. The country sample is divided into three groups ranging from low to very high dollarization. Countries are ranked by the average of their dollarization ratio for the time span available, 1995–2004. Bolivia and Cambodia are the most highly dollarized economies, with FCD accounting for around 90% of total bank deposits. Countries with low levels of dollarization—such as Chile, the People’s Republic of China (PRC), the Republic of Korea, Malaysia, and Thailand—have FCD of less than 10% of total deposits.

Countries can also be divided into those that have increased their proportion of dollar deposits and those that reduced them or maintained them at a relatively constant level. Among the countries that have managed to de-dollarize, at least to some extent, two distinctive groups can be found: those that did so unilaterally by legal means and those that left it to market forces to reduce the proportion of dollar deposits.

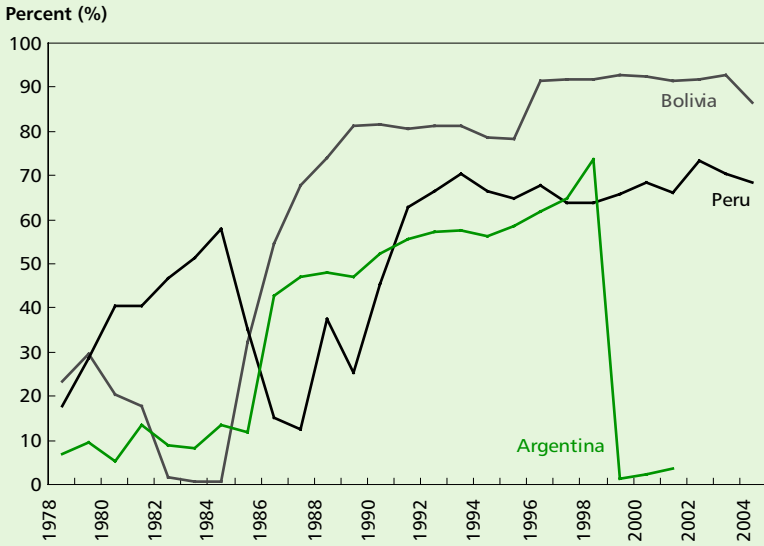
Within the first group (those with increased dollarization), the most obvious example is Argentina, which obliged its residents—without prior notice—to convert their FCD into pesos in the wake of the 1999 crisis. Bolivia and Peru also tried to de-dollarize by introducing serious limits on the availability of FCD. But after some years, they were forced to allow dollar deposits once again because of increasing capital flight. Since then, both countries have remained highly dollarized. Whether Argentina will be successful in maintaining its current low dollarization without suffering from disintermediation remains to be seen (Figure 10.1).

In Chile, the Russian Federation, and Viet Nam, the ratio of FCD to total deposits declined by more than 15% during the early 1990s (Figure 10.2). The trend, however, was reversed for a few years; and only recently has the ratio of dollar deposits started to fall again, particularly in the Russian Federation and Viet Nam.

Israel is the only country in our sample where the decline in the proportion of FCD has been large and relatively stable since the trend started back in the 1980s (Figure 10.3). Dollar deposits in Israel amounted to over 50% of total deposits in the early 1980s, but by 2004 they accounted for only 15%.

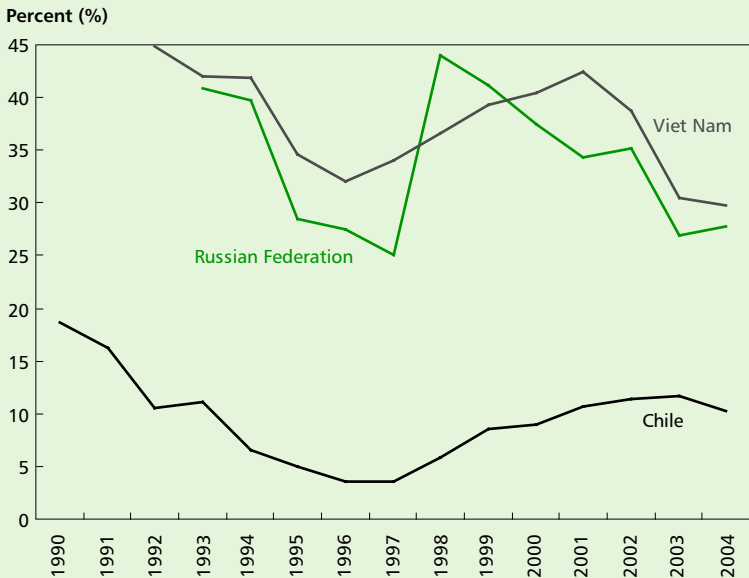
Ecuador, in turn, experienced increasing dollarization in the years before it adopted the dollar as legal tender, in 2000 (Figure 10.4). In contrast to most other economies that have a very high degree of dollarization, Ecuador had not been highly dollarized in the first half of the 1990s.

Figure 10.1: De-dollarization through Administrative Measures: Argentina, Bolivia, and Peru (Foreign currency deposits as a percentage of total deposits)



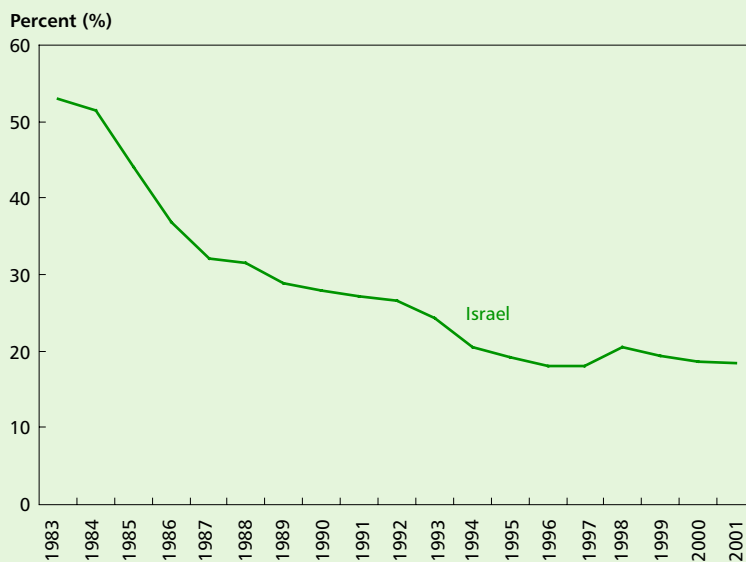
Source: Data from Levy-Yeyati (2006) and authors' calculations.

Figure 10.2: Market-driven De-dollarization: Chile, Russian Federation, and Viet Nam (Foreign currency deposits as a percentage of total deposits)



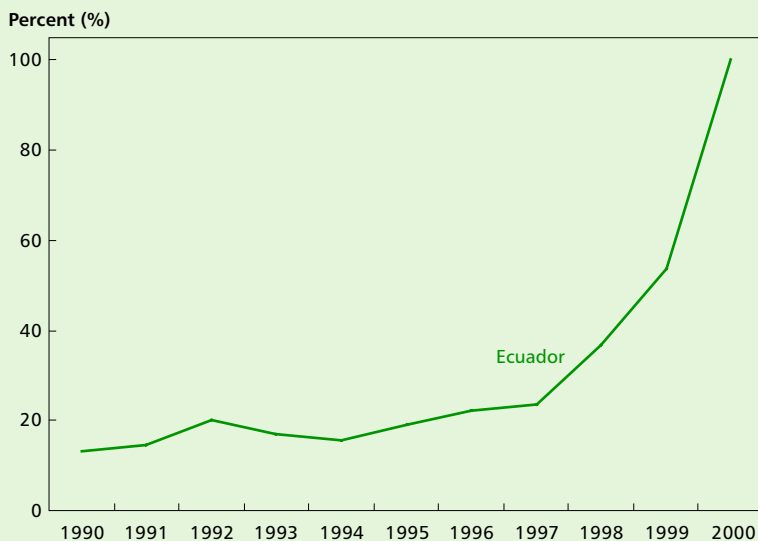
Source: Data from Levy-Yeyati (2006) and authors' calculations.

Figure 10.3: Successful De-dollarization: Israel
(Foreign currency deposits as a percentage of total deposits)



Source: Data from Levy-Yeyati (2006) and authors' calculations.

Figure 10.4: Increasing Dollarization: Ecuador
(Foreign currency deposits as a percentage of total deposits)



Source: Data from Levy-Yeyati (2006) and authors' calculations.

10.3 Dollarization and Monetary Policy

The parallel circulation of a foreign currency, either as means of payment or as a store of value, is bound to affect the conduct of monetary policy and, ultimately, the inflation rate. The theoretical literature does not offer a clear answer as to how dollarization can affect monetary policy. The base case is probably the model by Cowan and Do (2003), in which dollarized liabilities can, on the one hand, help correct a devaluation bias by creating a disciplining effect on the central bank but, on the other, can also put the economy in a dollarization trap when information is imperfect. A central bank that lacks credibility may face high levels of dollarization, making a monetary policy aimed at stabilization hard to implement and credibility very costly to build. As a matter of fact, emerging countries are generally subject to imperfect information, so the model is tilted toward dollarization being a burden for monetary policy. However, given the differences among countries, it seems useful to analyze the issue empirically.

In this section, we first assess how dollarization may affect inflation, in particular the pass-through from the exchange rate to prices. Second, we review how it may influence the effectiveness of monetary policy, particularly the stability of money demand. Finally, we draw some conclusions regarding the conduct of monetary policy.

10.3.1 Monetary Policy and Inflation

As already mentioned, dollarization is typically a reaction to economic instability and high inflation. This has been the case for most of the highly dollarized economies in our sample. In Argentina, Bolivia, Uruguay, and Viet Nam, for example, inflation reached over 300% in the late 1980s. In Cambodia, inflation exceeded 100% in the beginning of the 1990s. However, the fact that inflation has decreased dramatically in these countries over the last decade (Table 10.2) does not seem to have led to significantly lower levels of dollarization.⁷

The relationship between inflation and dollarization is far from clear. Although the average inflation rate in highly dollarized economies is consistently higher than in less dollarized economies (Table 10.2), it is difficult to argue that dollarization has been an impediment to stabilizing inflation. This is because in most dollarized countries, inflation has been on the decline and has reached single digit levels in the most recent period.

⁷Reinhart et al. (2003). They analyze the relationship between the degree of dollarization and the duration of disinflation, and come to the conclusion that dollarization had no considerable effects on the duration of the disinflation. Moreover, successful disinflation generally was not accompanied by declines in the degree of dollarization.

Table 10.2: Inflation Rates in Selected Countries

	1990	1995	1998	1999	2000	2001	2002	2003	2004
High Dollarization Degree									
Cambodia	na	1	15	4	(1)	(1)	3	1	4
Bolivia	17	10	8	2	5	2	1	3	4
Uruguay	113	42	11	6	5	4	14	19	9
Ecuador	48	23	36	52	96	38	12	8	3
Lao PDR	36	20	91	128	25	8	11	15	10
Peru	7,485	11	7	3	4	2	0	2	4
Argentina	2,314	3	1	(1)	(1)	(1)	26	13	4
<i>Average</i>	1,669	16	24	28	19	7	10	9	6
Moderate Dollarization Degree									
Viet Nam	67	6	7	4	(2)	0	4	3	8
Russian Federation	na	197	28	86	21	21	16	14	11
Philippines	14	8	10	7	4	6	3	3	6
Indonesia	8	9	58	21	4	12	12	7	6
Israel	17	10	5	5	1	1	6	1	0
<i>Average</i>	26	46	22	24	6	8	8	6	6
Low Dollarization Degree									
Chile	26	8	5	3	4	4	2	3	1
PRC	3	17	(1)	(1)	0	1	(1)	1	4
Korea, Rep. of	9	4	8	1	2	4	3	4	4
Malaysia	3	3	5	3	2	1	2	1	1
Thailand	6	6	8	0	2	2	1	2	3
<i>Average</i>	9.3	7.8	5.0	1.2	1.9	2.3	1.4	2.1	2.6

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, () = negative, na = not available.

Sources: Data from the International Monetary Fund's *International Financial Statistics Yearbook*.

Table 10.3: Granger Causality Test in Selected Countries

Country	Inflation Granger-causes dollarization ^b	Dollarization Granger-causes inflation ^a
Bolivia	no (1.118)	no (0.349)
Cambodia	no (2.401)	no (2.485)
Cambodia ^b	no (0.374)	no (1.102)
Lao PDR ^b	yes (2.506) ^c	no (0.420)
Viet Nam ^b	no (0.509)	no (0.802)

Lao PDR = Lao People's Democratic Republic.

^aThe null hypothesis tests whether a variable X does not Granger-cause variable Y. ^bResults according to de Zamaróczy and Sa (2003). ^cThe rejection of such a hypothesis at the 5% level.

Source: Author's computations.

Given the trends discussed above, one might ask why dollarization has actually contributed to decreasing inflation. To help disentangle the issue—within the limits of a descriptive chapter such as this one—we examine the relationship between inflation and dollarization using a simple Granger causality test.⁸ Unfortunately, we could run the tests only for Bolivia and Cambodia because these were the only countries for which monthly data on currency-denominated deposits are readily available. However, de Zamaróczy and Sa (2003) did conduct a similar Granger causality test for Cambodia, the Lao PDR, and Viet Nam.⁹ Our results, as well as theirs, are shown in Table 10.3, which indicates that dollarization does not Granger-cause inflation, or rather disinflation, in the midst of the most recent trends. The statistics shown in the table below are the conventional F-statistics of this type of test.

Another important issue in the debate about monetary policy and inflation in dollarized economies is whether the pass-through from exchange rates to prices increases under pervasive dollarization. This is important because it would constrain monetary policy. The reason behind such an a priori assumption is that non-tradable goods are priced in foreign currency so that exchange rate variations in a dollarized economy might pass-through to domestic inflation for a broader set of goods than in a non-dollarized economy.¹⁰

⁸One should be aware that inflation is a multifaceted concept that can hardly be determined by a single variable, at least in the short run. Still, the exercise seems useful as a tool to analyze the driving forces between the two variables.

⁹They approximated dollarization as the ratio of FCD to M2, whereas we used the FCD to total deposit ratio.

¹⁰This issue is also discussed in the Appendix to Chapter 9 of this volume.

We now move to analyzing whether dollarization affects the degree and speed of transmission of nominal exchange rate movements into domestic inflation. We estimate a 4-variable vector autoregression (VAR) model, country by country, in which we include the nominal exchange rate, the consumer price index (CPI), the money supply, and the output gap.¹¹ All variables, except for the output gap, are transformed into log differences.¹² In the selection of the lag order of the VAR model, several criteria are evaluated.¹³ The output gap is constructed by applying the Hodrick-Prescott (HP) filter to real gross domestic product (GDP). The definition of money supply used is M1. We use the nominal exchange rates against the dollar, because no data on the nominal effective exchange rates were available for several of the countries in our sample. In any case, because the United States (US) is one of the most important trade partners for many of these countries, and several others peg their currency to the dollar, we expect this bilateral exchange rate to be a good proxy for the nominal effective exchange rate. The countries in our sample are the same as those shown in Tables 10.1 and 10.2: our group of emerging economies ranging from low to moderate to high levels of dollarization.¹⁴

Figures 10.5 to 10.7 show the estimated impulse responses (over 24 months) of the CPI to a one standard-deviation shock in the exchange rate in each country. More precisely, the vertical axes show the percentage changes of domestic prices in response to the exchange rate shock; the horizontal axes report the time horizon in which the shock may impact the price variable. The point estimate of such impact is shown by the full line within each graph. The dotted lines, in turn, represent the plus/minus two standard error bands for such point estimates.¹⁵

The response graphs of the most dollarized countries (Figure 10.5) show that the price increase is positive and statistically significant

¹¹Our VAR model is based on the usual Cholesky decomposition. Variables are ordered in the following way: Output gap is ordered first, base money second, nominal exchange rate third, and the price variable fourth. For a similar approach, see Ito and Sato (2006).

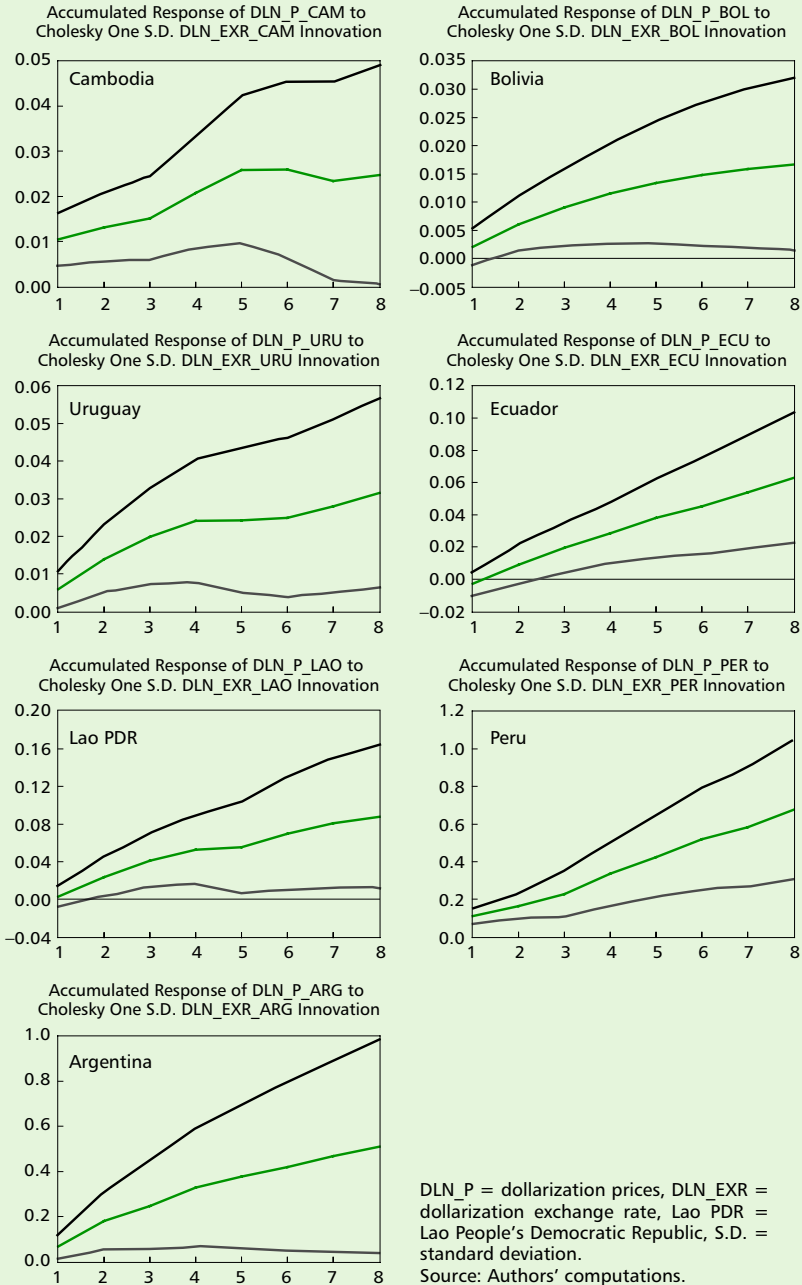
¹²Prior to this, all series have been found to be I (1) and not to be co-integrated so as to be able to proceed with the VAR estimation.

¹³Based on different specification tests, we decide to trust the Akaike information criterion. The VARs are estimated with the following lag lengths: Argentina (4), Bolivia (1), Cambodia (3), Chile (4), the PRC (5), Ecuador (4), Indonesia (5), Israel (4), the Republic of Korea (4), the Lao PDR (5), Malaysia (4), Peru (5), the Philippines (4), the Russian Federation (2), Thailand (5), Uruguay (4), and Viet Nam (5).

¹⁴For most of them we used quarterly data from Q4 1986 to Q3 2006. Only for Cambodia, the Lao PDR, and Viet Nam was the sample somewhat shorter and comprised data between Q1 1993 and Q3 2006.

¹⁵The analytic standard errors are used to generate the error bands.

Figure 10.5: Impulse Responses of Inflation to Exchange Rate Variations (High Dollarization Countries)



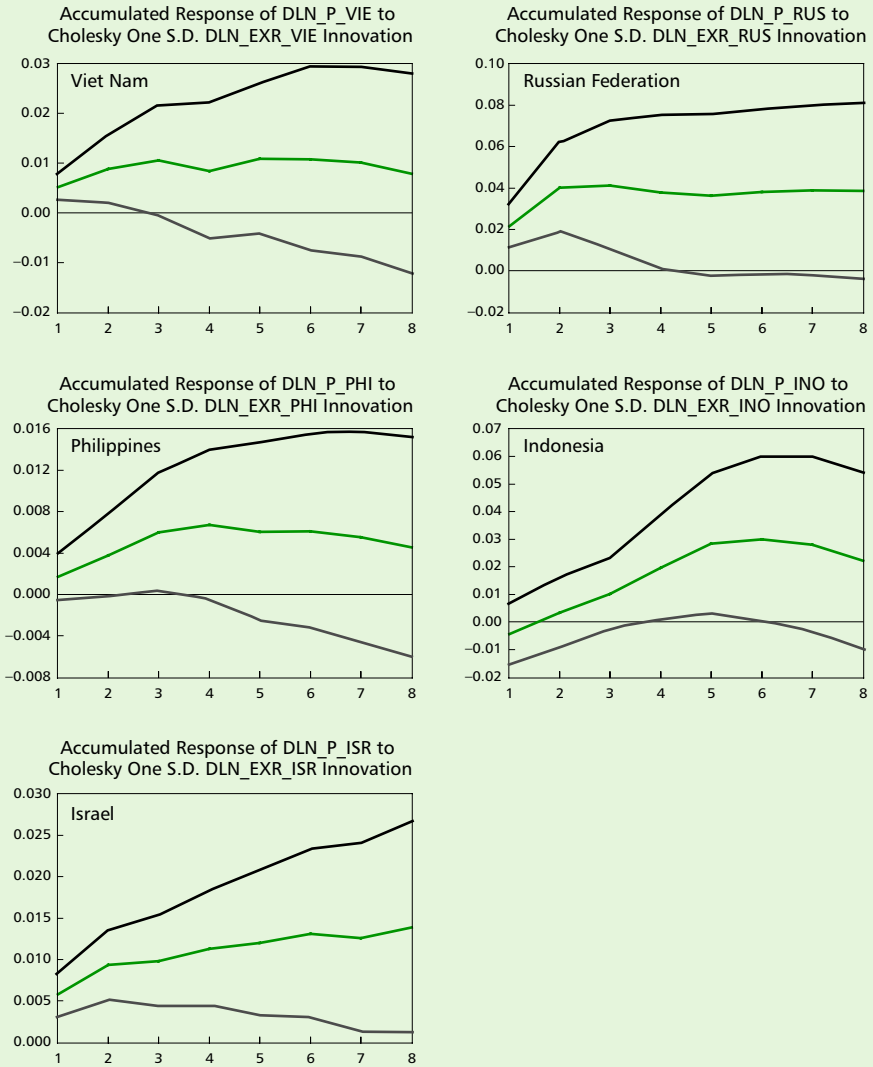
in all of these countries (even though the magnitude differs among them). Argentina, the Lao PDR, and Peru exhibit the largest response to an exchange rate shock, whereas the CPI response to exchange rate depreciation in Bolivia, Cambodia, and Uruguay is somewhat smaller. In all of these countries, the price increase is very persistent. Looking at the countries with a moderate degree of dollarization (Figure 10.6), it becomes evident that the price responses in these countries is not very persistent because the effect of an exchange rate depreciation becomes statistically insignificant after a few periods in most countries, or is not significant at all. Israel is the only exception within this group of countries. Altogether, the magnitude of price increases in countries with a moderate degree of dollarization is, on average, far smaller than in highly dollarized countries.

In the case of the countries with low dollarization (Figure 10.7), the pass-through stemming from a shock in the exchange rate is insignificant for all countries, with the exception of the Republic of Korea. Thus, overall the impact of exchange rate changes on inflation does seem to be affected by the degree of dollarization. To make sure that this result is not driven by the degree of openness, for which we do not control in our VAR models, we look at the countries' trade to GDP ratio. Most of the more open economies belong to the group of countries with low degrees of dollarization, whereas most of the countries belonging to the group with a high degree of high dollarization (with the exception of Cambodia and the Lao PDR) are relatively closed economies. Thus, the results of our impulse response analysis seem not to be driven by the degree of openness of an economy. It is rather the degree of dollarization that plays an important role.

Our results are consistent with those of Reinhart et al. (2003), who use a panel regression to estimate the pass-through. They also show that highly dollarized countries tend to experience a larger pass-through, while the opposite is true for countries with limited dollarization. The observation that the exchange rate pass-through in highly dollarized countries is significantly larger and generally more persistent has important policy implications. This is all the more so if one considers that the volatility of the exchange rate will tend to be greater in dollarized countries—as long as the exchange rate regime allows—because the exchange rate is more sensitive to changes in the domestic money supply or in other variables that influence the money market. This idea will be expanded upon later. All in all, policy makers in dollarized countries will tend to “fear” exchange rate movements more than those in less dollarized countries.¹⁶

¹⁶For a more general discussion of the “fear of floating,” see Calvo and Reinhart (2001), and Reinhart et al. (2003).

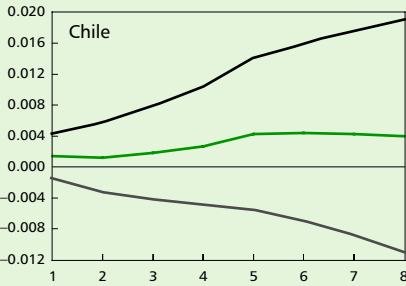
Figure 10.6: Impulse Responses of Inflation to Exchange Rate Variations (Moderate Dollarization Countries)



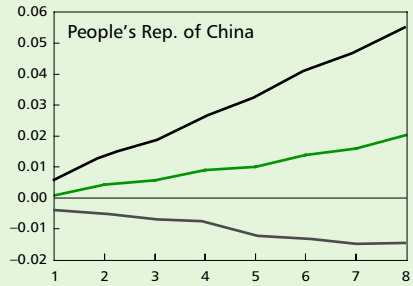
DLN_P = dollarization prices, DLN_EXR = dollarization exchange rate, S.D. = standard deviation.
 Source: Authors' computations.

Figure 10.7: Impulse Responses of Inflation to Exchange Rate Variations
 Low Dollarization Countries)

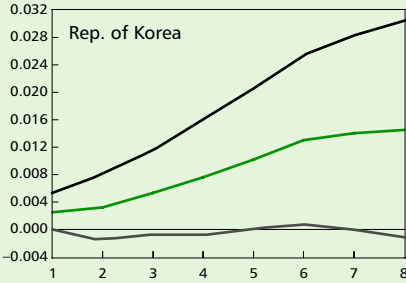
Accumulated Response of DLN_P_CHI to Cholesky One S.D. DLN_EXR_CHI Innovation



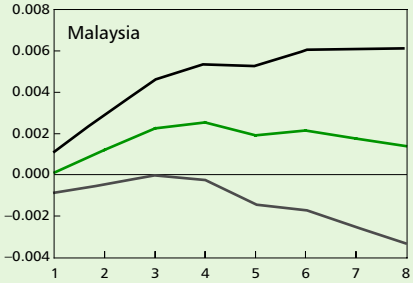
Accumulated Response of DLN_P_PRC to Cholesky One S.D. DLN_EXR_PRC Innovation



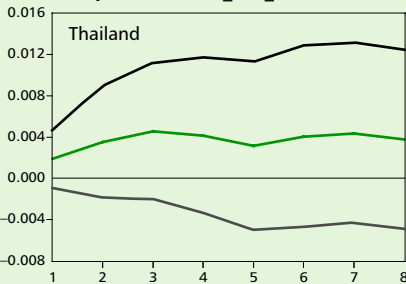
Accumulated Response of DLN_P_KOR to Cholesky One S.D. DLN_EXR_KOR Innovation



Accumulated Response of DLN_P_MAL to Cholesky One S.D. DLN_EXR_MAL Innovation



Accumulated Response of DLN_P_THA to Cholesky One S.D. DLN_EXR_THA Innovation



DLN_P = dollarization prices, DLN_EXR = dollarization exchange rate, S.D. = standard deviation.
 Source: Authors' computations.

10.3.2 Effectiveness of Monetary Policy

A common view among economists is that dollarization makes monetary policy more complicated and less effective. In large part, this view can be attributed to theoretical results from the early literature on currency substitution. They showed that dollarization might increase the volatility of money demand due to the reduced costs of switching from domestic to foreign currency holdings to avoid the effects of inflation. As a side effect, currency substitution should also increase the exchange rate volatility (if the exchange rate regime allows). Calvo and Végh (1992, 1996), for example, show that there is a strong positive correlation between currency substitution and exchange rate volatility. A higher exchange rate volatility results also from the fact that currency substitution makes the exchange rate more responsive to expected changes in domestic money supply and to other factors that affect the money market.

While this concern originally came from the assumption that the demand for foreign currency essentially reflects a search for a second means of payment, a similar argument could be made regarding dollarization as an asset substitution phenomenon: As the flight to readily available foreign currency assets becomes less costly, the demand for a store of value in a dollarized economy can be expected to be more responsive to a monetary expansion or to a change in the exchange rate (Ize and Levy-Yeyati 2006). Hence, the inflation response of monetary shocks should be stronger in dollarized economies. Ize and Levy-Yeyati (1998, 2006) do, in fact, find that the elasticity of the inflation rate to a monetary expansion increases significantly as dollarization deepens. They emphasize, however, that there can still be some scope for monetary policy. In fact, a more intense price response to monetary shocks suggests that a reduction in the rate of money growth would have a stronger stabilizing outcome.

Another strand of the literature emphasizes the weaker monetary transmission in dollarized economies. This is based on the fact that the foreign currency component of M2 cannot be directly influenced by the monetary authorities. Money supply is not set by domestic monetary authorities, but rather by the behavior of agents holding foreign and domestic currency-denominated assets. This should obviously complicate the ability of the authorities to control inflation.

Turning to the control of monetary aggregates, monetary authorities are obviously not able to influence domestic money supply directly, but they might be in a position to manage the monetary base and the reserve requirement rate of banks. Unfortunately, financial intermediation in partially dollarized economies is often limited, and conducted largely in foreign currency. This makes it very difficult for domestic central banks to control even very narrow definitions of money, such as the monetary base or reserve money. De Zamaróczy and Sa (2003) report that this has been the case in Cambodia.

10.3.3 How to Conduct Monetary Policy

A key issue that must be addressed when talking about monetary policy is which intermediate targets to choose. Traditionally, intermediate targeting has implied a pre-announced exchange rate rule or a target on a monetary aggregate. Under the exchange rate rule, monetary policy is very restricted. The monetary authorities stand by to intervene in the foreign exchange market in order to maintain the exchange rate at its pre-announced level or range; the exchange rate serves as the nominal anchor.

Recently, more and more countries have started to adopt explicit *inflation targeting* as a strategy for conducting monetary policy. This involves: (i) the public announcement of numerical targets for inflation, (ii) an institutional commitment by the monetary authority to price stability as the primary goal, (iii) information on the mix of instruments chosen to achieve it, (iv) increased communication with the public about the monetary policy strategy, and (v) the monetary authority's accountability regarding the inflation objectives (Mishkin 2000; IMF 2006). Decisions on monetary policy are then taken based on the deviation of forecasts of future inflation from the announced target. In other words, the inflation forecast basically serves as the intermediate target of monetary policy.

In the following, we look at the implications of dollarization for the conduct of monetary policy. There are different issues, depending on the monetary policy strategy that is chosen. In the case of a monetary aggregate anchor, an important question is whether foreign currency assets should be included in the monetary aggregate targeted. If the main criterion is the target's influence on the price level through transaction demand for money, currency substitution would justify that foreign currency-denominated monetary assets should be included. On the other hand, foreign currency assets that are accumulated as a store of value, rather than as means of payment, would not call for inclusion in the monetary aggregate that central banks decide to target.¹⁷ Against this background, Baliño et al. (1999) test for currency substitution (versus asset substitution) by checking whether foreign currency assets help monetary aggregates to forecast inflation developments more accurately. Their results vary significantly across countries.

In the same vein, Berg and Borensztein (2000) examine the experience of five dollarized countries—Argentina, Bolivia, Peru, the Philippines, and Turkey—and ask which monetary aggregates appear to have the closest

¹⁷As mentioned above, in the case of asset substitution, foreign currency-denominated assets are used as a store of value, but not as a means of payment or a unit of account.

connection to future inflation.¹⁸ They find that a broader monetary aggregate that includes foreign currency deposits is superior to one that does not. They also test whether the reason is their function as a means of payment, as argued by Baliño et al. (1999), but find contrary evidence: that foreign currency cash in circulation, as such, does not improve the forecasting power of narrow monetary aggregates.¹⁹

Unlike monetary targeting, inflation targeting does not require a stable relationship between money and inflation. However, dollarized economies have a number of disadvantages that may impinge on the conduct, and success, of inflation targeting. Important disadvantages include higher exchange rate pass-through effects on prices and the vulnerability of the economy to balance sheet effects. The former will reduce the monetary authorities' control of inflation, the more so under a floating exchange rate regime. The latter may make the exchange rate flexibility required by inflation targeting disruptive and costly.

Despite these concerns, Peru, a highly dollarized economy, has adopted inflation targeting. Leiderman et al. (2006) analyze the challenges faced by Peru compared to non-dollarized inflation targeters, and come to the conclusion that high dollarization *per se* does not rule out the use of inflation targeting as an effective policy. Regarding the “fear of floating” phenomenon faced by highly dollarized economies, the authors argue that “leaning against the wind” interventions on the foreign exchange market are consistent with, and even conducive to, inflation targeting. Moreover, they find that inflation targeting in Peru has resulted in a lower exchange rate pass-through to prices, and a higher pass-through of the policy interest rate to banking rates. It should, however, be noted that the design and implementation of inflation targeting in Peru differ substantially from those for non-dollarized environments (Armas and Grippa 2006). The differences have to do with the inflation forecasting system and the responses of monetary authorities to the risks of dollarization. As Armas and Grippa argue, one possible response would be to reduce a country's vulnerability to large exchange rate depreciations by promoting de-dollarization.

Due to the “fear of floating” phenomenon, dollarized economies often tend to choose the exchange rate as their nominal anchor. This, however, poses two major problems. First, while foreign exchange market interventions by monetary authorities provide implicit insurance against exchange rate risk, both de-dollarization and the development of

¹⁸Berg and Borensztein (2000). They run multiple VAR models on prices and money aggregates. They estimate several VAR models for each of the countries. In some cases, the exchange rate is also included.

¹⁹They approximate dollar currency in circulation based on US Customs Service data on shipments of currency across the US border.

exchange rate risk-hedging instruments by the market are exacerbated, leading eventually to greater financial fragility. Second, by depending on the intensity of foreign exchange market intervention, monetary policy loses influence in the domestic economy as the money supply becomes largely endogenous.

10.4 Country Experiences with De-dollarization

This section reviews a number of country experiences with de-dollarization and draws lessons for the conduct of monetary policy.

Chile's experience is centered on the introduction of indexed instruments to attract investor interest, to the detriment of dollar-denominated assets. Most instruments were indexed to the CPI through the creation of a unit of account called the "Unidad de Fomento" (UF), to which indexed instruments were referred. The success of these instruments can be explained in terms of the credibility of the UF and the public's confidence that it would not suffer from a sudden loss of value. In comparison, the negative experiences of Argentina, Brazil, and Uruguay with indexation suggest that it is not a panacea but requires a number of conditions to be effective. It has been argued that failure of these countries to develop markets in the 1980s and early 1990s was due to a lack of secondary markets for this type of instrument, the weak legal support for the indexation unit, and the difficulties in agreeing on a common indexation measure.

Institutional investors were another important factor, specifically pension funds and insurance companies. By regulation, they had to invest a large share of their portfolio in local instruments. Finally, a clear orientation of monetary policy toward price stability—through the introduction of inflation targeting but also a with clearer mandate—helped reduce investor uncertainty as well as macroeconomic volatility.²⁰

Israel also had a successful experience with de-dollarization. Although there was no direct attempt to de-dollarize the economy, the country began in the early 1990s to pursue policies that moved in this direction—for example, when deciding on the currency composition of public sector issuance. A conscious effort was made to deepen the market for local currency-denominated government bonds. This has obviously come at a cost in terms of higher interest payments paid by the public sector, particularly in a period of high real interest rates. However, the costs have been reduced year by year as the disinflation program started bearing fruit and inflation finally reached the single digits. Apart from

²⁰For more details, see Herrera and Valdes (2004).

“nominalizing” the debt—first through CPI-indexation and later without any indexation—Israel also lengthened the maturity of its public debt. This illustrates that there is not necessarily a trade-off between currency of composition and the maturity of public debt. Finally, the central bank has played a very active role in promoting markets in financial derivatives and other instruments to insure against exchange rate risk. With regard to monetary policy, the Bank of Israel is probably the first emerging country central bank to have introduced inflation targeting, which helped anchor inflation expectations and reduce investor uncertainty about local currency assets.²¹

Among ASEAN countries in transition, Viet Nam is probably the one that has gone furthest in de-dollarization. In Viet Nam, de-dollarization has been associated with a successful disinflation strategy. Goujon (2006) analyzes the monetary and exchange rate policies in Viet Nam that might have led to its control of inflation. He concludes that two steps taken by Viet Nam’s policy makers during the 1990s were decisive: First, the heavily managed-floating exchange regime adopted by the authorities allowed for exchange rate stability, and reduced uncertainty about the value of investing in domestic currency. Second, the authorities introduced a restrictive monetary policy based on targeting M2, which includes FCD.

10.5 Policy Recommendations for De-dollarization

Dual currency circulation and asset substitution are important issues for ASEAN’s transitional economies. The first challenge policy makers confront is the difficulty of measuring dollarization because of its several dimensions and the lack of reliable data. In this chapter, we have offered a quick overview of the degree of dollarization, not only in ASEAN’s transitional economies, but also in several Latin American countries, as well as in Israel and the Russian Federation.

We reviewed the existing evidence on how dollarization may affect monetary policy. Both the literature on this subject and our own empirical results suggest that partial dollarization does not necessarily help reduce inflation. Furthermore, it could actually hamper the conduct of monetary policy insofar as it increases the pass-through of exchange rate changes to prices and requires the monitoring of larger monetary aggregates (i.e., including foreign currency). In addition, partial dollarization can lead to large currency mismatches due to the immediate impact of exchange rate depreciation on foreign currency-denominated liabilities. The 2001/02

²¹For more details, see Galindo and Leiderman (2005).

Argentinean crisis is probably the best example of how severe this problem can be.

Against this background, it is fruitful to analyze the experience of countries that have succeeded in reducing their degree of dollarization. Their strategies can be divided into two classifications: (i) a hands-on approach based on administrative measures to discourage dollarization, and (ii) a more hands-off approach based on good macroeconomic performance and the stability (or appreciation) of the local currency. The paradigmatic case of the first approach is Argentina, but there have been other examples, such as Mexico, Peru, and even Cambodia. Chile and Israel have been more hands-off. While it is probably too early to evaluate Argentina's experience, Bolivia, Cambodia, and Peru did not manage to reduce dollarization through administrative measures. Mexico did, but only years after the measures were taken. Israel's case, on the other hand, shows how macroeconomic measures can help reduce dollarization by restoring confidence and increasing certainty about future developments. On the monetary policy front, the key pillar of Israel's strategy was the introduction of inflation targeting, which seems to have contributed to monetary credibility, and eventually to price stability.

All in all, dollarization is too complex a problem to allow simple rules to work for every country. On the one hand, one could argue that macroeconomic solutions are called for because dollarization clearly has macroeconomic causes. On the other, the so-called "hysteresis effect" behind the dollarization process suggests that government intervention is an important tool.

More generally, economic authorities may want to think about creating the right incentives for residents to hold, and conduct transactions in, the local currency. Both market forces and government intervention should reinforce each other.

As for market forces, reducing price uncertainty is the key because this would reduce the need for consumers and firms to insure against inflation surprises. One important measure would be to strengthen the institutional framework of the monetary authorities. Europe's experience shows that a clear focus on price stability and central bank independence are very important improvements on the institutional side.

As for government intervention, prudential regulation should aim at limiting the possibility that agents will mis-price risk due to dollarization. More specifically, regulation should discourage financial intermediaries from lending in foreign currency to agents who cannot generate foreign currency revenues, but are attracted by the lower cost of financing. While this measure would be reasonable in terms of financial stability, it should be noted that it may encourage disintermediation. This is generally the case for most administrative measures that aim to reduce dollarization.

Between the hands-off and hands-on approaches, there are additional ways in which authorities can discourage dollarization related to financial market development. The main one is the introduction of local currency-denominated instruments, which can still be appealing to domestic investors. Chile and Israel are two examples of countries that successfully introduced indexed instruments (generally CPI-indexed), but Argentina and Uruguay in the late 1970s offer counterexamples. All in all, indexed instruments should be viewed as a useful but transitory tool to offer investment instruments that can compete with foreign currency ones. In the long run, local currency instruments should be developed, as well as forward markets to cover exchange rate risk.

Taken together, a policy agenda for de-dollarization would seem to require a three-pillar approach: (i) ensuring that regulation encourages, or at least does not penalize, intermediation in the domestic currency; (ii) promoting the use of local currency, or at least indexed, instruments; and (iii) ensuring that the institutional set-up of the central bank, as well as its monetary policy strategy, are geared toward reducing uncertainty about the value of the local currency. This obviously implies that price stability should be the central bank's main objective, and that the central bank should be independent so that it can pursue that goal.

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Incentives, Initiatives, and Obstacles to Monetary Cooperation

Erik Klär and Stefan Kooths

In analyzing the incentives for increased monetary cooperation in Asia, the natural starting point is to define the economic policy goals that could be expected to improve cooperation among countries. One can presume there would be broad agreement on macroeconomic stability, sustainable economic growth, and a convergence of living standards within the region as the principal policy targets in Asia (as they are elsewhere in the world). If these are the goals, then the question is: Is regional monetary cooperation an effective means to achieving these ends? And the answer would be: Yes, monetary cooperation can be beneficial if it is practiced in such a way that it:

- contributes to greater internal (intra-regional) and external exchange rate stability, reduces risks, and thus promotes increased trade and investment within the region;
- prevents competitive exchange rate devaluations (beggar-thy-neighbor strategies), which lead to misallocations and possibly to decreases in trade; and
- becomes instrumental in mitigating the effects of economic crises such as the Asian financial crisis of 1997/98, or indeed reduces the likelihood of another such crisis occurring in the first place.

In the aftermath of the Asian financial crisis, ASEAN+3 countries,¹ not surprisingly, focused primarily on the last point, because preventing a recurrence of the disastrous consequences of that period appeared to be the most urgent challenge at the time. For this reason, we will look initially at the numerous recent initiatives to promote cooperation in preventing

¹Composed of members of the Association of Southeast Asian Nations—Brunei Darussalam, Cambodia, Indonesia, the Lao People’s Democratic Republic (Lao PDR), Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam—plus the People’s Republic of China (PRC), Japan, and the Republic of Korea.

capital account crises; then we will address monetary and exchange rate cooperation in a narrower sense.

11.1 Financial Crisis, Crisis Management, and Creation of Regional Mechanisms

11.1.1 The Asian Financial Crisis

The Asian financial crisis of 1997/98 has prompted a huge amount of research that fills entire shelves in economics libraries. There is no need, therefore, to reiterate in detail what has been discussed comprehensively elsewhere. A brief account highlighting what we deem the most important aspects of the crisis will suffice.²

In the early to mid-1990s, East Asia's "tiger economies" were flooded with international—and predominantly short-term—capital because of their excellent macroeconomic performance, which promised much higher returns on investments than the financial markets from which the capital flowed. Moreover, there was no perceived exchange rate risk because the currencies of many East Asian economies were pegged to the dollar. The capital inflows were far in excess of what was required to finance the countries' current account deficits, and they were also inessential to the financing of productive investment, for which ample funds were available domestically, given the high savings rates in these countries. Because national authorities continued to support the currency peg, incoming funds mainly showed up as increases in foreign reserves, with a simultaneous buildup of surplus liquidity that generated a partly unwarranted credit expansion by financial institutions. This, in turn, led to investments in excess of productive capacities and fueled a real estate bubble. The first signs of difficulty showed up prior to the outbreak of the crisis, as doubts about the sustainability of the real estate boom and concerns over a rise in nonperforming bank loans emerged. The first investors began to pull out their capital.

The successful speculation against the Thai baht in the first half of 1997, soon to be followed by speculative attacks against other regional currencies, opened the floodgates. The resulting devaluations, and the sudden and abrupt outflows of capital throughout the region, exposed the highly vulnerable position of financial intermediaries and indebted corporations. Their balance sheets suffered from both maturity mismatches, a result of having borrowed predominantly short-term to finance long-term investments, and currency mismatches, as liabilities

²A comprehensive early analysis of the crisis was put forth by Radelet and Sachs (1998).

were largely in foreign currency (mostly dollars) while outstanding loans were in local currency. These mismatches deepened the crisis by severely damaging the financial situation of banks, which, in turn, disrupted the flow of credit in the affected economies, plunging businesses into trouble and thereby further increasing the percentage of bad loans. In turn, bank failures, bankruptcies, and the signs of an imminent recession prompted investors to accelerate the unwinding of short-term investments. This trend aggravated a situation that, by now, appeared to have the characteristics of a self-fulfilling crisis. The contagion even spread to economies that bore no fundamental connection to the countries in trouble, and who thought they were safe from the alarm of international investors.

In recent years, the International Monetary Fund (IMF) has come under heavy criticism for its role during this crisis, which had wrought so much havoc in Asia. The criticisms do not only concern the way the IMF handled the crisis itself; they also go deeper, addressing the institution's involvement in paving the way for flows of short-term capital into Asia in the first place, thus exposing the region to the consequences of an abrupt reversal of those flows, which is what triggered the crisis. Indeed, most observers today agree with a number of prominent economists—such as Joseph Stiglitz, Dani Rodrik, Barry Eichengreen, and John Williamson—who argue that the premature liberalization of capital accounts in Asia during the 1990s, pushed with excessive zeal by the IMF and the United States' (US) Treasury, was the single most important cause of the financial and economic crisis (Rodrik 1998; Williamson 1999a; DeLong and Eichengreen 2001; Stiglitz 2002).

All of the factors that were cited as structural problems after the crisis had struck (dubious exchange rate policies, insufficient regulation of the banking sector and financial markets, implicit government guarantees for questionable investment projects, etc.) did contribute to the way the crisis played out. Yet they were also present, often to a much greater extent, in East Asian countries that were not affected by the crisis. One simple fact distinguishes the two sets of countries: Those that were hit by the crisis had liberalized their capital accounts, while those that were not hit had not (Steinherr et al. 2005).

The Asian financial crisis, in this view, was neither a currency crisis nor a current account crisis. It was a liquidity crisis, brought about by the reversal of short-term capital flows that weakened the financial sectors in the affected countries. The resulting disruption in the flow of credits to private businesses forced them into bankruptcy and plunged the affected economies into recession. The measures implemented by the IMF, however, were designed to deal with a current account crisis rather than a liquidity crisis. What was required, above all, at the time was to stabilize the flow of credit in the economy. Instead, the IMF prescribed a strategy of exorbitantly high interest rates to keep foreign capital inside

the affected countries. This course of action achieved the exact opposite, driving more capital out of these countries and worsening their recessions (Stiglitz 2002).

The IMF's role in the run-up to the crisis—and, more importantly, the policies the IMF thought appropriate for handling it—have generated great dissatisfaction with the institution in Asia. This dissatisfaction was all the greater because few Asian economists had shared the IMF's views during the crisis, and the governments that followed the IMF's strategy did so grudgingly, because they had little choice. Undoubtedly, their disillusionment prepared the way for regional initiatives to make Asia more resistant to a recurrence of the events of 1997 and 1998, and more independent when it came to choosing economic policies.

11.1.2. Regional Policy Initiatives after the Crisis: Liquidity Provision, Surveillance and Dialogue, and the Asian Bond Market

FROM ASIAN MONETARY FUND TO CHIANG MAI INITIATIVE

In late-September 1997, Japan proposed the establishment of an Asian Monetary Fund (AMF) at the Group of Seven (G7)–IMF meeting in Hong Kong, China. The Japanese envisioned a regional multilateral institution that would quickly provide liquidity to countries affected by an abrupt reversal of international capital flows, thereby addressing what were regarded as deficiencies of the IMF both as a surveillance institution and as a lender of last resort. Japan had first put forward the proposal in August 1997 at a conference held with a number of the Association of Southeast Asian Nations' (ASEAN) member countries to discuss assistance to Thailand, when the crisis was in its early stages. Membership in the AMF would have included six members of ASEAN (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand) plus the People's Republic of China (PRC); the Republic of Korea; Taipei, China; and Hong Kong, China. The initial liquidity endowment would have amounted to around \$100 billion, half of which Japan would contribute, while other participating countries would contribute the rest.

On the international stage, however, the proposal immediately met with fierce opposition from the US and the IMF. Officially, it was criticized as potentially intensifying moral hazard and introducing double standards in liquidity provision. Unofficially, few observers doubted that the US viewed the idea of an AMF as a challenge to its leadership in the region and therefore opposed it, especially as it would have acted independently from the IMF, and would have employed a different concept

of conditionality when providing liquidity assistance.³ Moreover, there was only “lukewarm” support for the proposal by the PRC (Agarwala and Prakash 2002). Eisuke Sakakibara, Japan’s Vice Minister of Finance for International Affairs at the time, has subsequently described the failure to involve the PRC fully in the planning stages of the AMF as a “major strategic mistake” (Sakakibara 2001). Lipsy (2003) has gone a step further, citing an unnamed “informed source” as saying that the US in fact lobbied the PRC to oppose the proposal on the grounds it posed the threat of “Japanese hegemony” in the region (Lipsy 2003, 96; Chai and Rhee 2005, 3).

In any case, the proposal never got off ground. It was effectively rejected at a mid-November 1997 meeting of senior officials from the Asia-Pacific Economic Cooperation (APEC) countries in Manila, who laid out a joint framework for dealing with present and future crises in the region. The so-called “Manila Framework” explicitly confirmed the continued central role of the IMF, and was endorsed by APEC leaders shortly afterward. Japan had to content itself with a less ambitious initiative to deal with the imminent financial crisis. The “New Miyazawa Initiative” involved a much lower level of liquidity (\$30 billion) and lacked the multilateral characteristics of the initial AMF proposal. These aspects of the initiative made it eligible for support from the US and the IMF (Shirai 2006).

The initiative did include the first large bilateral swap agreements (Japan–Republic of Korea and Japan–Malaysia). And over the following years, swap agreements have come to be seen, to some extent, as a smaller-scale alternative to the initial AMF proposal. At a meeting in Chiang Mai, Thailand, in May 2000, finance ministers from ASEAN+3 agreed to establish a system built on an ASEAN swap arrangement dating back to 1977. The Chiang Mai Initiative (CMI) involves a number of bilateral swap agreements (BSAs), as well as a substantially augmented ASEAN-wide swap agreement (ASA). The total volume of BSAs amounts to \$75 billion (excluding the BSAs under the New Miyazawa Initiative), while that of the ASA amounts to \$2 billion.⁴

Despite continuing efforts to increase the funds for future emergencies, there is a clear awareness among observers in Asia that the measures taken thus far would still be insufficient to counter a crisis of a magnitude similar to that of the Asian financial crisis of 1997/98. Moreover, critics point out that only a small portion of the funds currently available (20%) can be employed without regard to IMF conditionality, which makes the CMI a significantly less autonomous arrangement than was envisioned in Japan’s

³For a comprehensive account of the diplomatic developments centered on Japan’s proposal, see: Lipsy (2003).

⁴As of May 2006. For a diagrammatic representation, see also: www.mof.go.jp/english/if/CMI_060504.pdf

AMF proposal. Nevertheless, the CMI has been heralded as a significant achievement, not least because it brings together Japan and the PRC in a cooperative endeavor. The CMI also has to be considered as a foundation on which any further monetary cooperation in the region could be based. The substance of the original AMF proposal may thus be realized in a less ambitious, but more pragmatic and arguably more successful manner (Sakakibara 2001). In the meantime, the ASEAN+3 countries are likely to continue to expand the volume of their swap arrangements to increase the autonomous funds available for crises and to improve the mechanisms for ensuring quick disbursements of liquidity. At the same time, they will seek ways to avoid the moral hazard that critics say is potentially associated with alternatives to IMF liquidity loans. Moreover, the CMI might gain from having its own regional monitoring and surveillance institution, which, among other things, would identify situations that require quick liquidity assistance (Shirai 2006).

REGIONAL SURVEILLANCE

Since the Asian crisis, several steps have been taken to improve the exchange of information and to provide early warnings of potentially harmful developments in regional financial and foreign exchange markets. The Manila Framework Group (MFG), established at the APEC meeting there in late 1997, is intended to increase the frequency and quality of high-level dialogues regarding risks to financial stability in the region. It includes representatives of the IMF, the World Bank, the Asian Development Bank (ADB), and the Bank for International Settlements. The group seeks to use peer pressure to promote “best practices” in the region, and especially to improve the regulatory and supervisory framework of financial markets.

Shortly after the inception of the MFG, in October 1998, a similar initiative, the ASEAN Surveillance Process (ASP), was also launched; and this was supplemented in 2000 by the establishment of the ASEAN+3 finance ministers’ Economic Review and Policy Dialogue (ERPD). While covering much of the same ground as the MFG, these other initiatives go further: They include the monitoring of sector developments, including social policies, to improve the exchange of ideas on policy making in a broader sense (Nasution 2003). Moreover, in late 2002 ADB initiated the development of an Early Warning System (EWS) specifically designed to detect irregularities in financial market flows that could precipitate capital account problems. Finally, in their meeting in Hyderabad in May 2006, the ASEAN+3 finance ministers launched the Technical Working Group on Economic and Financial Monitoring (ETWG), which is aimed at further developing and promoting EWS models.

While these can be considered the most important cooperative initiatives since 1997, the desire to promote the exchange of information in the wake of the Asian financial crisis has led to an outright proliferation

of regional surveillance institutions, as Lamberte and Yap (2003) note in a survey on regional cooperation in Asia that in some respects reads like a catalogue of acronyms. Sakakibara (2001) has complained that already “technocrats in this field are so busy attending or preparing for meetings, they do not have the time to think.” In a similar vein, Lamberte and Yap conclude that the likelihood of redundancies is high, and a consolidation among regional institutions might be beneficial. In the short run, the region would be best served by a single, unified surveillance and early warning system to detect potentially disturbing developments in international capital flows. Such a system would require clearly defined criteria and should be connected directly to the CMI, through which liquidity would be provided as soon as problems arise.

STRENGTHENING REGIONAL CAPITAL MARKETS

A third area in which much progress has been made since the Asian financial crisis is the development of regional capital markets. As noted earlier, one major problem in the buildup to the crisis was the double (currency and maturity) mismatches in the balance sheets of financial intermediaries in the region. The need to strengthen the underdeveloped domestic bond markets in ASEAN countries was quickly identified as a promising strategy for dealing with the mismatch problem. Bonds would be issued with longer maturities, thus mitigating the problem of investors faced with sudden liquidity problems when short-term capital is pulled out. And the bonds would be denominated in domestic currency, thereby eliminating the danger of real liabilities increasing as a consequence of exchange rate changes.

However, there were reasons for the underdevelopment of domestic bond markets in many ASEAN countries. Among them were the relatively small number of firms with the necessary size and reputation to issue corporate bonds; the limited demand for bonds, given the penchant of households for safe and liquid bank deposits (many held in foreign currency); and the lack of informational, institutional, and legal frameworks for capital markets. This is where the obvious benefits of a regional integration of bond markets come into play. With regional integration, both the supply and the demand base become larger. Moreover, with a larger pool of investors, it becomes easier to spread risk, rendering investments in bonds more attractive as the market size increases. Finally, while each country would have to establish the necessary legislative framework enabling participation in a regional bond market, it would not have to bear alone the non-trivial costs of developing the infrastructure for its own domestic bond market.

Against this background, the ASEAN+3 countries have developed the Asian Bond Markets Initiative (ABMI) with an explicit view to tapping the large pool of regional savings more effectively for investment within East

Asia. Japan first proposed the ABMI in late 2002, and it was subsequently endorsed by the ASEAN+3 finance ministers in August 2003. A number of working groups have been charged with exploring ways to overcome the specific problems associated with developing bond markets in emerging economies.⁵ Moreover, efforts have gone into strengthening both the supply and the demand base for a regional bond market. On the demand side, a Thailand-led initiative culminated in the establishment of an Asian Bond Fund, managed by the Bank for International Settlements, where foreign reserves of regional central banks—represented in the Executives' Meeting of East Asia Pacific Central Banks (EMEAP) Group—are invested in dollar-denominated regional bonds. On the supply side, a number of public or quasi-public institutions such as ADB, the World Bank, the German Kreditanstalt für Wiederaufbau (KfW) banking group, and the Japan Bank for International Cooperation (JBIC) have issued local currency-denominated bonds in ASEAN countries since 2004.⁶

Notwithstanding the recent successes in promoting regional bond markets in Asia, the problem of currency mismatch has been only partially mitigated. As long as ASEAN+3 countries continue to operate under different exchange rate regimes, and as long as a major correction of exchange rates seems imminent (this time with the dollar rather than regional currencies being the prime candidate for a strong devaluation), the perception of exchange rate risks will limit capital market activities and delay full realization of the efficiency gains that an Asian bond market could effect. This provides yet another argument in favor of exchange rate cooperation, as discussed below.

Before dealing with the potential benefits of exchange rate cooperation, however, there are some issues concerning the involvement of Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam (CLV) in the recent initiatives described earlier.

11.2 Another Step Forward: Increasing Exchange Rate Cooperation

11.2.1 Incentives for Exchange Rate Cooperation

If there are, indeed, gains to be expected from greater exchange rate stability in Asia, this implies that cooperation in exchange rate policy would be desirable. While the intellectual battle among proponents of different exchange rate regimes is sure to rage on, it is safe to conclude that ASEAN+3 countries would benefit from greater exchange rate stability

⁵For a more detailed treatment, see: Shirai (2006).

⁶A more comprehensive survey can be found in Shirai (2006).

between regional currencies and against other currencies like the dollar and the euro. There are two main reasons. First, intra-regional trade and investment would be encouraged by a reduction in exchange rate risks. Moreover, as argued earlier, stronger regional capital markets—the ABMI in particular—can only realize their full potential in an environment of high exchange rate stability. Second, in the context of increased economic interdependence in East Asia, more stable regional exchange rates would help reduce the asymmetric impact of corrections to global imbalances (widely believed to come about through large exchange rate adjustments). This would reduce the potential danger of a series of devaluations engineered to restore price competitiveness at the expense of trading partners (beggar-thy-neighbor policies). Furthermore, we believe these factors to be interconnected. The history of exchange rate and monetary cooperation in Europe demonstrates quite clearly that these were never ends in themselves, but rather elements of an ever-increasing economic *and* political integration. Accordingly, a narrow economic cost–benefit analysis of exchange rate cooperation is unlikely to capture the whole picture of potential benefits.

The latter point becomes apparent when one looks at the role of exchange rate stability in fostering trade and investment. While the theoretical argument is sound, the empirical evidence has been surprisingly mixed (Klein and Shambaugh 2004). But with the recent advent of the European Monetary Union (EMU), empirical judgment has rapidly shifted in favor of the view that fixed exchange rates do promote trade. Numerous studies on European countries, starting with Rose (2000), have found large and significant effects of the euro on intra-EMU trade (Baldwin et al. 2005). However, this conclusion is difficult to reconcile with theoretical considerations. The advantages of a currency union over a system of fixed exchange rates are supposed to be relatively small: Transaction costs drop out with a single currency, and the risk of exchange rate realignments still present under a system of fixed but adjustable exchange rates ceases to exist. It is not immediately obvious that these benefits should be able to account for the large differences observed in the empirical literature.

In our view, this puzzle can be solved by a look at the recent research. First, as Klein and Shambaugh (2004) demonstrated, the application of gravity models in estimating the impact of fixed exchange rate regimes on trade produces similar significant positive results as the above-mentioned research on currency unions; and the latter also makes ample use of gravity models. Moreover, as Berger and Nitsch (2005) have shown using data for 22 industrial countries between 1948 and 2003, there is an increasing trend toward trade integration among the European countries in the sample, after controlling for those countries for which the reported significant effects of the euro have largely disappeared. This result supports the view that a *ceteris paribus* analysis may often fail to

account for the full story. In Europe's case, exchange rate cooperation has to be viewed in connection with the comprehensive political enterprise of fostering European economic integration. For this to happen, intra-regional exchange rate stability was deemed crucial. Even as the difficulties of the Bretton Woods system were beginning to become visible, in the late 1960s, Europe was beginning to develop alternatives that would secure the degree of exchange rate stability considered essential for continued economic integration. Thus, the first plans for a single European market and currency union were formulated in the "Werner Report," two years before the demise of Bretton Woods.

The situation in Asia today is somewhat different. Despite recent progress with regard to the ASEAN Free Trade Area (AFTA), a customs union comparable to that envisioned in the Treaty of Rome in 1957 and completed by the European Community in 1968 is not yet in sight. Given the large diversity in trade patterns among ASEAN countries, this comes as no surprise. Some ASEAN members trade primarily with other Asian countries, while others trade predominantly with the US or European countries. As a result, the costs and benefits of abolishing intra-regional tariffs and raising a common tariff barrier for countries outside ASEAN would be distributed unevenly. The main thrust for promoting trade in the region still comes therefore from bilateral free trade agreements (FTAs), and, more recently, from the economic partnership agreements (EPAs), which Japan particularly prefers (Shirai 2006). However, bilateral initiatives have the disadvantage of increasing administrative costs and causing allocation losses because different agreements between different countries signed at different times will have different schedules for the removal of tariff and non-tariff barriers, contributing to what Bhagwati has famously called the "spaghetti bowl" effect.

Nevertheless, there is reason to believe that fostering exchange rate stability could help promote stronger multilateral, region-wide economic integration in Asia. In this regard, the experience of the European Union is instructive. It should not be forgotten that, while Europe had indeed already proceeded further on the road to economic and political integration before a move for increased monetary cooperation was launched, this previous integration had been realized within the largely stable exchange rate environment guaranteed first by Bretton Woods and later by the European Monetary System (EMS).

The second major argument for increased cooperation on exchange rate policies has to do with the risk of an abrupt correction of the current global imbalances centered on the massive and growing US current account deficit. This can only come about through a substantial devaluation of the dollar. Several observers in Asia have argued that in this situation, a higher degree of stability among regional currencies might help absorb the inevitable shock to Asian export-oriented industries as US households

reduce their demand for imported consumer goods (Chai and Rhee 2005). Some economists have even warned that a disorderly unwinding of the global imbalances might raise the danger of competitive currency devaluations in the region, potentially disrupting trade even further (Ryou and Wang 2003). Dialogue and cooperation on exchange rates is precisely what might prevent this from happening—just as the lack of dialogue and cooperation in the period between World War I and World War II contributed to the beggar-thy-neighbor strategies that led to a breakdown of international trade in the 1930s, and to the Great Depression. As is well known, the strong political will to avoid a repetition of these events was one of the driving forces behind the Bretton Woods conference.

11.2.2 Possible Forms of Exchange Rate Cooperation: Advantages and Obstacles

DOWNSIDES OF PROMOTING EXCHANGE RATE STABILITY

One concern that regularly arises when debating moves toward greater exchange rate stability is the danger of market pressure forcing adjustments of fixed exchange rates that could result in large devaluations and cause distress for the real economy. After all, speculative attacks against pegged exchange rates were the trigger that set off the Asian financial crisis. One result was that, when the crisis was over, there was a move toward greater flexibility of exchange rates in most ASEAN countries. Could increased cooperation aimed at stabilizing exchange rates partially undo the recent successes in reducing the probability of another crisis?

Indeed, there is no denying that fixed exchange rate regimes are potentially vulnerable to speculative attacks. As a matter of fact, even Europe's EMS was targeted and actually collapsed in the summer of 1992. The fact that it had previously been working fine for 13 years is only partially exonerating, since in that period capital movements were still more regulated in most of Europe than they are today in Asia. However, it should be noted that it was not cooperation in exchange rate policies that prompted the 1992 crisis, but rather a lack of it. Wide disparities in real interest rates among EMS member countries in the wake of German reunification led to a buildup in tensions that caused the EMS to break down. The German central bank, the Deutsche Bundesbank, was applying a highly restrictive monetary policy to combat what it considered to be undue inflationary pressure caused by the massive demand shock of 16 million new consumers. The central banks of other EMS countries, which were required to keep their currencies within a narrow band around the Deutsche mark, had no choice but to reluctantly go along with the Bundesbank's interest rate hikes. As a result, their economies, already suffering from the effects of the 1991 recession, contracted. Once the

fissures in the EMS became apparent to the market, speculative attacks on the monetary system were only a matter of time.

Arguably, one important lesson to be learned from past crises in fixed exchange rate systems is that problems arise if the monetary policy of the anchor country becomes unsuitable for the other members, and then, for political reasons, the necessary exchange rate realignments are not carried out. The majority of European countries have now solved this problem by effectively removing the very possibility of exchange rate realignments, regardless of whether markets consider the area-wide monetary policy appropriate for all member countries or not.

Monetary union, however, is at best a long-term perspective for ASEAN countries, if the European experience is any guideline. Nonetheless, ASEAN countries could draw their own conclusions from the history of stable exchange rate regimes, and could expand the purview of their established monetary policy forums to address the need for exchange rate cooperation and for ways to avoid the pitfalls described above.

FORMS OF INCREASED EXCHANGE RATE COOPERATION

How exactly might exchange rate cooperation look in East Asia? The principal achievement to date is undoubtedly the ADB-led initiative for the computation of the Asian Currency Unit (ACU), which was supposed to be launched in 2006. It has been postponed, reportedly because of quarrels over the participating currencies and their respective shares in the index. At any rate, the establishment of the ACU is but a first step. The important question is for what purposes this region-wide currency index would be used.

Eichengreen (2005) has suggested that the ACU be used as a parallel currency similar to the European Currency Unit (ECU) under the EMS. He points out that the ECU was never able to gain an importance equal to that of the European reserve currencies, but he also argues that policy initiatives might have been able to raise the popularity of the parallel currency. An obvious application for the ACU would be in the Asian Bond Market. Bonds issued by public or quasi-public entities could be denominated in ACU, and the demand for such bonds could be higher if they promised higher returns due to lower exchange rate risks. Moreover, a possible policy might be to phase out capital flow restrictions on ACU-denominated assets before those on assets denominated in international currencies (Steinherr et al. 2006).

Others have gone a step further and proposed that the ACU be used as the currency index against which national currencies would be pegged (e.g., Moon et al. 2005). The resulting Asian Monetary System (AMS) would operate in much the same way as the EMS, except that there would

be no single anchor currency.⁷ Critics of the proposal have pointed to the institutional difficulties of providing the short-term financing needed to support weaker currencies within a possible AMS. A solution could be to employ funds accessible under the CMI for this purpose (Shirai 2006). The main downside of a peg to a basket of ASEAN currencies, however, would be the larger exchange rate variability of regional currencies against the dollar and euro, which would disadvantage countries that conduct a large part of their trade with the US or with European countries.

As a result, many observers favor a peg against a weighted basket of the major international currencies (i.e., the dollar, euro, and yen), an idea that Williamson (1999b, 2005) has particularly promoted. Singapore has had such a currency arrangement for many decades, during which the weights of the various currencies in the basket have been modified on a regular basis to account for changes in trade patterns. More recently, the PRC has announced that it was switching from the dollar to an undisclosed basket of currencies as the peg for the yuan's exchange rate. Williamson (2005) presents counterfactual calculations suggesting that adopting a peg to a common basket as the exchange rate regime in the original six ASEAN countries plus the PRC, the Republic of Korea, and Japan would have reduced exchange rate variability in nearly all these countries (except for Singapore and Hong Kong, China, where it would have increased marginally). Furthermore, as Williamson points out, the realization of Eichengreen's concept of using the ACU as a parallel currency is perfectly compatible with the pegging of individual currencies against a basket of non-ASEAN currencies. At a later time, as institutions evolve and a higher degree of monetary cooperation becomes desirable, the countries involved may decide to change their peg to the ACU.

Whatever concept of exchange rate cooperation is eventually seen as most effective in promoting intra-regional trade and providing greater resilience against global economic shocks, the ASEAN+3 countries will require two more things regularly stressed by Asian scholars who contrast the Asian experience with that of Europe: political will and leadership (Ryou and Wang 2004; Chai and Rhee 2005). The European integration process, which experienced periodic advances and retreats, was repeatedly brought back on track through joint French–German efforts. By contrast, the two largest and most influential economies in the ASEAN+3, Japan and the PRC, are less likely to form such a partnership in the near future. This observation has prompted some Korean scholars to propose a more active role for their country, possibly in coalition with smaller ASEAN

⁷Although it has to be noted that the Deutsche mark was not initially envisioned to be the anchor currency of the EMS, but it became so as a result of subsequent developments. A similar evolution might occur in the case of an AMS, with the Japanese yen being a prime candidate for the role of anchor currency.

economies (Chai and Rhee 2005). Others, meanwhile, have argued that the experience of the Asian financial crisis and the sustained risk of economic shocks on a global scale might prompt Asian countries to set aside their differences the way European countries did after World War II (Ryou and Wang 2003). Clearly, the sizable progress that has been made so far provides reason for optimism.

11.3 Conclusion

Several preliminary conclusions emerge from the discussion of having an increased monetary cooperation in Asia:

- The ASEAN+3 countries have a sensible approach to handling short-term liquidity shortages that might otherwise develop into capital account crises. In this context, the various initiatives to encourage dialogue on monetary policy are the next steps toward what's needed now: increased regional cooperation. They are also important because successful and effective cooperation requires institutional experience. However, it may now be necessary to focus on a smaller set of institutional arrangements within which policy options can be evaluated and decisions made, because the proliferation of regional institutions in recent years has created redundancies.
- In the short to medium term, initiatives for increased monetary cooperation will have to be on the agenda with a view to expanding regional trade and strengthening the region against monetary and real macroeconomic shocks. The European experience of the past 40 years points to a relationship between increased economic integration and greater exchange rate stability. Accordingly, the focus must be on implementing an exchange rate system that provides greater intra-regional stability and accommodates the needs of individual ASEAN+3 economies, with their very different trading patterns and states of development. This especially applies to differences in the banking sector, as well as in capital and exchange rate markets. Initially, there will probably have to be different strategies for different ASEAN+3 countries. With the CLV countries, for instance, the primary goal must be the strengthening of the institutional framework to enable them to increase their participation in the regional initiatives that have already been launched.
- A set of more ambitious initiatives for monetary cooperation can be envisioned on the road to a possible monetary union, as intra-

regional exchange rate stability increases, the synchronization of trade and business cycles progresses, living standards in the region continue to converge, and institution building bears fruit. But for this to happen, political will and leadership will be just as important as the right economic conditions. East Asian countries can learn from the history of Europe's process of integration, which itself came in fits and starts followed by eventual breakthroughs. One lesson is that ASEAN+3 countries will require a fair degree of tenacity to make it down the road to monetary union. However, these countries have a unique advantage: They have the opportunity to study the European process, and improve upon its successes while avoiding its mistakes.

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European Monetary Cooperation: The Role of Small Countries

Alfred Steinherr

When the European Monetary System (EMS) was created in 1978 as a system of fixed but adjustable exchange rates, the driving force was the already high degree of economic integration within European Community (EC)—later renamed the European Union. Because real exchange rate adjustments have effects similar to those of variations in import duties, it made sense for the member states to extend their cooperation beyond just integrating the market for goods to integrating their monetary and exchange rate policies as well.

Although French and German heads of government took the initiative in creating the EMS, the role of the small countries was also very important because they were the most enthusiastic supporters of the EMS, for the reasons described below.

Any system of fixed exchange rates needs a reference currency. The reference currency for the Bretton Woods system was the dollar, which itself was based on the gold standard. The choice for the EMS was the European Currency Unit (ECU), and the small countries had no particular problem with this.

12.1 From Integration of the Goods Market to the European Monetary System

The grand project of the Treaty of Rome (1957) was to create a single European market for goods and services. To this end, a customs union—with a free flow of goods within and a common external tariff vis-à-vis the rest of the world—became the basis for the European Common Market. It quickly became clear to the negotiators around the table that the exchange of factors of production, namely labor and capital, was a substitute for the exchange of goods. This was later shown theoretically by Mundell (1961). As a result, the coherent grand design embraced the idea of an internal market for goods, services, and factors of production. In 1968, the national tariffs on imports were eliminated and

a common external tariff was established, earlier than originally planned. However, the free movement of labor took much longer to implement, and even today it is not fully realized. The free movement of capital also took more time. It was only in the early 1990s that the last capital controls were eliminated.

When the Treaty of Rome was negotiated during the mid-1950s, the Bretton Woods system of fixed exchange rates was in its heyday. The period of dollar scarcity had ended, but the period of dollar glut, the two legs of the so-called “Triffin dilemma,” had not yet commenced. Therefore, the Treaty of Rome did not foresee the need for new monetary arrangements. As long as the world enjoyed a fixed exchange rate system that worked well, Europe had no need to go its own way. This changed only when the Bretton Woods system began to unravel. In 1969, the European Council appointed Luxembourg Prime Minister Pierre Werner to head a group of experts from the six founding nations of the EC to develop a plan for European monetary cooperation and integration. By the time the “Werner Plan” was finalized, in 1971, Bretton Woods had essentially ended.

Of considerable interest for the present study of the role of small countries is the fact that the Council of Ministers did not ask a prime minister from a large country to prepare the report, but rather the prime minister of the smallest country. At that time, Luxembourg did not even have its own currency; it had entered into a currency union with Belgium.¹ Clearly, Luxembourg, like other small countries such as Belgium and the Netherlands, was much more supportive of monetary integration than the large countries such as France and Germany. (Italy was different because its monetary weakness led it to behave more like a small country). The economies of the small countries were more open, as measured by the average of imports and exports as a share of gross domestic product (GDP): in excess of 50%, far higher than for the larger countries. Currency movements were thus a greater source of potential instability in small countries. And the capacity of small countries to control domestic inflation was seriously constrained.

At the time of the Werner Report, member countries were already trading much more with each other than with countries outside the EC. Therefore, flexible exchange rates were not an option. The basic argument was that a depreciation of the exchange rate would have effects on exports and imports similar to an increase in import tariffs. Hence, it would be contradictory to eliminate import tariffs within the Common Market, set up legislation to prohibit subsidies as another substitute for tariffs,

¹There was another important consideration: All Luxembourg prime ministers, with their dual French and German culture, were trusted go-betweens for France and Germany.

but then allow exchange rates to achieve what tariffs and subsidies were prohibited from doing.

In addition, uncertainty about future exchange rates could further upset the economic gains from integrating markets. But if flexible exchange rates were not an option, fixed exchange rates were hardly better if governments were still free to adjust exchange rates any way they liked. Therefore, any acceptable arrangement had to include rules on how to proceed with exchange rate adjustments, and how to determine the extent of adjustments, to avoid beggar-thy-neighbor policies. The first attempt at a European fixed exchange rate system started in 1973, and was colorfully dubbed the “snake in the tunnel.” This arrangement suffered precisely from the absence of binding rules regarding exchange rate adjustments. The system was put to a hard test right after its creation, when the first oil price shock created tremendous asymmetric adjustment needs, particularly in real exchange rate realignments, in the absence of any rules for EC coordination.

12.2 The Role of Small Countries in the European Monetary System

The EMS was launched in 1978 based on fixed, but adjustable, exchange rates with mutual short-run central bank support, extensive exchange of information among central bankers in regular monthly meetings, and a joint decision-making process for exchange rate adjustments involving finance ministers and central bank governors.

Small countries had no problems agreeing to a fixed exchange rate system. When more than half of domestic consumption is imported, and a similar share of domestic production is exported, as was the case in the smaller countries, a stable exchange rate is considered a precondition for stable domestic prices and competitive conditions. In addition, a big trading partner that may account for a sizable share of imports and exports, and may be inclined to pursue a beggar-thy-neighbor exchange rate policy, would be a very serious problem for a small country. Any bilateral negotiations dealing with the problem would risk being ineffective given the difference in size and political weight of the countries involved. With a multilateral framework, however, such negotiations would be much more manageable for all parties involved, especially the small countries.

The big disadvantage of a fixed exchange rate is that speculation is one-sided. Either an exchange rate is over- or undervalued. Thus, when speculators take positions, the risk is limited to the non-occurrence of an exchange rate adjustment. For that reason, the mutual financial assistance of the EMS was considered important. For the small countries, exchange rate misalignments turned out to be less pronounced on average than for

the bigger countries. The reason was that the dependency of the small countries on foreign trade sharpened the sensitivity of their decision makers, and left little room for the mistaken belief that it would be good to maintain an exchange rate that was not supported by economic fundamentals.²

Small countries knew that, in the absence of capital controls, they had no leeway for national monetary policy. This was first argued by Mundell (1961) and his conclusions proved robust regarding the specifications of different models. In practice, this meant that, while large countries had difficulties accepting fixed exchange rates and coordinating their domestic monetary policy with the policy of a reference country, small countries realized much more quickly that they had no choice. They knew that they could not conduct their own monetary policy independent of the monetary policy governing the reference currency. They also knew from Mundell's demonstration that fiscal policy was a more powerful instrument with fixed than with flexible exchange rates. While they could regain monetary independence by adopting a flexible exchange rate scheme, the price would be a loss of fiscal policy effectiveness. Moreover, given their high degree of dependency on foreign trade with partners from the European Common Market, they had nothing to gain from flexible exchange rates.

A suitable benchmark had to be found that would be in line with the preferences of the small countries in the European Common Market. In recent European history, the Deutsche mark had already been playing the role of benchmark for small countries, whether inside or outside the EMS. (Austria was outside, while Belgium and the Netherlands were inside). The ultimate choice of a benchmark in the form of a currency basket is discussed below.

A regional fixed exchange rate system needs rules or joint decision making regarding exchange rate alignments. Again, the small countries had fewer problems accepting this constraint than the larger countries. They also had fewer illusions about the transmission from nominal to real exchange rate adjustments. Given their openness, they had experienced rapid pass-throughs of nominal exchange rate variations to domestic prices, and, for this reason, made only very limited real exchange rate adjustments. The basic arguments in favor of both flexible exchange rates and adjustable fixed rates assumed that nominal exchange rate movements were not fully offset by domestic price adjustments, and hence did have an effect the real exchange rate. Small countries had reasons to be doubtful.

²The same characteristics can be observed in Asia. The small economies like Hong Kong, China, and Singapore avoided big misalignments, and could therefore resist the speculative pressures during the Asian financial crisis of 1997/98.

The following model shows what is at stake.

$$\begin{aligned}
 (1) \quad & P_c = a.P_n + (1-a).P_i \\
 (2) \quad & P_i = e.P_w \\
 (3) \quad & P_n = b.W \\
 (4) \quad & W = f.P_c
 \end{aligned}$$

Equation (1) defines the consumer price index (CPI) as P_c , a weighted average of domestic prices P_n and imported goods with prices P_i , the weight of domestic goods being “a.” Import prices are obtained by multiplying world market prices P_w with the exchange rate “e.” The assumption that P_w is given implies that the country under analysis is small. Domestic prices P_n are driven by the domestic wage rate W (cost-plus pricing). If $b = 1$, then firms are able to pass increased costs on to the consumers. Similarly, wage earners negotiate real wages, and if $f = 1$, then any increase in consumer prices leads to higher wage demands to protect real wages.

Substituting equation (4) into equation (3) and equations (2) and (3) into (1) gives

$$(5) \quad P_c = \{(1-a)/(1-abf)\}.e.P_w.$$

Clearly, for small countries “a” tends to be small. If “a” goes to zero, then equation (5) becomes

$$(5') \quad P_c = e.P_w.$$

and the pass-through of an exchange rate adjustment to domestic prices is complete. Hence, the real exchange rate is unaffected. The same result obtains for any “a” if $b = f = 1$. This is perhaps more interesting because it means that, independent of the degree of openness, if firms and workers protect their purchasing power, then nominal exchange rate movements will not translate into real exchange rate changes. However, the ways in which higher import prices feed into domestic prices will differ. In smaller countries, the larger share of imports in the CPI will account for an immediate higher impact. In larger countries, the degree of substitutability between imported and domestic goods is greater, so an increase in the prices of imported goods will lead to a greater demand for domestic goods, and hence to an increase in domestic good prices.

The size of the country and its openness may still play a role, however. For example, with greater openness, there are fewer iterations (and therefore less time) required for the pass-through to fully materialize, and for consumers to become aware of the higher import prices.

The rules of the EMS stipulated that there should be joint decision making for exchange rate realignments. The guiding principles for such

joint decision making emerged in practice when the country with the largest economy, Germany, managed to impose its views. Realignment was supposed to correct for the accumulated loss in competitiveness, but without taking into account expected future losses. For example, suppose that, since the last realignment, Italian prices increased by 20% more than German prices, then Italy would be allowed to devalue the lira against the Deutsche mark by at most 20%, although it could be predicted that such a devaluation would have the immediate effect of further increasing Italy's inflation. The consequence of this rule was that high-inflation countries always suffered from an increasing loss of competitiveness; they could only return temporarily to "equilibrium." This was the price these countries had to pay for their unwillingness to pursue more stable monetary policies. But it should be noted that, as in all such forums, the wishes of large countries have a greater chance of being fulfilled than those of small countries.

When the European Monetary Union was established, it was decided that the decision-making body of the European Central Bank (ECB) would be a council composed of the executive officers of the ECB (that is, the president and his five colleagues) and the presidents of all participating central banks. Unlike in other international forums, the representatives of national central banks all had one vote. This was a remarkable decision for the small countries involved because it meant that the president of the Central Bank of Luxembourg (a country with a population of 450,000) had the same voting power as the president of the Deutsche Bundesbank (the central bank of Germany, which has a population of 80 million). This proves that, with the right institutional design and the necessary political will, small countries can play a role far in excess of what their population figures would suggest.

The adoption of a one-vote-per-country decision-making process was only made possible by two important conditions. The Maastricht Treaty, which specified the rules of the game for monetary union in Europe, required that each member country enact legislation granting full autonomy to its central bank. Hence, central bank presidents were no longer bound by national political decision making. In addition, central bank appointments became long-term to ensure, in practical terms, the independence of the bank president. Second, although member governments may have had their own views about desirable monetary policies, the Maastricht Treaty specified that the main responsibility of the ECB would be to safeguard price stability. This did not preclude taking employment and growth into account, but there was an implicit ordering of priorities to avoid political trade-offs. As a consequence, with the objective defined in terms of controlling aggregate inflation in the euro area, there was little scope for specific national objectives. Central bank presidents could therefore be expected to act exclusively with a view to European—not national—targets.

12.3 The European Currency Unit as a Benchmark for the European Monetary System

A key to the success of a fixed exchange rate system is the reference standard, or anchor, of the system. A currency outside the EC, such as the dollar, offered some advantages. The main one was the dollar's importance as the world's leading currency. However, as the Bretton Woods experience demonstrated, an external anchor may at times be too loose or too stringent. At any rate, the EC, as a large economic actor, was not eager to tie itself to the dollar and thereby "import" the United States' (US) monetary policy. The obvious alternative was to choose the Deutsche mark. However, from an economic point of view, the risk of the Triffin dilemma remained. And it was politically difficult for most countries, especially the larger ones, to accept a preponderant role for the mark. Therefore, another solution had to be found.

This other solution would have to satisfy several requirements. It could not be the currency of any country, either inside or outside the EC. It needed a European dimension, so it could not be any commodity standard such as gold, silver, or oil. The solution consisted of the construction of a basket. This had the advantage of representing a benchmark for national exchange rates based on the average performance of member countries. In other words, it would be a benchmark with a "European dimension," and not, as would have been the case with the Deutsche mark, a benchmark based on the strongest performer in the group.

The small countries had no specific objections to that proposal. Nor would they have had a problem with the choice of the Deutsche mark, although they clearly preferred a multilateral system in which they could play a role. While larger countries in the EMS, such as France, had to accept the leading role of the Deutsche mark, this was considered a transitional arrangement, and would not have been politically acceptable as a final outcome. Among the smaller countries in Europe, Austria, which was not a part of the EC, pegged its currency to the Deutsche mark, not only because Germany was its most important trading partner, but also because Germany's commitment to price stability corresponded to Austria's preferences. Later on during the existence of the EMS, the Netherlands and Belgium also made the Deutsche mark the anchor for their domestic monetary policy.

Although the small countries were the main drivers of monetary integration, they were not the main users of the ECU. The main users were countries with high and variable inflation rates, such as Italy, and those smaller countries with financial instability, such as Greece and Portugal, as well as Belgium before its decision to peg to the Deutsche mark. By contrast, in the Netherlands, which enjoyed stable financial conditions, the ECU played a less pronounced role.

The smallest country in the EC, however, played a central role in the development of the ECU market. Luxembourg had developed an international financial center with a strong concentration in private banking and euro-market operations. Although the official currency of Luxembourg before the euro was the Belgian franc, the domestic currency was secondary for banking operations. The big success of the ECU market was achieved through private initiatives to develop financial instruments (mainly bonds and loans) denominated in ECU. This was just one of the three functions of money, namely the store of value. The ECU failed as a unit of account and as a transaction currency for essentially political reasons. However, where market forces were decisive, namely in the choice of denomination for financial instruments, the Luxembourg banking center played a key role. Two conditions are necessary for playing such a role. First, the country must be small, so that its national currency is not the driving force, as it is in large countries. Second, it should be financially sophisticated. In Asia, those conditions are met, for example, by Hong Kong, China, and Singapore.

12.4 Conclusion

What does Europe's experience suggest for monetary integration in Asia? First, smaller countries will probably be the most ardent advocates of monetary integration, all the more so if they have difficulty stabilizing their domestic financial conditions, as is the case today in countries like Cambodia, the Lao People's Democratic Republic, and Viet Nam, where substantial amounts of cash holdings are in foreign currencies. Second, not only will small countries have fewer problems in accepting fixed exchange rates, they also will tend to favor a local benchmark, rather than an outside one. In addition, because they are small, they are more open, and therefore more embedded in the regional trade network; so, they will be more motivated to adopt a benchmark that is regional. Moreover, the only acceptable regional benchmark will likely be a basket of regional currencies, not a national currency. Third, in Europe, the differences between large and small countries were not as great as those among Asian countries today. For example, Europe's largest country, Germany, had a weight in the ECU of roughly 25%, whereas the smallest country, Greece, had 3%. This is a relationship of just over one to 10, whereas in Asia the differences are more extreme. Therefore, the weighting scheme proposed in Girard and Steinherr (2006) would have to be revised so that the smallest countries, many of which have the weakest economies, would have a sense of ownership. Fourth, the financial centers of small countries with deep ties to the international financial system are bound to play a key role in developing the regional currency. For the

time being, the key pretenders to that role include Hong Kong, China, and Singapore. Fifth, when it comes to the governance of any regional monetary arrangement, Europe's experience suggests that small countries are predestined to play an important role.

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Policy Options for CLV Countries

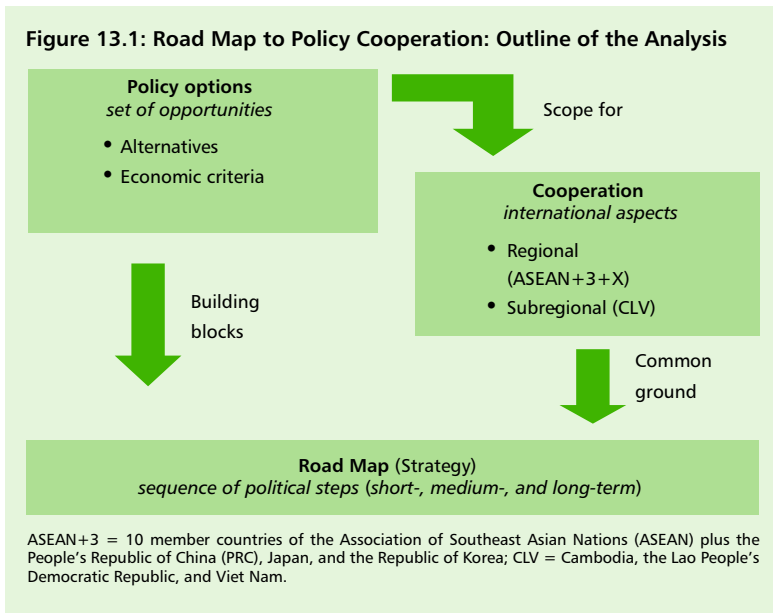
Erik Klär, Stefan Kooths, and Jayant Menon

This study started out by looking at the process of economic and monetary integration among the countries of the Association of Southeast Asian Nations (ASEAN) and compared it with the evolution of integration elsewhere in the world, notably in Europe. It then considered in detail the situation in Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam (CLV), as well as the role of these countries in the ongoing integration in Asia. The final questions in this concluding chapter—what policy options are there for increasing monetary stability in the CLV countries, and what is the actual scope for cooperation among these countries?—must be addressed against the background established in the three preceding parts of this study.

Figure 13.1 outlines the analysis in this chapter. The principal policy alternatives are the starting point, because they are the opportunities available to the CLV countries. Economic criteria can be used in evaluating the advantages and disadvantages of the alternative options. Besides mere economic criteria, the politico-economic aspect of cooperation must also be considered: while some policy options are to be implemented singly, others require some form of cooperation, regional (within ASEAN) or subregional (among the CLV countries). Only after the scope and common ground for cooperation are identified can an adequate long-term political strategy be developed from the available policy options.

13.1 Monetary Stability Defined

To evaluate possible policy measures and how they contribute to monetary stability, it is essential to define concretely what monetary stability means. A common definition equates monetary stability with *price stability*. Only in an environment of low inflation can money be a store of value, one of its three principal functions. Moreover, price stability encompasses a relative *constancy* of the inflation rate, which serves to stabilize the inflation expectations of economic agents. The



task of maintaining price stability falls primarily on the central bank. The literature generally points to the link between price stability and central bank independence, although the causality is not simple: more independent central banks may indeed pursue price stability more rigorously, but for central banks to be granted independence in the first place, price stability must initially become a prevalent social preference, which then triggers the necessary political decision.

Price stability, however, is an important, but not the only, aspect of monetary stability as defined here. A second aspect is *financial stability*, which has recently received increasing attention—notably in connection with the financial crises around the world in the 1990s and early 2000s. Financial stability essentially describes the smooth functioning of the financial and banking sector, which is required to keep the real economic engine running by maintaining an efficient flow of credit. Financial crises disrupt this flow and can cause severe disturbances in the real economy. Achieving and maintaining this kind of stability requires setting up adequate institutions to deal with the mostly market-endogenous risks to financial stability. This task falls to government and central bank policy makers nationally and internationally.¹

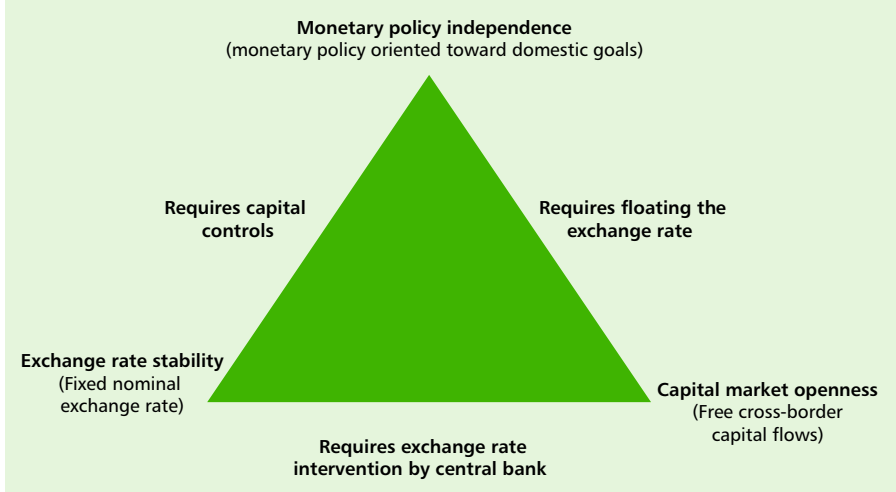
¹See Schinasi (2006) for a comprehensive survey of challenges to financial stability and available remedies, and García-Herrero and del Río López (2003) for the implications for monetary policy design.

The third aspect of monetary stability is *exchange rate stability*. If the purchasing power parity and interest rate parity theories held in reality, bilateral nominal exchange rates would always adapt in such a way as to ensure that the purchasing power of a currency remained the same domestically and abroad, while allowing for international interest rate differentials to be compensated for by exchange rate adjustments over a relevant time horizon. The real exchange rate would stay basically unchanged. Empirical studies, however, regularly reject the validity of both theories: exchange rates *do* effectively determine the real relative value of the domestic currency against foreign currencies. The exchange rate thus becomes a crucial economic variable for open economies, and provides a political rationale for intervening to determine exchange rates. Political influence, exercised through intervention in the foreign exchange market, is, however, limited to its impact on the nominal exchange rate. Even a constant nominal exchange rate (e.g., against the dollar) cannot be equated with exchange rate stability, because the relevant exchange rate for purposes of cross-border trade and investment is the real exchange rate. Moreover, with regard to the ability to absorb idiosyncratic external shocks, fixing the exchange rate without making the necessary exchange rate realignments may be harmful for political reasons.

To sum up, what is referred to as monetary stability in the context of this study should better be termed *monetary system sustainability*. The elements of a sustainable monetary system are (i) low and stable inflation (monetary stability); (ii) a financial sector with adequate institutions in place to provide protection against endemic risks (financial stability); and (iii) an exchange rate system that limits exchange rate fluctuations not warranted by economic fundamentals (exchange stability). Policy alternatives discussed in this chapter are evaluated for their ability to contribute to stability according to this definition.

13.2 Fundamental Regime Options under the Policy Trilemma

The well-known policy trilemma of international macroeconomics illustrated in Figure 13.2 states that among the three policy targets—monetary policy independence, exchange rate stability, and capital market openness—only two can be realized at the same time (the so-called “impossible trinity”). If capital markets are liberalized and a country’s monetary policy is geared to pursue domestic goals (as is the case in the United States [US] or the euro area today), fixing the exchange rate at the same time becomes impossible. If, on the other hand, monetary policy is used to keep the exchange rate fixed, it will no longer have the necessary degree of freedom to pursue domestic goals as long as the capital markets

Figure 13.2: Impossible Trinity of International Macroeconomics

are open to cross-border flows. The only way to maintain a larger scope for domestic monetary policy while simultaneously enjoying exchange rate stability is through control of cross-border capital movements. This was the arrangement under the Bretton Woods system, and it is essentially the regime operated by the People's Republic of China (PRC) today. In Figure 13.2, the macroeconomic targets are at the tips of the triangle. The price to be paid for achieving any two of them is shown on the leg of the triangle between the respective tips. The realization of the target on the opposite tip is ruled out.

From this policy trilemma, it immediately becomes clear that the choice of an exchange rate system in a given country cannot be considered independently of the monetary policy regime pursued by that country. Unless substantial controls over capital inflows and outflows are in place, any regime that requires the central bank to intervene in the foreign exchange market to control the nominal exchange rate will inevitably impede to a certain degree its ability to pursue domestic policy goals (e.g., inflation targeting) independently. As a rule, in view of the interdependencies between various policies, the situation must be considered in its entirety.

Table 13.1 gives a stylized overview of the fundamental alternatives available for designing a monetary system (i.e., a currency and exchange rate regime). For the exchange rate regime, three alternatives can be identified. The exchange rate can be left to float freely, its value determined entirely by actors in the foreign exchange market. Or it can be fixed to a

Table 13.1: Fundamental Monetary Policy Options for the CLV Countries

Exchange rate system	Reserve/reference currency
• Floating exchange rate	• Single currency
• Fixed exchange rate	• Currency basket
— Currency board	— Transparent composition/weights
— No currency board	— Undisclosed composition/weights
• No national currency	
Capital mobility	Parallel currency/currencies
• Unrestricted cross-border flows	• Informal
• Segmented capital markets	• With legal tender status
• Strict capital controls	

CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

certain degree through central bank intervention in the market, with or without a currency board arrangement to back it up.² The third option is to have no national currency at all, and instead use a foreign currency (as in official dollarization) or a supranational currency in a currency union. Given the current political preferences in ASEAN as a whole, and in the CLV countries in particular, we refrain in this chapter from a discussion of the pros and cons of floating versus fixed exchange rates. We take it as a given that the region is moving toward an exchange rate framework that promises greater intra-regional exchange rate stability, similar to developments in Europe after the breakdown of the Bretton Woods system in 1973. The policy issues are then centered on how the eventual exchange rate arrangement should be constructed, and to what extent independent monetary policy is possible under different capital control regimes.

Accordingly, if the chosen exchange rate regime is a fixed exchange rate for the domestic currency, the next question is what to fix the exchange rate against. In principle, there are two options. One is to fix the domestic currency's nominal value to a single foreign currency such as the dollar or the euro. In a currency board, this will also be the reserve currency used to back up the domestically supplied money. The other option is to fix the exchange rate to a basket of foreign currencies. Within the basket solution, there are the additional options of announcing the currencies forming the basket as well as the respective weights used in the composition, or to keep this information undisclosed.

²For reasons of clarity, the various intermediate regimes are not discussed in this context.

As argued above, a regime of capital controls becomes relevant when the implications of a particular exchange rate regime for the conduct of monetary policy are considered. To put it simply, cross-border capital movements can be highly liberalized (as in Europe, Japan, or the US) or heavily restricted (as in the PRC), or some form of intermediate regime can be adopted. In intermediate regimes, capital restrictions typically have two aims: (i) to prevent disturbing the real economic effects of abrupt reversals of short-term capital flows (like those that caused so much havoc during the Asian financial crisis) and (ii) to secure some leeway for monetary policy that would not exist in liberalized capital markets and fixed exchange rate regimes.

Finally, there is the issue of multiple currencies in circulation. These parallel currencies are typically used informally in the economy, although one of them could be made official (legal) tender, either alongside or in place of the domestic currency. Either way, the multiple-currency phenomenon (MCP) obviously carries implications for the monetary, exchange rate, and capital control systems. Because the MCP is especially relevant to the CLV countries, these implications are considered in detail in the next section.

13.3 Implications of the Multiple-currency Phenomenon

13.3.1 The Multiple-currency Phenomenon in the CLV Countries: Causes and Policy Implications

This study has analyzed the MCP comprehensively, both from a general viewpoint and with respect to its role in the CLV countries. The historical evolution of the MCP is traced in the individual country chapters. All three countries have experienced periods of macroeconomic instability or crises over the last 2 decades as a result of either exogenous shocks or endogenous policy choices. The Lao PDR, for instance, had episodes of high and sometimes hyper inflation between 1995 and 1999. Using Granger causality tests, de Zamarócksy and Sa (2002) find evidence that these episodes had a significant impact on the surge in dollarization over the period. Similarly, in Viet Nam, they find that high inflation in the early 1990s contributed to the increase in dollarization during that period.

Cambodia was not yet heavily dollarized in 1990. Dollarization occurred mainly under the United Nations Transitional Authority in Cambodia (UNTAC) in 1991–1993, when dollars poured into the economy. In Cambodia, one can observe the reverse relationship between dollarization and inflation. While there was high inflation in the very early part of the 1990s because of inflationary financing or monetization of the budget deficit, this soon dissipated as dollarization increased exogenously.

With respect to exogenous shocks, it is worth noting that the extent of dollarization in all three countries was at its highest in the immediate aftermath of the Asian financial crisis.

In short, there is enough evidence to establish a link between the MCP in these transitional economies and macroeconomic instability, whether induced endogenously or imposed exogenously. Restoring macroeconomic stability by addressing persistently high budget and current account deficits, and episodes of high or hyper inflation, will be a necessary part of addressing the MCP. The recent experience of Viet Nam is useful in demonstrating this (more on this in the latter part of this chapter).

Although political uncertainty has not been a significant constraint in either Viet Nam or the Lao PDR, it has been a problem in Cambodia in the past. This uncertainty has no doubt contributed to the persistence of very high dollarization in the country. Recent political reforms making it no longer necessary for a new government to be formed by a two-thirds majority suggest that political instability should be much less of a constraint in Cambodia in the future.

An underdeveloped financial and monetary system results in a lack of monetary instruments such as local currency-denominated interest-bearing assets. The lack of such assets constrains the store-of-value function of domestic money. It also limits the capacity of central banks to implement countercyclical monetary policy. Financial and banking reforms that deepen this sector must be pursued with greater urgency and commitment to address these constraints.

In summary, although solutions to most of these problems—macroeconomic instability, political uncertainty, an underdeveloped financial and monetary system, and weak legal and institutional systems—are long term in nature, they require short- and medium-term policy actions and reform measures. When these problems are eventually overcome, then the MCP as a symptom of the problems will also disappear.

To a certain degree, this is exactly what has been happening in neighboring Viet Nam, where the use of the dollar as a medium of exchange has diminished as the monetary and institutional systems have developed and as macroeconomic stability has been restored. With fiscal and current account deficits consistently below 5% of gross domestic product (GDP), inflation in single digits despite GDP growth that is among the highest in the world, and official reserves doubling over the past 3 years, Viet Nam is no longer considered a multiple-currency economy. The passing of the Unified Enterprise Law and Common Investment Law by the National Assembly in 2005 has further improved the legal environment. Also, official recognition of the contribution of the private sector to economic development is becoming more explicit, reinforcing the rapid transition to a market-based economy. By adopting its own version

of muddling through with accelerated reform, Viet Nam has addressed the MCP without incurring costs and presents a worthy model for emulation within the region.

The MCP has a number of positive as well as negative implications for monetary and exchange rate policies. On the negative side, the presence, or even dominance, of foreign currencies in the economy can considerably restrain the ability of the central bank to implement an autonomous or independent monetary policy. Moreover, the MCP makes the central bank less able to act as lender of last resort in case of a financial crisis. On the positive side, the MCP imposes discipline on governments by limiting their ability to finance budget deficits through inflation taxing. Given the chronic deficits in many transitional economies, this constraint can indeed be a useful safeguard.

Similar considerations apply with regard to exchange rate policy. The greater the dominance of foreign currencies in the economy and the easier it is for economic agents to switch between currencies, the more difficult it becomes for the central bank to influence the exchange rate by intervening in the foreign exchange market. Indeed, the very definition of the “official exchange rate” is substantially complicated by the dominant presence of foreign currencies. As outlined above, given that the MCP may even result in a situation where there is effectively “no exchange rate” at all, the role that the nominal exchange rate is expected to have in macroeconomic adjustment virtually disappears. In such a situation, necessary adjustments of the real exchange rate to external shocks will have to be brought about through changes in wages—a process that is bound to be slow and inevitably more painful to society. On the positive side, the benefits of an effectively fixed exchange rate to stability and certainty are in this case conveyed through the presence of the MCP.

13.3.2 Seigniorage in Multiple-currency Economies

A number of the policy options proposed in this chapter will affect the country’s ability to earn seigniorage revenues. Since changes in seigniorage revenues may represent a significant benefit or cost associated with implementing a particular option, this section considers the issue of seigniorage in multi-currency economies in more detail. The current situation in relation to the MCP in the Lao PDR is used for illustration.³

Seigniorage is the difference between the face value of a currency and the cost of producing it. The ability of governments to issue token or

³The analysis in this section draws on Menon (2007).

paper money generates a very large social saving in the use of resources.⁴ There are both *stock* and *flow* components associated with the social cost of the MCP. One can best understand the stock component by looking at how dollars or Thai baht were brought into circulation in the Lao PDR. Every baht and dollar note now in circulation in the Lao PDR, apart from unilateral transfers in the form of aid flows, was obtained through an exchange of goods, services, or claims on assets, equivalent to the face value of the stock of foreign currency in circulation. Thus, the seigniorage accrues to Thailand and the US, not to the Lao PDR.

There is also a flow aspect related to the stock component in the form of *holding cost*. The holding cost associated with the current stock of baht and dollars used for transactions is the income forgone on interest-bearing assets. This is the income that could have been earned if the stock of foreign currency currently held for transactions were invested in income-bearing assets, such as bank deposits or bonds.⁵ The interest forgone in holding domestically issued currency for transactions has no net effect on the domestic economy; it has only a distributional effect within the economy. That is, there is a transfer between citizens, but no net change in overall income or welfare.⁶

If the stock component of seigniorage involves a one-time process of recouping the baht and dollars currently held for transactions, then the costs associated with the flow component relate to the demand for money over time. With economic growth, there will be an increasing demand for money for transactions.⁷ To increase the stock of baht and dollars in the

⁴Under the gold standard, for instance, this saving resulted from resources that would otherwise have been expended in mining and smelting large quantities of metal, such as gold. Similarly, the MCP deprives governments of this social saving to a large extent.

⁵Note that this holding cost applies only if a foreign currency is used as domestic money. The holding cost does not apply when the domestically issued currency is held for transactions. This is because there is no, or little, cost associated with meeting the transactions demand for domestically issued money. The central bank could simply print the amounts required for transactions, and the only cost incurred in this instance would be the cost of *printing* money (rather than the cost equal to the face value of the money).

⁶To illustrate, consider the current situation in the Lao PDR. If the kip is held for transactions, then the net effect (in terms of interest forgone) is zero because the kip cannot be invested in banks or bonds overseas. If it could be so invested, then there would be a net inflow of income to the Lao PDR economy (equivalent to the income forgone by not investing the kip overseas). If dollars are held for transactions, the net effect (in interest forgone) is equivalent to the income forgone by not investing the dollars in banks or bonds overseas.

⁷In theory, the demand for money should decrease over time as financial development reduces the need for currency to effect transactions. Given the low level of development of the financial system in the Lao PDR, this is unlikely to happen for some time.

Lao PDR, there must again be an exchange of goods, services, or claims on assets to bring more foreign currency into the country. In effect, the Lao PDR will have to run a balance-of-payments surplus to increase its money supply.

The flow component is easier to understand in terms of the benefits of getting rid of the MCP. Consider a case where the Lao PDR's GDP grows by 6% in a given year. Assume further that, as a result, the transactions demand for money also increases by 6%. Without the MCP, this would mean that the government could run a budget deficit (or reduce its budget surplus) by an equivalent amount without increasing inflation. That is, the growth in the economy allows the government to finance the budget deficit, or reduce the budget surplus, by printing money in a noninflationary way. Indeed, without the MCP, the Lao PDR government could increase its budget deficit or reduce its budget surplus by the amount of the increase in transactions demand for money simply by printing money, without any increase in inflationary pressures.

In an economy with only foreign currencies in use, the increase in the transactions demand for money caused by economic growth can be met only by a balance-of-payments surplus. That is, there must be an increase in the stock of dollars or baht in circulation equivalent to the increase in the transactions demand for money. If the increased demand for transaction balances cannot be met, then a deflationary effect is likely. However, meeting this increased demand for transaction balances involves a waste of resources equivalent to the loss in seigniorage.

The kip is estimated to account for 50% of the money stock in the Lao PDR, the baht for 30%, and the dollar for the remaining 20%.⁸ If the government exercises monetary discipline and increases the stock of kip by a percentage equivalent to GDP growth times the share of kip in the money stock, it will earn seigniorage on these new notes continuously. If GDP growth is 6%, and transactions demand for money increases by 6%, then the government can print money in a noninflationary manner (and earn seigniorage) in the amount of:

$$0.5 \times 0.06 \times \text{the money stock}; \quad (1)$$

where 0.5 = the share of kip in the money stock, and 0.06 = the growth in transactions demand for money (driven by economic growth).

What if the share of kip in the money stock could be increased over time from 50% to 60%? From the example above, such an increase could result in quite substantial social gains from seigniorage, from both the stock and flow components. The stock component implies that about 10%

⁸This estimate came from the Bank of the Lao PDR. The estimate of foreign currency deposits as a share of M2 in 2004 was much higher, at 63%, as estimated by the International Monetary Fund (see also Watanabe [2006]).

of the foreign currencies in circulation can be exchanged in a one-time recouping transaction for goods, services, etc., because these notes will no longer be required for transactions. The Lao PDR would be able to recoup the original cost incurred in obtaining the stock of baht and dollars in circulation.

The one-time benefit from the stock component would equal:

$$0.2 \times 0.5 \times \text{the money stock}; \quad (2)$$

where 0.2 = the percentage increase (0.1/0.5) in the share of kip, from 50% to 60%, and 0.5 = the original share of foreign currency in the money stock.

The gross benefits from the flow component would equal:

$$0.6 \times 0.06 \times \text{the money stock}; \quad (3)$$

where 0.6 = the new share of kip in the money stock, and 0.06 = the growth in transactions demand for money (driven by economic growth).

This benefit from the flow component can be earned continuously. Increasing the share of kip in the money stock over time will continue to yield social gains from both the stock and flow components. The gains from the stock component will cease when the Lao PDR is completely free of the MCP. The gains from the flow component will accrue indefinitely, as long as the transactions demand for money grows with economic growth, and the government exercises monetary discipline.

13.4 A Set of Criteria for Policy Design

Before we finally proceed to the discussion of policy options available to the CLV in section 13.5, we develop a catalog of criteria that can be used to evaluate the advantages and disadvantages of alternative regimes. The criteria are grouped into two categories. One is concerned solely with aspects of economic efficiency connected with the implementation of different policy options. In the other category, which we term *politico-economic criteria*, we look at how potential policy options perform against the background of increased monetary cooperation and integration. An aim of this study is to fathom the scope for monetary cooperation among the CLV countries, besides the monetary cooperation currently envisaged for ASEAN as a whole.

13.4.1 Economic Efficiency Criteria

EFFECTIVENESS

Effectiveness is concerned with whether or not the adopted monetary regime has the potential to make the public use the official currency underlying the monetary system. In the case of the CLV countries, this criterion particularly reflects the perspective of de-dollarization in case a domestic currency is preferred.

MONETARY STABILITY

As defined in section 13.1 *monetary stability* covers two aspects—structural and operational. A workable financial sector (structural aspect) is a crucial prerequisite for the stability of the monetary system as a whole. A domestic central bank as lender of last resort is one, but not the only, subitem in this aspect, because the imported reputation of an internationally acknowledged foreign provider of money might also be relied on. The operational aspect of the monetary stability criterion concerns inflation control. The degree to which the stabilization target of domestic inflation is disturbed or fostered by imported inflation or imported stability via the exchange rate system has a major role in this respect.

MONETARY AUTONOMY

As we have argued above in the context of the “impossible trinity,” for a given state of capital market liberalization, the choice of an exchange rate regime will inevitably bring about implications for the conduct of monetary policy. In the case of completely liberalized cross-border capital movements, keeping the exchange rate fixed will essentially disable monetary policy as a tool for domestic stabilization. In a different setting, the available degree of *monetary autonomy* will also be different.

ALLOCATIVE EFFICIENCY

Allocative efficiency is predominantly affected by relative price distortions stemming from the exchange rate regime. These distortions may have two sources: the system’s propensity to generate real effective exchange rates with long-lasting deviations from the equilibrium level, or the degree of transaction costs that result from regulations implementing the exchange rate regime (e.g., capital controls). If a particular monetary setting is largely prone to relative price distortions, and therefore has a significant impact on the free cross-border flow of goods, services, and capital, then the allocative excess burden of the system should not be neglected.

SHOCK ABSORPTION

Given the experience of the Asian financial crisis, the capacity of *shock absorption* (robustness) is also an important criterion in choosing the

exchange rate system. Because the impact of different shocks (real versus monetary) depends to a large extent on the foreign exchange system that is adopted, the country-specific relative importance of both types of shocks should be assessed.

EXPOSURE TO LIQUIDITY RISKS

The role of exchange rate arrangements in precipitating the Asian financial crisis in 1997/98 has been highlighted in the literature.⁹ Accordingly, this criterion looks at whether the exchange rate system in place can be counted on to shelter the economy from disruptive capital movements that can lead to liquidity crises, or if indeed it makes the economy more vulnerable to this particular kind of calamity.

SEIGNIORAGE

Finally, the role of seigniorage was examined in detail in section 13.3. This criterion looks at the different implications that different exchange rate regimes will have for the ability of the country to extract seigniorage gains.

13.4.2 Politico-economic Criteria

Beyond distinct economic considerations, two other closely connected aspects must be taken into account. The *cooperative potential* (scope for international cooperation) describes the extent to which the selected regime enables or even requires greater regional cooperation in ASEAN or subregional cooperation among the CLV countries. Moreover, the ease with which the countries might merge into the envisioned ASEAN-wide currency area—what we call *ACU compatibility*—is another international politico-economic aspect with a long-term perspective. Clearly, some exchange rate arrangements are more suitable than others in this regard.

Obviously, the relevance of these criteria depends on one's view of prospective ASEAN integration over the medium to long term. If one is rather skeptical about the likely speed with which monetary cooperation will be realized, a focus on the immediately relevant economic efficiency criteria may be warranted. If, however, one believes a cooperative monetary and exchange rate regime will be realized relatively quickly, then politico-economic considerations gain in importance for individual countries. Our position is somewhat in-between. While we believe the path to an ASEAN monetary union will most likely take many years—given the example of the European experience with monetary integration—we firmly expect that this is the path countries in the region will choose to take. By implication, experience gained in cross-border cooperation will undoubtedly become

⁹See also Chapter 12.

an asset over time, and therefore policy options that involve a degree of international cooperation may turn out to provide additional benefits to the countries engaged in them.

13.5 Potential Scenarios for CLV Policy Making

As we look finally at the principal options that are open to the CLV countries in the field of monetary and exchange rate policy, we make a first distinction between what we have termed *cooperative* and *noncooperative* scenarios. Noncooperative scenarios are those that a country can implement without taking particular notice of what is going on outside its borders. Cooperative scenarios, on the other hand, require some amount of working together, perhaps limited at the outset but expanded at a later stage. For each scenario, we apply the criteria outlined in the previous section. While we take care to address all potential options, we delve a bit deeper when considering those scenarios that appear the most feasible from a political standpoint.

13.5.1 Noncooperative Scenarios

STATUS QUO: NO MONETARY COOPERATION, BUT INDIVIDUAL COUNTRY REFORMS

Maintaining the status quo is always a policy option. In the current situation, this option would imply that the CLV countries stick to their present monetary and exchange rate regimes. For Viet Nam, this would mean preserving the dong's current peg to the dollar and continuing to sacrifice a notable degree of monetary policy autonomy (the degree being limited by the extent of control over cross-border capital movements). For Cambodia and the Lao PDR, the situation is rather similar. Although both are classified as managed floaters by the International Monetary Fund (IMF), suggesting that their monetary policy scope is curtailed to a lesser degree by the need for exchange rate interventions, the presence of the MCP in these economies substantially reduces the ability to pursue domestic goals through monetary policy measures.

Table 13.2 summarizes the performance of a status quo solution according to the criteria set in section 13.4. From the standpoint of monetary stability, the CLV countries are relatively stable. They have had a very good record of price stability, and the chosen exchange rate regime—a peg in place in Viet Nam and a managed float with very limited exchange rate variability in Cambodia and the Lao PDR—has by and large guaranteed exchange rate stability. Financial stability, however, remains a problem, given the underdeveloped state of the financial sectors. Other current troubles have to do largely with the MCP. The presence of

Table 13.2 Maintaining the Status Quo in the CLV countries

Monetary stability	Relatively stable; reforms could further improve the situation
Effectiveness	Limited due to MCP
Allocative efficiency	Transaction costs due to MCP and only small network effects
Shock absorption	Real shocks more important than monetary shocks
Liquidity risks	Unlikely
Monetary autonomy	Depending on respective exchange rate target
Seigniorage	Yes, but limited due to MCP
Subregional cooperation	No
Regional cooperation	No

CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam; MCP = multiple-currency phenomenon.

foreign currencies in the economy limits the effectiveness of the present system, entails allocative losses due to additional transaction costs and the restraints on potential currency network effects, and reduces revenue from seigniorage.

However, maintaining the monetary status quo does not imply that nothing can be done to improve the present system. On the contrary, a number of reforms could be—and, in some cases, are already being—made by the CLV countries to increase monetary stability and foster inclusion in overall ASEAN integration. These reforms are discussed here in the context of the status quo policy option, but they could just as well be implemented in the context of the other policy options presented in this section, both noncooperative and cooperative.

INDIVIDUAL COUNTRY REFORMS TO REDUCE THE MULTIPLE-CURRENCY PHENOMENON

In developing ways to reduce the prominence of the MCP in the CLV countries, one should note that the MCP is not, in fact, the problem, but rather a symptom. The problem (*cause*) is a lack of confidence in domestically issued currencies, while the symptom (*effect*) is the use of another currency such as the dollar. As outlined above, the problem stems from macroeconomic instability, political uncertainty, an underdeveloped financial and monetary system, and weak legal and institutional systems.

Improving the monetary and financial system, increasing macroeconomic stability, and strengthening institutions, especially legal and administrative ones, are necessary long-term challenges facing the governments of these countries. What can be done to start the process of de-dollarization in the short to medium term? The experience of the Lao PDR clearly shows that trying to enforce the increased use of the domestic currency is not a solution, and can indeed be counterproductive.

Measures that impose the use of the domestic currency should be removed to help reduce the distinctions, whether perceived or real, between the currencies.

In a sense, the best way to reduce the use of foreign currencies is to reduce the *distinctions* between domestically issued and foreign currencies. Enforcing the use of the domestic currency is likely to add to the perceived differences, rather than reduce them. If citizens are free to choose among the kip, the riel, the dong, the baht, or the dollar for any transaction in the Mekong transitional countries, then the perceived differences between those currencies in each country are likely to diminish slowly over time.

In Cambodia, for instance, a number of institutional barriers appear to add to the differences between the riel and the dollar, and to stand in the way of gradual de-dollarization. These institutional barriers include the preference given to dollars in the payment of wages to nonpublic sector workers. Exemplifying this preference, the Labor Law defines the minimum wage in dollars (see Menon [1998]). Also, international aid organizations and nongovernment organizations tend to pay their staff solely in dollars in Cambodia, whereas in other countries organizations such as the United Nations (UN) tend to pay at least 30% of staff salaries in the currency of the home country. A useful step in setting preconditions for de-dollarization would be to remove this favored status of the dollar in the payment of wages. Rules and regulations, whether implicit or explicit, that favor the use of dollars are just as detrimental as those that impose the use of the riel to achieve the long-term objective of de-dollarization.

To reduce the distinction between currencies in the Lao PDR and also in Cambodia, the kip and the riel must be freely convertible, in any quantity, into dollars. In these countries where confidence in the domestic currency is low, the policy would effectively require the governments to issue kip or riel on an almost one-to-one basis with foreign reserves. The present stock of kip is estimated at 50% of currency in circulation in the Lao PDR, and the riel at 10% in Cambodia; it could be argued therefore that the current situation in these countries already reflects this aspect of convertibility.

Thus, the transition from an economy characterized by the MCP to a kip- or riel-based economy will depend on the willingness of citizens to hold their domestic currency. This willingness will require an assurance of free convertibility initially and confidence in the value of the domestic currency eventually. We cannot escape the conclusion, however, that the root causes of the MCP will need to be addressed directly, and that there is no other long-term solution to dealing with its implications.

IMPROVING MONETARY STABILITY AND INCLUSION IN ASEAN INTEGRATION

Observers of ASEAN integration have repeatedly cautioned against the danger of a widening gap between the “old” members of the ASEAN-6 and the “new” members, i.e., the CLV countries and Myanmar.¹⁰ Besides well-known differences in the level of development, a number of connected causes have been cited as complicating the catch-up process, notably a lack of financial as well as human resources that makes it difficult for the new members to participate fully in the initiatives launched by ASEAN since 1998. For example, CLV countries are largely left out of the bilateral swap arrangements under the Chiang Mai Initiative (CMI) because of their limited foreign exchange reserves. Likewise, the scope for participation in the Asian Bond Markets Initiative (ABMI) is very narrow. While a stock market has been operating successfully in Viet Nam for a number of years, no stock market exists in Cambodia or the Lao PDR, and bond markets are absent in all three countries. Finally, even if CLV participation in the numerous regional working groups established since the Asian financial crisis were guaranteed, CLV influence would be limited by a shortage of human resources and the necessary institutional knowledge and experience.

Without a doubt, continuing market reforms are crucial in further strengthening the competitiveness of the CLV countries and advancing their integration into the world economy. In this context, the countries’ accession to the World Trade Organization (WTO)—Cambodia has been a member since 2003, Viet Nam joined recently, and the Lao PDR’s bid is in process—should be regarded as an indication of the sizable progress made, rather than a step in itself. Still, CLV economic policy makers have a formidable task. They must ensure, on the one hand, that increased economic integration does not lead to severe allocational losses by benefiting primarily those businesses (notably state-owned enterprises) whose competitive advantage is based on subsidies that will be dismantled at some point. On the other hand, they have to balance the reforms with the inevitable social costs (Vo 2006).

Strengthening the private commercial banking system is particularly important in this context. Limited access to credit has been identified as one of the main hindrances to private business activity in the CLV countries (Leung et al. 2005). Liberalization of the primarily state-controlled banking sectors would be desirable, provided that the prudential supervisory and regulatory framework renders impossible the kind of exposure to short-term capital movements by financial intermediaries that is regarded as one of the main causes of the Asian financial crisis of 1997/98. The

¹⁰See, for example, Leung et al. (2005); Sussangkarn (2006); and Vo (2006).

same argument applies to premature liberalization of capital account transactions. For the time being, the CLV countries should make use of capital controls that limit short-term capital inflows without harming the prospects for foreign direct investment and long-term investments. However, existing controls should be checked for efficiency, transparency, and adaptability to an altering economic situation.¹¹

In addition to reforms carried out by the CLV countries on their own, support from partner countries, within and outside ASEAN, is likely to benefit both sides in several areas. One is technical assistance. A number of programs have been implemented in cooperation with organizations from industrialized countries such as the Japan International Cooperation Agency (JICA) and the German Technical Cooperation Agency (GTZ). ASEAN, in principle, has recognized the significance of technical assistance and identified four priority areas: infrastructure, human resource development, information and communication technology, and capacity building for regional economic integration. However, the benefits derived from ASEAN programs have been questioned on the grounds of both the overall funding available and the effectiveness of the activities that have been implemented to date (Vo 2006). It would seem that there is scope for improving intra-ASEAN cooperation in this matter. With regard to ASEAN monetary integration, training would enlarge the pool of qualified technocrats that the CLV countries need to prepare for and represent these countries in the regional consultations and working groups.

A second area where intra-regional initiatives might assist the inclusion of the CLV countries in ASEAN integration is the currency swap agreements under the CMI, which are seen as a crucial building block for future regional monetary cooperation. Here in particular countries in the region that have built up large foreign reserves in recent years (the so-called “+ 3” economies of the PRC, Japan, and the Republic of Korea come to mind) might consider entering into “special” bilateral agreements with the CLV countries that, because of their very limited foreign reserves, have not been able to negotiate bilateral swap arrangements and are involved in the CMI only through the ASEAN swap agreement. Such “special” treatment could take the form of a variation in the swap ratio (e.g., 1:10 instead of 1:1) or even agreements on unilateral liquidity provision (Sussangkarn 2006).

To sum up, maintaining the status quo of monetary and exchange rate arrangements while at the same time continuing reforms to remove current shortcomings is a viable option for the CLV countries. The one area where this alternative fails is with regard to regional and subregional cooperation: it does not require any joint efforts by the CLV countries, nor

¹¹See Steinherr et al. (2006), pp. 15–19, for a more detailed discussion.

does it put them on track to a possible ASEAN-wide monetary integration in the medium run.

OFFICIAL DOLLARIZATION

A number of Latin American countries have officially chosen to adopt the dollar as their currency. Among these countries are Ecuador, El Salvador, and Panama. By doing so, these countries have effectively adopted the US Federal Reserve's monetary policy. Although, subsequently, most of these countries have had quite stable inflation rates, Panama in particular is often hailed as a success story of formal dollarization (see Moreno-Villaz [1999] and Bogetic [2000a]).

It is often argued that official dollarization by transitional economies can send an important positive signal to foreign investors and the world trading community, signifying increased stability and reduced risk. With respect to risk, however, a distinction must be made between currency and country risks. Although official dollarization may significantly reduce the currency risk, the perceptions of country risk may not change much, particularly for transitional economies (Menon 2008b). But without currency risk, the prices of individual traded goods cannot deviate much from the dollar price in the US market, net of taxes, and transaction costs, without creating arbitrage opportunities. The same arbitrage opportunities would ensure that most interest rates, especially long-term mortgage rates, between the officially dollarized economy and the US economy track each other more closely.

Furthermore, unlike the Latin American countries that have chosen official dollarization, the transitional economies in the Mekong region are not that closely integrated with the US economy. The US has also been unwilling to return seigniorage revenues to countries that formally dollarize. Thus, whatever seigniorage revenues are currently being earned will be lost under official dollarization. Since the country's central bank is now effectively the US Federal Reserve, domestic control over monetary policy and the lender-of-last-resort function is also lost. Needless to say, discretionary exchange rate policy is also no longer an option.

Thus, on economic grounds, it remains unclear whether official dollarization is the solution to the MCP in the transitional economies of the Mekong region, although it would clearly eliminate many of the problems associated with the MCP, as a comparison between the economic criteria considered in Tables 13.2 and 13.3 reveals. The main obstacle to official dollarization in the Mekong countries, however, is political. The governments of these countries are unlikely to consider dollarization as a feasible option because they are politically committed to strengthening their domestic currencies. It is unlikely they would move in the opposite direction. Moreover, with regard to the criteria for regional and subregional cooperation, it is evident that dollarization would effectively

Table 13.3: Implications of Official Dollarization in the CLV countries

Monetary stability	Foreign interest and inflation rates, but no lender of last resort
Effectiveness	Yes
Allocative efficiency	Very low transaction cost, but real exchange rate adjustment via prices/nominal wages alone
Shock absorption	Yes (monetary shocks) and no (real shocks)
Liquidity risks	No
Monetary autonomy	No
Seigniorage	No
Subregional cooperation	No
Regional cooperation	No

CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

remove the option to establish a joint exchange rate framework. In short, for political reasons, official dollarization, irrespective of its advantages and disadvantages, does not appear to be a realistic option for these countries.

INDIVIDUAL CURRENCY BOARD ARRANGEMENTS

Although Hong Kong, China is perhaps the most well-known economy whose monetary regime is based on a currency board, a number of less well-known, newly independent transitional economies such as Bosnia, Estonia, and Lithuania have implemented currency board-like systems with success, having anchored their local currencies to the euro.¹²

A currency board arrangement (CBA) is close to official dollarization, but there are important differences.¹³ First, a CBA is less rigid in that devaluation is possible, although not typically beneficial to credibility. Second, a CBA would reinstate seigniorage, whereas official dollarization would remove it completely. Since a CBA would effectively replace the central bank, the conduct of a discretionary monetary or exchange rate policy and the lender-of-last-resort function in the event of a crisis would be effectively lost.¹⁴ In other words, like official dollarization, a CBA would not restore these two functions of a central bank that are

¹²Argentina had a currency board-like system anchored to the dollar until 2002, and many Caribbean states continue to run a dollar-anchored CBA.

¹³The pioneering work on optimum currency areas (OCAs) is Mundell (1961). A good, general reference on OCAs in the context of the MCP is Willett (2003), and on regional (European) integration, Baldwin and Wyplosz (2004).

¹⁴Proponents of CBAs argue that, if run efficiently and credibly, CBAs would significantly reduce the risk of an endogenous crisis, thereby reducing the need for a lender of last resort.

Table 13.4: Feasibility of Currency Board Arrangements in the CLV Countries

Monetary stability	Foreign interest and inflation rates, but no lender of last resort
Effectiveness	Depending on credibility of domestic currency back-up
Allocative efficiency	Low transaction cost, but real exchange rate adjustment only via prices/nominal wages
Shock absorption	Yes (monetary shocks) and no (real shocks)
Liquidity risks	Yes, potentially limited by foreign reserves accumulation
Monetary autonomy	No
Seigniorage	Yes
Subregional cooperation	No
Regional cooperation	No

CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

compromised under the MCP. Unlike official dollarization, however, a CBA allows adjustments in currency in circulation through the accumulation of reserves or through a change in the reserve requirement ratio.

How feasible is a CBA for Cambodia and the Lao PDR? In Cambodia, official reserves cover about three times the amount of riel in circulation at present exchange rates. Although this may sound impressive, the fact remains that most estimates place the share of foreign currency in circulation at between 85% and 95% of total currency in circulation (de Zamaróczy and Sa 2002; Menon 2008a). These estimates, when averaged, imply that the riel constitutes only about 10% of currency in circulation. To recoup the foreign currencies in circulation at present would thus require tripling the amount of official reserves. This appears to be a binding constraint, unless government borrowings, mostly from abroad, are increased. The constraint is even more severe in the Lao PDR, which has a lower ratio of official reserves to domestic currency in circulation than Cambodia.

Thus, although CBAs may be an attractive alternative, either interim or permanent, to the current MCP situation, implementing such an arrangement currently appears to be beyond the financial capacity of these countries. CBAs may be feasible in Viet Nam, where the degree of dollarization is much lower and foreign reserves higher. But the decision to implement a currency board requires taking a longer-term perspective. It becomes clear then that such a policy would lack what we have termed *compatibility* with the process of monetary integration, whether in ASEAN as a whole or in the CLV subregion.

13.5.2 Cooperative Scenarios

In principle, a number of steps could be taken in the region to create a cooperative environment for the CLV countries, such as regular consultations between government and central bank officials or joint

research missions. Indeed, these steps—discussed in more depth in the conclusion and the executive summary—will have to precede the kind of cooperative scenarios presented here, which have to be interpreted as medium- to long-term policy options.

IMPLICIT CLV EXCHANGE RATE SYSTEM

A cooperative scenario for exchange rate policy among the CLV countries implies some form of joint exchange rate management. A feasible starting point might be the establishment of an identical currency peg in all three countries. Given that the dong is already pegged to the dollar, one obvious option is for the Lao PDR and Cambodia to peg their currencies to the dollar. From the standpoint of economic efficiency, pegging to the dollar in the current situation is not a bad idea. Since (i) most currencies of the Asian trading partners, most notably the PRC's, are more or less pegged to the dollar, and (ii) the dollar already has an important role as a unit of account and a means of payment in the CLV countries, curbing fluctuations of its value against the respective domestic currencies would be beneficial. What speaks against a common dollar peg is the CLV governments' determination to decrease the MCP in their economies. Also, given the importance of currencies other than the dollar in CLV trade,¹⁵ a joint peg might more appropriately be against a basket of currencies (e.g., the dollar, the euro, and the yen)—an option also identified for ASEAN as a whole—or a combination of ASEAN and extra-ASEAN currencies. The composition and relative weights would then have to be determined in trilateral consultations. Furthermore, joint consultations could be carried out to determine whether a common peg should be institutionalized further with the introduction of a CLV currency board; this, of course, can be an option only if the peg is against a single foreign reserve currency.

As in the preceding sections, Table 13.5 shows major characteristics of the policy option in terms of the criteria established in section 13.4. In most regards, the implicit exchange rate system is similar to the status quo, where a peg (Viet Nam) or at least a very limited variability of the exchange rate against the dollar (Cambodia, the Lao PDR) already exists. The crucial difference is indeed the need to cooperate if the chosen peg is not the dollar, but rather some basket that requires agreement on the composition and the relative weights of the currencies included. Agreement would also be required on the intervention bandwidths that determine the allowed degree of fluctuation of the respective domestic currencies.

Besides fostering subregional cooperation, a common exchange rate framework for the CLV countries could develop into a stepping stone

¹⁵The Lao PDR, to name but one example, trades largely with Thailand. Therefore, any joint exchange rate framework must not result in increased fluctuations relative to the baht.

Table 13.5: Implicit Exchange Rate System in the CLV Countries

Monetary stability	Foreign interest and inflation rates with some latitude via intervention bandwidths
Effectiveness	Need for legal endorsement in highly dollarized countries
Allocative efficiency	Lowered transaction cost, but trade patterns vary across CLV
Shock absorption	Yes (monetary shocks) and no (real shocks)
Liquidity risks	More likely, the stricter the peg
Monetary autonomy	Very limited (depending on band widths and capital controls)
Seigniorage	Yes
Subregional cooperation	Yes, CLV-wide monetary coordination is advisable / required
Regional cooperation	Useful policy coordination, potential step toward larger ASEAN currency area

ASEAN = Association of Southeast Asian Nations; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

to ASEAN monetary integration, but only if the ASEAN+3 countries successfully conclude their negotiations to establish an Asian currency index (ACI) to serve as the benchmark for a prospective monetary union. If the CLV countries were to peg against the ACI soon after its establishment, they might secure for themselves a kind of precursor role in a future joint exchange rate system in the region.

CLV CURRENCY AREA

The final option presented in this section is a strictly long-term perspective: a currency union among the CLV countries. A number of ifs are associated with this option. First of all, a currency union between the three countries would require the single currency to be created to have substantial credibility. Given the present role of the MCP in the three economies, considerable improvements would obviously have to be made before one could even begin to think about creating a joint currency that would enjoy the necessary credibility among the public that would use it. Another issue involves the institutions required to handle the changeover to a single currency. And, perhaps most important, the move would require a substantial amount of political will, which takes time to develop. The CLV countries are only just beginning to consider ways of cooperating to achieve common aims. Nevertheless, it is at least worthwhile speculating about this alternative, the potential benefits of which are shown in Table 13.6.

The way it is envisioned here, a currency union among the three countries could take place only some time after a common peg against the prospective ACI is made. The particular charm of this option lies not primarily in the advantages that it may have over a more simple form

Table 13.6: Currency Area in the CLV Countries (ACI-based)

Effectiveness	Higher than in status quo, but requires substantial credibility from the outset
Monetary stability	Mix of ACI-inflation rates latitude via intervention bandwidths
Allocative efficiency	Lower transaction cost within CLV, varying trade patterns less important
Shock absorption	Smoother relative to single anchor currency
Liquidity risks	More likely, the stricter the peg
Monetary autonomy	Limited (depending on bandwidths and capital controls)
Seigniorage	Yes
Sub-regional cooperation	Yes, intensive CLV-wide monetary coordination is essential
Regional cooperation	Useful policy coordination, possible precursor role for ASEAN-wide monetary union

ACI = Asian currency index; ASEAN = Association of Southeast Asian Nations; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam.

of a joint exchange rate system. Rather, it lies in the fact that, provided the ASEAN+3 countries envision a regional currency union based on the ACI, the CLV countries could form a subgroup of countries that forestall this move by forming a smaller currency union among themselves. If they were indeed successful in achieving this, their “common voice” in matters of monetary integration within ASEAN would certainly carry more weight than their separate voices ever could.

13.6 Conclusion: Sketching a Road Map for CLV Cooperation in Enhancing Monetary Stability

This chapter has summarized some of the main findings developed in the course of this study. In light of them, we have presented policy options that may serve to enhance monetary stability in the CLV countries and improve the countries' integration into the overall process of ASEAN integration. A number of these measures can be taken individually by each of the countries examined. However, despite indisputable differences among Cambodia, the Lao PDR, and Viet Nam, we believe there is also considerable scope for cooperation among these three countries. Several straightforward joint initiatives could be undertaken within a short period of time. Other steps, such as increased cooperation in exchange rate policies over the medium term, are more difficult to assess. This is primarily because such steps would not only have to reflect differences in trading patterns among the three countries,

but also account for potential new developments in the monetary and exchange rate system of the entire ASEAN+3 region.

Starting with the available short-run options, there is a clear case for the CLV countries to set up and gradually expand a common network involving policy makers, bureaucrats, and researchers from different levels of government and economic institutions in all three countries. The history of European integration after World War II suggests clearly that the very process of engaging in such consultations and exchanges of views and information is an essential element in developing positions and political ideas that go beyond narrow national interests. This process sharpens mutual understanding of the circumstances and concerns of partner countries, and builds trust within a cooperative environment. This is absolutely essential for any process of political and economic integration.

With time, the range of activities launched within this network could be widened, moving from joint meetings for the exchange of information and data to higher-level consultations to explore avenues for cooperation within the process of ASEAN integration. In the field of economic analysis, research institutions from the CLV countries could be equipped with the necessary means to establish cross-border research teams. With support from external experts where sensible, these teams could investigate topics of specific and common interest to all partners, thus providing the empirical background for possible policy initiatives under consideration.

Another area for potential cooperation is the strengthening of CLV capital markets. Two concrete initiatives appear worth debating. First, the countries might agree to allow companies from Cambodia and the Lao PDR to list on Viet Nam's stock market. This would save Cambodia and the Lao PDR the cost and time required to set up their own stock markets. Viet Nam, in turn, would profit from a deepening of its stock market, which has recently experienced the first signs of a possible demand-induced overheating as international capital continues to flow in, in response to the country's high growth in recent years. In a similar vein, the CLV countries might profit from evident economies of scale in capital markets if they also decided later on to cooperate on a common CLV bond market. Indeed, if financial market integration of this kind were conceivable, another step might include a joint regulatory and supervisory framework throughout the CLV countries, which would increase transparency for investors and also allow for a joint financial market supervisory authority. To sum up, cooperation could help foster financial intermediation and make the financial sector more robust in the CLV countries, which are prerequisites for them to become more actively involved in regional integration projects such as the ABMI. However, any substantial integration of the countries' financial markets will require, at minimum, a removal of controls on foreign exchange markets involving the CLV currencies. Ideally, it would also be accompanied by nominal exchange rate stability among them, to

eliminate the exchange rate risk that would be associated with acquiring stocks or bonds denominated in different currencies.

Finally, turning to possible monetary and exchange rate cooperation within CLV subgroup, at first glance, there is room for some skepticism regarding the potential benefits: these three countries, at least officially, trade very little with each other. So it is not immediately obvious that they would profit from coordinating their exchange rate policies. However, when taking into account the bigger picture of intra-ASEAN and international trade and exchange rate relations, as well as the plans for monetary cooperation within ASEAN+3 aimed at increasing intra-area exchange rate stability, this initial assessment changes.

Regarding trade patterns, all CLV countries import predominantly from other East Asian countries, while the vast majority of their exports go to countries outside Asia, mainly the US. A large part of this trade is billed directly in dollars, or in the case of intra-Asian trade, in currencies that fluctuate in a narrow band against the dollar. This is true in particular of the PRC, which has steadily gained in importance as a trading partner for ASEAN, including the CLV countries. This is likely to continue, especially considering the various comprehensive agreements on economic cooperation that have been inked between ASEAN and the PRC. And finally, the merits of any CLV cooperation in monetary matters have to be viewed in the context of ASEAN+3's initiative to move toward a joint exchange rate framework.

Against this background, a case can be made for the CLV countries to move ahead with a pilot project to increase cooperation in exchange rate matters. We have discussed the options of a joint peg to the dollar, as well as a peg involving a basket of currencies (e.g., the dollar, the euro, and the yen—the G3 currencies), which has also been identified as an option for ASEAN as a whole. The relative weights would then have to be determined in trilateral consultations.

With either form of peg in place across all CLV countries (whether or not additionally backed by a currency board arrangement), the bilateral exchange rates between them would be fixed in nominal terms. However, as stressed in section 13.1 fixed nominal exchange rates do not necessarily imply exchange rate stability. Relative real exchange rates variations can still come about through divergent inflation rates in the countries whose currencies are pegged. Accordingly, there is an additional argument for enhancing price stability, if frequent exchange rate realignments are to be avoided. Currently, inflation rates in the CLV countries are not alarming; however, the variability of inflation rates is relatively high. In this context, increasing central bank independence should be a major policy priority. Indeed, most empirical research points to a positive correlation between central bank independence and price stability. However, a causal relationship between central bank independence and price stability cannot

be established. Rather, the past 2 decades have seen a substantial shift in social and political preference for more emphasis on domestic price stability. Increasing degrees of central bank independence, in this sense, essentially reflect this shift (Hayo 1998).

For this reason, it would be insufficient to demand simply that the CLV countries grant their central banks more independence. Rather, political leaders need to be convinced for a variety of reasons, including the benefits it implies for the envisioned exchange rate system, that price stability is a social good that should be secured. Specific exchange rate systems inevitably come with specific “rules of the game.” The implications extend not only to monetary policy, but also to fiscal policy. Specifically, requiring central banks to monetize public debt is not compatible with the successful conduct of monetary policy aimed at maintaining price stability and achieving a given exchange rate target.

Something that should be part of monetary cooperation from the beginning is regular consultations between representatives of the CLV central banks, both on a technical and political level. Not only will such consultations bring about the benefits attributed to cooperative, multinational working groups earlier on, they will also be essential in creating a “common voice” for the CLV countries in matters of monetary integration within ASEAN. That common voice will carry more weight than the separate voices of each of the three countries, which, after all, are relative newcomers to ASEAN.

The longer-term vision for CLV cooperation presented in this chapter is based on the assumption that the ASEAN+3 countries as a group will proceed with monetary integration by introducing an ACI as outlined by ADB. The ACI would be a weighted basket of Asian currencies and could, in principle, be used to establish an ASEAN currency unit that might serve a purpose similar to the European currency unit (ECU) within the European monetary system. Once the ACI is introduced, the CLV countries might choose to switch the target for their peg from the dollar, or a basket of major currencies, to the ACI. Exchange rate stability in relation to their main Asian trading partners would be maintained and, at the same time, the CLV countries might secure for themselves the role of an early mover should the ACI form the nucleus for a prospective Asian currency union.

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Exchange Rate and Monetary Policies in Indochina during the Colonial Period

Henri Bourguinat

The analysis of exchange rate and monetary policies in the Indochinese region during the French colonial period offers interesting insights for contemporary discussion on optimal exchange rate regimes, dollarization, and monetary policy. Undoubtedly, it is necessary to take into account the colonial experience itself—namely, the asymmetry of capacities between the colonizers and the colonized, although the conduct of monetary policy was not affected by the so-called “colonial pact” regime and the financing requirements of military operations, in particular after 1945.

From the end of 1870 to 1954, France saw its exchange rate and monetary policy in Indochina dominated by the following three options: (i) to recognize the *piastre* as Indochina’s currency, (ii) to concede to the Bank of Indochina the privilege of issuing currency, and (iii) to accept the disadvantages of antagonism between a strong relationship with France and the requirements of the Indochinese region.

- **Recognizing the piastre as Indochina’s currency.** Unlike what it had done in North and sub-Saharan Africa, France did not from the outset in Indochina substitute the franc for the local currency. In other words, there was no policy that would be called today “dollarization” (or, more precisely, “francization”). On the contrary, despite the diverse legal status of the various territories,¹ France chose from the start to unify its monetary system in Indochina by replacing the various unorthodox forms of money that existed at the time of conquest with a new piastre, which was first coined in 1885 and was considered Indochina’s national currency.

¹Only Cochinchina (southernmost region of Viet Nam) had the legal status of a colony. Annam (the central region of Viet Nam), Tonkin (the northernmost region of Viet Nam), Kampuchea (former name of Cambodia), and Laos were protectorates.

- **Conceding to the Bank of Indochina the privilege of issuing currency.** In 1875 the Bank of Indochina, a private bank, was granted the privilege to mint coins for all of Indochina. This decision had significant consequences. It meant not only that seigniorage would be transferred to the metropolis (as in the case of dollarization for the United States [US]) but also that the bank issuing currency would, purely and simply, be privatized. The powers granted to the Bank of Indochina made it one of the major actors defining monetary policy, and especially policy relating to credit distribution. This applied also to instances where it made significant loans to the local government. Although disputes with the Bank of Indochina increased from the 1930s, including a period of suppression after 1945, the privilege of issuing currency continued, in fact, up to 1951, thus enabling the Bank of Indochina to maintain a certain colonial exploitation.
- **Accepting the disadvantages of antagonism between a strong relationship with France and the requirements of the Indochinese region.** For more than a half century, the management of the piastre exchange rate was pulled in two different directions: one favored an exchange rate that privileged the trading and financial interests of the metropolis, France, while the other gave priority to Indochina's relationships with other Asian economies. The difficulty of reconciling these two competing interests resulted over time in an exchange rate that at times overvalued and at other times undervalued the piastre, depending on which of the two interests prevailed. These misalignments persisted over a long period of time, often hampering the ability of Indochina to maintain a positive trade balance, especially because of its rice exports to places like China and Hong Kong.

1. The Piastre's Silver Monometallism (1878–1930)

At the time of France's conquest, a wide variety of coins circulated in Viet Nam and the other territories of Indochina (Girault 1930). One of them, the sapeque, was essentially a standard of exchange. It was a coin of 3.775 grams of zinc or copper, but in reality, its weight was extremely variable and its value was not linked to anything (Duffour 1943). One hundred sapeques of copper or 600 sapeques of zinc formed a *quan*, a unit of account that was often used. But, paradoxically, the most widely used currency at that time in Asia was the Mexican piastre, a souvenir of the French expedition to Mexico. It was traded in Singapore and Hong Kong. While the currency came in a variety of forms—such as the piastre with the eagle and the balances, the Spanish piastre, and

Table A1: Piastres in Circulation Before the Unification
(in gram)

	Weight fine silver
Spanish piastre	24.44
Mexican piastre	24.44
Trade American dollar	24.49
British dollar	24.26

Source: Roquebain 1939.

the American trade dollar—all were backed by silver. All of this shows that at the beginning of the French colonial period, there was not in fact “any Indochinese monetary system such as it is today, with its units, their multiples and submultiples. Various currencies appreciate or depreciate, one against the other, along with the circumstances...” (Robequain 1939). The various forms of the piastre had the characteristics illustrated in Table A1.

Indochina at that time did not have a national silver currency. The dong or sapeque of copper or zinc was the legal currency but had insignificant intrinsic value. The ligature sapeque of 100 or 600 circulated for use in making large payments. While Dutch, British, and Spanish silver coins were also in circulation, it was the Mexican piastre that was most often used to pay foreign partners. A great deal of monetary confusion resulted, and large payments sometimes had to be settled with gold or silver bars.

1.1 Monetary Unification through a New Piastre

In 1878, a new piastre was issued. It was worth 27.215 grams of silver with 900/1,000, that is to say, a little more than the Mexican piastre that was already in circulation and had received the status of legal tender in Cochinchina² at the time of the conquest. The divisional coins, made of either silver or bronze for small amounts (the sapeque was a coin 1/500th of a piastre), appeared the following year. The privilege to issue the currency was granted to the Bank of Indochina in 1875, and renewed regularly up to 1952 (Meuleau 1990; Gonjo 1993). From 1930, the piastre

²Cochinchina, known locally as *Nam Kỳ* (meaning “southern region”), is a name for the southernmost part of Viet Nam, lying southeast of Cambodia. During the French colonial period, it was called Cochinchine in French and its capital was Saigon. The two other parts of Viet Nam at the time were Annam and Tonkin.

Table A2: Official Exchange Rates of the Indochinese Piastre (French Franc)

Year	Official exchange rate	Year	Official exchange rate	Year	Official exchange rate
1890	4.16	1895	2.71	1900	2.57
1891	4.03	1896	2.74	1901	2.51
1892	3.63	1897	2.52	1902	2.21
1893	3.32	1898	2.43		
1894	2.86	1899	2.52		

Source: Data from the Bank of Indochina. Bassino, J.-P., and H. Nagakawa. 1999. Exchange Rates Policies in Vietnam under French Rule 1875–1945. Paper presented at the Asian Statistical Project Conference Quantitative History of Viet Nam, Tokyo.

was supplied only with a payment from the Bank of Indochina to the French Treasury, after the seigniorage was netted out.

Following its creation, the new piastre gradually came into wider use. From 1882, the government budget of Indochina was established in piastre and the currency slowly replaced other currencies. We come thus little by little to a real monetary system around the new currency.

The choice of silver as a standard became an issue a few years later, however, when many countries began to adopt a gold standard instead. British India adopted it in 1893, Japan in 1897, Siam (Thailand) in 1902, and the Philippines shortly afterward. Among the few countries that remained faithful to the silver standard—including Afghanistan, Iran, and Hong Kong—one of them was particularly important to Indochina: China, its principal trading partner.

Moreover, the adoption of the piastre did not occur without some upheaval. Gresham's law, whereby bad money drives out good under legal tender laws, very quickly asserted itself, as the Japanese yen, lighter in silver weight than the piastre, was swapped equally against the Indochinese currency. To combat this, the piastre weight was brought back to 27 grams of silver. The government also imposed a tax of 3% on the outflow in 1898. Eventually, the measures played their stabilizing role with respect to the exchange rate (Robequain 1939, 159; Duffour 1943).

1.2 The Fall of Silver (1880–1914)

The fall in the price of silver started around 1870 and accelerated from 1880. Inevitably, it had a considerable impact on the piastre exchange rate (Girault 1930, 356). In 1897, the legal link between the piastre and the French franc was fixed according to the commercial value of silver (Table A2).

The piastre's official exchange rate against the franc plunged by almost half between 1890 and 1902 (Bassino and Nakagawa 1999), dropping from 4.16 francs per piastre to 2.21 francs. The collapse of the piastre had a serious negative impact on certain social groups—those who had been paid in piastre but had to make payments in stronger currencies or in gold.

This was the exchange rate situation faced by the colonial government, which, except for the customs duties levied in the French currency, received its taxes in piastre but spent mostly in gold. Indochina's local population, meanwhile, saw itself threatened with new taxes. Civil servants and other colonists anxious to repatriate their profits to France were themselves directly concerned. Undoubtedly, the planters and mining companies, which paid their workers in piastre, exported to Europe or elsewhere, and were paid back in gold, clearly benefited from the falling piastre. But the winners, at least in number, were clearly a minority. In 1902, a commission on monetary reform in Indochina was asked to find remedies for the situation and to stabilize the piastre. Its recommendations led only to the abolition of the 3% tax on the outflow of the Mexican piastre and a prohibition on inflows. The result: the silver monometallism of Indochina "became lame like the former French bi-metallism" (Robequain 1939). With the inflow of the Mexican piastre prohibited whereas the outflow of the French piastre (whose minting now required government authorization) was allowed, the pressure on the exchange rate increased. In the case of balance-of-payments surpluses, the debtor countries of Indochina could not get the necessary piastre against silver. The exchange rate of the Indochinese currency had to rise. In the case of balance-of-payments deficits, meanwhile, the piastre exchange rate had to fall below parity because the deficit could not be paid in cash. This regime, known as "in a vacuum," provoked deep criticism from experts, but still the government preferred to maintain the status quo.

1.3 The Rise of the Piastre (1914–1920)

The piastre's exchange rate, which was 2.50 francs at the start of 1914, then experienced a completely unexpected development: it surged to 16.50 francs in February 1920 (the highest it had ever reached). This reversal of the trend had three causes: the franc's depreciation, the rise of silver against gold, and a balance of trade in favor of Indochina, thanks to a rise in its exports.

The redistributive effects that were experienced when the piastre was in decline were also quickly reversed. France's civil servants benefited from the piastre's appreciation. So too did the local population, because, while domestic prices remained relatively stable, the cost of servicing French franc loans declined. On the other hand, the piastre's rise carried negative effects for other groups such as mining companies and rubber planters,

in particular, as well as any firms that had payments in Indochina but exported to Europe. Indochina's government budget was also unbalanced because of the Treasury's operations on behalf of the metropolis. All of this led those who were negatively affected by the piastre's appreciation, particularly those in France itself, to believe that Indochina had somehow adopted a "Chinese monetary regime," because it was inconceivable that the Indochinese piastre was "stronger" than the French franc. A new commission met in 1919 and significantly opened the Indochina market to French raw material and coal exporting firms and signaled its approval of a shift to a gold standard by invoking in particular the shortage of silver coins. France's efforts to stabilize the piastre's value against the franc raised many fears among the local population in Indochina, but in the end those efforts were confined to an arrangement authorizing the Bank of Indochina to issue banknotes with the integrated amount equal to a multiple of its reserves in gold and silver. This ratio, which was initially set at 1:5 in 1916, rose to 1:8 in 1918 and to 1:12 in 1920. The measure hardly slowed the piastre's appreciation. However, from 1920, the price of silver began to fall again, and this reversal led to the piastre's stabilization and eventually an abandonment of the silver standard.

2. The Path to the Piastre's "Francization"³

The piastre's peg to the franc did not come about directly but rather through the franc's relationship to gold. With the so-called Poincaré stabilization of 1926–1928—named after French President Raymond Poincaré—the franc was defined against a gold standard. As a result, the standard that was adopted by the metropolis was indirectly applied to the Indochinese piastre via its subordinate relationship to the franc.

2.1 Detaching from Silver and Attaching to Gold

The price of silver in London stood at 42.5 pence at the start of 1921, but by the end of 1929 had plunged to only 21.25, returning to its pre-World War I level. As a result, the piastre's exchange rate quickly broke down: it fell from 27 francs in 1926 to 12.80 francs in 1927 and to 10 francs at the end of 1929. Everyone who had benefited from the rise of the Indochinese currency immediately suffered from its fall. In particular, the metropolitan capital flow from the last boom resulted in considerable losses. Also, the local population quickly became poorer. Along with the Chinese currency, the Hong Kong dollar, and some other regional currencies, the Indochinese piastre suffered from an aftershock of the fall of silver when the Philippines,

³For the franc, this term is taken as equivalent to that of "dollarization."

Table A3: Balance of Payments of Indochina (million francs)

Years	Foreign trade					Repatriations of capital		Totals
	Exports	Imports	Balance of trade	Payments from the Treasury ^b	Balance at the disposal of the Issuing Institute	Dividends overhead taxes of the firms' management established in Indochina	Savings of the France's civil servant established in Indochina	
1928	3,579	3,239	340	80	420	200	400	600
1929	3,183	3,175	8	80	88	150	350	500
1930	2,428	2,435	(7)	80	73	100	300	400
1931 ^a	607	748	(141)	40	(101)	50	150	200

() = negative value.

^aFirst 6 months.

^bOrders of the public administrations in France (20 million) and private purchases paid by postal orders (60 million). Source: ANSOM. 1931. A Note on the Monetary Situation in Indochina. *Political Affaires* 2467(5). Ho Chi Minh City; and Gonjo (1993).

Java (Indonesia), Singapore, and Siam (Thailand) adopted the gold standard. The moment for Indochina to convert to the gold standard had come. A decree dated 30 May 1930 made it official: "the piastre as the monetary unit of the Indochinese Union is set at 665 milligrams of fine gold under 900/1,000, equivalent to 10 francs according to the definition of the law of June 25, 1928."

In accordance with the wishes expressed for several years by a number of specialists, the value of the piastre was finally linked to gold. It benefited from the Poincaré stabilization, which had defined the value of the franc in gold. The definition of the piastre by its yellow metal weight marked a significant change. It meant that the piastre rejoined the monetary regime prevailing in the rest of Asia. More important, giving to the Indochinese currency the same legal tender as the currency of the core country restored the unity of the system. Any inclination to exercise autonomous monetary policy on the Indochinese peninsula disappeared. Irrevocably, the piastre was linked with the currency of the colonizing country. As much as the standard of 665 milligrams of gold, it was the ratio of 1:10 against the franc that prevailed. Gold was only an indirect means to attach the piastre to the franc.

It must be said that Indochina's balance of payments on goods and services as well as capital moved unfavorably (Table A3). As for the commercial account, the value of exports, which was significantly higher than that of imports in 1928, no longer showed a surplus after 1929. Consequently, the relationship between the colony and the metropolis would soon be put in question, especially because new inflows could no longer finance the difference.

The colonial perspective was aptly expressed somewhat later by governor general Pierre Pasquier (quoted in Gonjo [1993, 327]): “Indochina is a colony to be exploited, and the activity of any kind that the Europeans deploy is above all to constitute in the hands of the civil servants, colonists and French firms, the liquid assets in local currency whose transfer they seek.”

From the 1930s, the drying up of capital inflows and the persistent trade deficit forced the Bank of Indochina to allow exceptional overdrafts, which tended to become permanent and had to be replaced by loans issued in the metropolis by the federal government. At the same time, it was observed that funds available for repatriation to France had decreased substantially from 1928.

2.2 Overvaluation of the Gold Piastre

From the time the gold piastre was first defined, the influence of the worldwide financial and economic crisis that started in 1929 was fully felt. The price of rice in Saigon dropped from 11.70 piastres a quintal in 1929 to 3.26 piastres in 1934. The fiduciary circulation declined from 170 million piastres in April 1930 to 99 million piastres 4 years later. Deflation had set in. People did not fail, of course, to question the new monetary regime afterward. They blamed the authorities for having stabilized the currency at too high a level and for being involved in *overvaluation*. The gold piastre, from that moment on, was criticized and there were even calls for a return to the silver standard. It is true that a currency that becomes increasingly strong as worldwide prices drop is a disadvantage. It was observed, in particular, that the abandonment of the gold standard in favor of sterling by some countries had led to the formation of a sterling bloc in Asia that compromised the competitiveness of Indochinese exports, whose prices then went up. In particular, the value of the Indian rupee, the Thai baht, and the Singapore dollar followed the decline of the sterling from 1931, and depreciated against the piastre—the only exception being the Indonesian rupiah (Bassino and Nakagawa 1999).

In this context, the public objected to the fact that while the volume of rice exports had climbed from 10 million quintals in 1930 to 14 million in 1934, the value of those exports had plummeted from 183 million piastres to 106 million piastres. In the same way, the favorable trade balance had improved during the same period, from 2.14 million piastres to 14 million piastres, but this was due more to a fall in imports caused by a stagnant economy rather than to a rise in exports.

Consequently, those who argued for a devaluation of the piastre, and even those who advocated a return to the silver standard, did not disarm. Once again, an official commission was organized to examine the monetary problem of Indochina, perhaps influenced by China’s decision in November 1935 to demonetize silver and integrate the Chinese currency

into the sterling bloc. Yet, once again, the commission recommended the status quo.

2.3 The Piastre as Satellite of the Franc (1936–1939)

The franc was devalued in 1936 and detached from the gold standard in 1937. It then became a floating currency, subject only to regulating interventions by the government. Shortly after the franc's devaluation, a decree on 2 October suspended provisions of the decree of 31 May 1930 that had put the piastre on the gold standard. Before that happened, the Bank of Indochina held fast to ensuring the convertibility of its banknotes in French francs on the basis of 10 francs for 1 Indochinese piastre.

From that day forward, any link to gold was abandoned and the piastre mechanically followed the franc's fluctuations. The franc was devalued twice in 1938 but still did not stop depreciating. On the eve of War World II, the dollar was worth 39.83 francs, which corresponded to 24.75 milligrams of gold equivalent—only 8.5% of the value of the franc's 290.32 milligrams of gold in 1803! For the piastre, the problem was no longer overvaluation but unrelenting depreciation.

Indeed, one can see that, after 1936, the piastre depreciated sharply against all Asian currencies. The feeling locally in Indochina was that, while the piastre had undergone a true devaluation, it was because of the metropolitan franc's tribulations and not because of any reason specific to the colony. No doubt, the piastre's fall would benefit exporters, but it would do little to help those who languished in the depressed economic situation caused by the worldwide crisis. Besides, by virtue of a "transfer of volatility" phenomenon, the piastre's exchange rate with other Asian trading partners was becoming increasingly volatile with variations in the franc–piastre rate. The local population, as well as domestic importers, had to cope with price increases fueled by a weakening in the local currency. There were calls to decouple the piastre from the franc and adopt a more autonomous local currency supported by a stabilization fund. In answer, the French administration emphasized the importance of the link between the piastre and the franc as a necessary symbol of a common destiny. Despite the conflicting views, once again, the status quo carried the day on the eve of 1939.

After the defeat of France in 1940, Indochina was cut off from its colonial ruler and lost its principal market and supplier (in 1938 and 1939, for example, the metropolis and the empire accounted for 46% of Indochina's foreign trade; in particular, they absorbed 45% of its rice and 95% of its rubber). While the Japanese occupiers allowed the French colonial administration a relatively free hand, Indochina had de facto entered the "yen area" under duress: Japan imposed their requirements on commercial and financial activities. Indochina had a significant commercial surplus, but it also paid 8 million piastres yearly to the Japanese occupiers for their

“operating expenses”—something that amounted, in effect, to a tribute. In 1942, the Japanese introduced a “special yen” into Indochina. It had the same value as the traditional yen but was not immediately convertible. The special yen quickly came into wider use as a portion of fiduciary circulation from 1938 to 1945, and its issuance increased dramatically after Japan’s forces finally took over on 9 March 1945. Payments to Japanese occupation forces for their “operating expenses” tripled (Meuleau 1990). One of the first measures French authorities took in December 1945 after the war was to demonetize the 500 piastre banknotes. But by then history had entered a new phase, as national resistance to the French colonial rule emerged.

3. Failure of the Monetary Union of the Associated States after 1945

3.1 Dates and Key Events

1945

November: Withdrawal of 500 piastre banknotes. To regain control of money in circulation (which had increased fifteenfold between 1938 and the end of 1945), the 500 piastre banknotes were demonetized in November 1945. (The French government had at first sought to withdraw the 100 piastre banknotes, but had abandoned the idea in the face of negative public reaction.) The French authorities justified the withdrawal of the 500 piastre notes by alluding to what they described as their “savage” introduction by the conquering Japanese in March 1945. The withdrawal of the notes, however, had another less apparent motive: to drain the Vietnamese Treasury, which held important stocks of these banknotes. This measure was designed by François Bloch-Lainé, the financial adviser of the French authorities.

December: The piastre at 17 francs. After numerous delays and procrastination, the French authorities, apparently at the initiative of Bloch-Lainé, fixed the piastre’s exchange rate at 17 francs to the piastre—compared with the 10 francs that had prevailed since 1931. This extraordinarily overvalued rate appeared aimed at reducing the cost of assisting Indochina, which the French thought should not be penalized at a time when the link with its metropolis was being restored. It appeared that the promoter of this overvalued exchange rate believed that it would be reconsidered quickly. It would not be until 1953. The severe overvaluation of the piastre would, in fact, prove to weigh hard on the economic and monetary history of Indochina.

1946

November: Creation of the dong. The National Assembly of the National Movement for the Resistance created the dong as the local currency and a symbol of anticolonial aspirations. The bills, in denominations of 1, 10, 100, 200, and 500, entered circulation at the start of 1947. Officially, the new monetary unit was defined by the value of the precious metal (0.375 grams of gold). In reality (Tertrais 2002), its value was based on popular support and the currency's effective diffusion, helped along by a vigorous propaganda campaign on the theme "to support the Vietnamese money is to support the battle for the independence of the country." The value of the new currency differed depending on where in the country the Viet Minh were established. Thus, from 1947 to 1948, the value of the dong ranged from 150–200 dong for 100 piastres in Tonkin to 300–350 dong in Cochinchina and to 400 dong in Hué.

1946–1947: Multiple-currencies. In 1946–1947, Indochina entered a period where several currencies co-circulated, in the process creating a "war of currencies." The armed forces of each side sought to discredit the currencies of the other side. The resistance punished those who paid in piastres, while the French *deuxième bureau* (military intelligence) introduced fake dong notes to discredit the new nationalist currency. After the breakdown of the Sainteny–Ho Chi Minh agreement of March 1945, the bombings in Haiphong, and incidents in Ha Noi on November 24, open war broke out.

1947–1950

Financial disorder of the colonial war. During this period, military operations gained in importance. The French expeditionary task force doubled its recruits to 100,000 men by the end of 1946. Although France was having serious difficulties financing its war expenditures, and costs within the metropolis were increasingly contested, its military operations in Indochina and the economic war of the resistance (attacks on plantations, denunciations of collaborators by the resistance movement) persisted and expanded.

Indochina's commercial balance worsened as the exchange rate of the piastre against the franc attracted excessive imports. This created an environment for dangerous speculation (the infamous "traffic of the piastres") and led to an artificial increase in the flow of funds toward the metropolis. Financial transfers from Indochina to France nearly doubled, from 61 billion francs in 1948 to 112.8 billion francs in 1949, and soared to 223 billion francs in 1952 (Table A4). A significant portion of these transfers came from fraudulent activities. Speculators would purchase piastres on the black market and transfer them officially to France, picking up a profit of 6–9 francs per piastre. All of this involved fraudulent means—such as excessive invoicing, false orders, and illegal transport—which the

Table A4: Indochina's Total Transfer to France from 1947 to 1952
(billion francs)

Years	By the banks		By the posts	Others	Total
	Financial operations	Commercial operations	Civil and Military	Purchases and Treasury operations	
1947	17.9	11.0	3.7	6.4	32.6
1948	15.0	32.7	7.4	7.2	61.5
1949	28.7	63.9	13.0	4.2	112.8
1950	37.7	72.1	21.4	2.7	135.4
1951	51.9	109.0	16.0	10.3	179.6
1952	54.1	134.1	25.0	na	223.5
Total	205.3	422.8	86.5	30.8	745.4

na = no data available.

Source: Mondon Report, National Assembly, No. 8681.

authorities tolerated, in hopes of securing permission from the Office of Currency Exchange to transfer the funds. As a result, an atmosphere of illicit behavior prevailed, and numerous scandals (Despuech 1953) provoked suspicions about the different actors, including the Bank of Indochina. The anomaly lasted until the much-delayed adjustment of the franc–piastre exchange rate.

1953

Devaluation of the piastre. The military situation for France, meanwhile, was deteriorating, beginning with the retreat of the Cao Bang garrison in October 1950. On the political front, Bao Dai's Viet Nam, as well as Cambodia and Laos, recognized the status of the Associated States in 1949, and the transfer of sovereignty had already begun to be organized. France appeared to understand that, in compensation for independence, it had to allow Viet Nam to participate, and so it stepped up its war effort. At the same time, the US started contributing more and more financial support to the French war effort in the 1950s, with its share of the cost increasing from 20% in 1951–1952 to 41% in 1953–1954. Indeed, in the French political and military circles, people began to talk about “a war for sale to America” (Tertrais 2002, 134).

On the monetary front, the need to devalue the piastre had become unavoidable. It was the only way to stop the so-called “traffic of the piastres” and to reduce the heavy burden on the French Treasury caused by the Indochinese conflict, which was exhausting public funds (there were frequent complaints in Paris that the “the treasury is empty”). In strict coordination with the US government, which contributed \$400 million in assistance to France, the rate of the piastre was fixed on 11 May 1953 at 10 francs to the piastre, a devaluation of 40%. The Associated States reacted to the devaluation with a sense of revolt, vigorously protesting

the French action.⁴ Other measures that were adopted at the time, such as price freezes and trade restrictions, were also poorly received. The Viet Minh recognized that, despite the devaluation, the link between the piastre and the dong was maintained. In fact, the piastre in the south of the country was still worth between 50 dong and 100 dong after the devaluation. The economic effects of the devaluation, however, were quickly overtaken by the rapidly deteriorating military situation (the failure of the Navarre plan). This marked the end of what could have been a grand scheme—a common monetary zone among the three Associated States, which, however, would have been part of the “franc zone.”

3.2 Disintegration of the Monetary Zone

ASPIRATIONS OF THE AGREEMENTS OF PAU

To understand the risks associated with the devaluation of the piastre, one must look back to the Agreements of Pau in 1950. One of the aims of the agreements was to transfer competencies and assets to the three Associated States—Viet Nam, Cambodia, and Laos. The conventions signed at Pau stipulated a large transfer of principal powers—political, economic, and financial. In addition, there was a customs union project and a convention concerning the common use of the port of Saigon and navigation on the Mekong. It was a federal system where France, however, retained some key control. The agreements also called for the establishment of an institution to replace the Bank of Indochina so that the Associated States could eventually issue the piastre, the registered official currency of the whole union. In December 1951, the Convention of Paris authorized the transfer of power to issue the currency, and the head office of the central bank at Phnom Penh was informed. For its part, the French government also took steps to ensure the smooth transfer of monetary authority, although the French Treasury retained control of financial transfers to and from the metropolis for military and civil expenditures. It also assured the hedging of the recently circulating piastre in francs.

It was thus that France accepted the principle of gradual independence for Indochina, which, however, would remain under the rule of the French Union. On the military side, leaders such as General Jean Joseph Marie Gabriel de Lattre de Tassigny were adamant about continuing to prosecute the war. On the monetary side, meanwhile, with the creation in December 1951 of the Institut d’Emission, which was authorized to issue piastre on behalf of the Associated States, the keystone of an embryonic monetary zone appeared to be in place.

⁴A week after the devaluation, Maxime Robert, general vice director of the Bank of Indochina, declared, for example, that the measure “decreases the Bank’s profit carried out from the beginning of the year by 41%” (Tertrais 2002).

DISADVANTAGES OF A LACK OF COOPERATION AMONG THE ASSOCIATED STATES

What subsequently unfolded did not go according to plan. Technically speaking, the law of 1951 stipulated that the “Institut d’Emission is required to progressively supply and maintain the hedging of foreign currency in francs of at least or equal to 50% of the fiduciary circulation.” But by May 1952, 5 months after the law was supposed to be implemented, the level of hedging of the franc into fiduciary circulation was at only 13%. In reality, only the credits of the war backed the piastre.

In political terms, the relationship with the Associated States deteriorated rapidly, particularly between Norodom Sihanouk’s Cambodia and France. The conventions on the common use of the port of Saigon and navigation on the Mekong were far from being concrete. Viet Nam also quickly clashed with Cambodia, which refused to fix the prices of products that were of common interest, such as petrol and medicines, which were not stipulated in the Agreements of Pau. Phnom Penh retorted that it had a right to be compensated. In 1952, a rice shortage forced Viet Nam and Cambodia to prohibit the export of rice from their territories. Moreover, in autumn 1953, Viet Nam failed to return custom taxes owed to its two partner states that helped spell the end of the experiment with a customs union. The Institut d’Emission, which began operating in Phnom Penh in 1952, generally performed much better, but was weakened by the devaluation of the piastre in May 1953, which forced the Associated States to face some stark realities. Authorities in Saigon, Phnom Penh, and Vientiane soon began to take more unilateral measures. At the start of 1953, Cambodia’s prime minister even demanded, on behalf of the Kingdom of Khmer, the possibility of having its own national currency.

Above all, it should be noted that at the start of 1953 the influence of the US in Indochina began to increase significantly. No fewer than 65 US missions passed through the area that year. The US role in helping to finance the war was on the rise, while France’s was in decline.

Gradually, France, which had long viewed the Associated States as its “private hunting grounds” (Tetraï 2002, 154), became resigned to its military setbacks in Indochina, at the same time that the US was pushing hard to get out of the assistance it was providing, particularly in Viet Nam. At the center of the French–American clash was the view in France that the US had encouraged the French by providing financing.

The Agreements of Pau—which should have provided a natural framework for economic and monetary cooperation among the Indochinese states associated with France under the auspices of the French Union—quickly gave way to disagreements among the Associated States and between the states and France. It is not surprising that military setbacks multiplied gradually, since even before the French defeat at Dien Bien Phu in the spring of 1954, the plan envisioned by the Agreements of Pau had

failed. The official breach of the customs and monetary union came at the initiative of Cambodia in November 1953, when it signaled its desire to abandon the agreements and leave the French Union. Laos, however, signed a treaty of cooperation with France that granted the kingdom independence while allowing it to remain a member of the French Union. Viet Nam, meanwhile, after lengthy negotiations with France, was recognized as a “fully independent and sovereign state” on 8 April 1954. But a few weeks later, at the end of the battle of Dien Bien Phu, marked by the French defeat on 7 May 1954, came the highlights of the Geneva Agreements of June 1954.

The temporary economic and monetary union achieved by Indochina was effectively liquidated. With the partitioning of Viet Nam into two zones, North and South, there were now two opposing monetary systems in fairly large disorder. In the South, the piastre of Bao Dai was issued by either the Institut d’Emission or the Bank of Indochina at the same exchange rate. In the North, the Institut d’Emission created in 1951 introduced a new dong worth 10 old dong, which circulated alongside the old Ho Chi Minh dong. After the ceasefire, the Republic of Viet Nam officially fixed the exchange rate at 30 Ho Chi Minh dong for 1 piastre, which, after some initial difficulties, eventually proved to be a respectable exchange rate. Nevertheless, Indochina at this time faced a situation where a number of different currencies were co-circulating within the territory. This persisted until 1955, when each of the states recovered full monetary sovereignty. But by then, Indochina had become “balkanized” by the long period of open struggle for influence between the US, on one side, and the Soviet Union and the People’s Republic of China (PRC), on the other.

4. The First Attempt at a Monetary Union?

Without a doubt, we can attribute the failure of the first attempt at a monetary union to the political and military situation, which was very unstable during this period. To achieve a customs union and establish an institution to issue currency common to the three member states would on its own have met strong resistance within each state, setting aside the US’s later intrusion into the scene. Under all of these circumstances, it would have been an extraordinary result had this first attempt at a monetary union succeeded. Nevertheless, one can provide an interpretation of the failure of these efforts in a very limited sense by looking at them in strict economic terms.

4.1 Usefulness of Criteria for an Optimum Currency Area

There are four important criteria to consider in measuring the opportunities for creating an effective monetary union. These are (Mundel 1961):

- differential mobility of factors (internal factors in the area should be much stronger than the external factors, especially labor);
- intensity of commercial exchanges;
- noncorrelation of shocks; and
- convergence of collective preferences.

It is evident from this list that the three Indochinese territories were a few years behind their expectations. With the advantage of recent analysis of the situation (Frankel and Rose 1998), it could be argued that even if all the linked criteria were not in place at the start, the states could still have managed to gradually integrate and develop through self-reinforcement. However, there were numerous clashes between the Associated States, notably “the sword of Damocles” represented by the threat of the Viet Minh.

It was actually the start of the split-up of the member states that eventually threatened the aspiration to create an economic and monetary union. With a territory where the majority of land was controlled by a resistance movement, and disturbances of road and railway communications and periodic military operations that isolated large geographic zones were commonplace, the conventional theory of the ideal monetary union did not make sense. It is also important to understand that the principal common factor of an eventual integration was *exogenous*: the tough willingness of France to maintain its leadership, while at the same time trying vainly to accommodate the aspirations for independence in each territory.

4.2 The Alternative of a Hegemonic Model of Monetary Union

The attempt to create an economic and monetary union in Viet Nam differed considerably from the integration experiences of Europe that began in the 1950s and eventually led to the European Union. Three traits were dominant in Viet Nam:

- A *hegemon* existed outside the zone, namely, France. It initiated and managed the project. Its interests were evident. First, it opposed the creation of the Republic of Viet Nam in the North, and the idea that it might spread its influence and find other territories to regroup with them. France also had an interest in strengthening the other states to “Vietnamize” the war, since it was becoming too expensive to wage alone.

- The former powerful colonizer was willing to compensate for the loss of its sovereignty over its former colonial states by having the three new Associated States participate in the French Union. This whole federal area would preserve France's guardianship and protect its interest.
- The French Treasury, with its own operations account, effectively had a hold over Indochina's financial system. While a national treasury was set up in each of the three member states (Viet Nam, Cambodia, and Laos) in 1949, its role was minor and subordinate—namely, as the “monetary operations account and settlement of the French Treasury in Indochina.” It managed the transfer of credits into different territories. This mechanism gave France the authority to control monetary and financial flows. As a consequence, it created a system of asymmetric control that considerably benefited Paris. This was similar to the mechanism (Bloch-Lainé et al. 1956), employed in Africa and other parts of the “franc zone.”

Still, a monetary union in Indochina could have achieved positive results if it had followed three series of centrifugal forces. The following would have been necessary:

- There had to be a basic level of cooperation and common preferences among the Associated States in political customs, control of the currency exchange, money supply, and common infrastructure. The differences among the states were stark. The population of Cambodia, for example, was only a third of Viet Nam's, and there were enormous inequalities in France's level of investment and capital flows from its businesses in the two places. As for Laos, it included a larger area but with less population and was mostly divided up among divisions of the royal families. It had also become a real battlefield for the Viet Minh and their ally, the Pathet Lao. In short, it was too early to conclude that Indochina in 1954 had the characteristics needed to successfully launch a monetary union. As for the future of South Viet Nam, its resources were notably sufficient, but it was under pressure from the Viet Minh, and its new President Ngo Dim Diem deliberately turned to the US for help. It was obvious that the three Associated States at the start of the 1950s lacked the genuine willingness to carry out an economic and monetary union.
- The pressure from the North would have had to be less negative. However, by 1952–1953, the progress being made by the Viet Minh on both the political and monetary front was already too strong to allow the monetary integration of the Associated States to go

forward. After the defeat of France at Dien Bien Phu, integration became purely and simply impossible.

- US interference in the relationship between France and the Associated States would have had to be less pronounced. However, during the short period of the economic and monetary union (1951–1954), two of the three states experienced a real “iron hand” from the US. France tried to transfer more and more of its war expenditures to the US to reduce its own spending, but, as a consequence, the use of US aid as a lever of power became more and more straightforward (US spending, for example, surged from \$400 million in 1953 to \$785 million in 1954).

Moreover, the increasing competition for leadership between the US and France, which became a subject of frequent conflict between the two, undermined the fundamental elements of cooperation among the Associated States needed to make an economic and monetary union work.

5. What Lessons Can Be Drawn?

It is understood that the project to create an economic and monetary union in Indochina came too late to have any chance of success. The two principal lessons to retain are: *first*, a monetary union cannot succeed if it is managed in the context of a military conflict; and *second*, even if there is peace, such a union demands a minimum of consensus allowing collective preferences from the participating member states.

The monetary policy undertaken by France regarding exchange rates from the conquest of Indochina until its independence seems to have been a story of missed opportunities. At the start, the benefit the colonial power brought to Indochina was to give it its own currency and to organize a better system of monetary circulation. By creating the piastre and by rationalizing the money supply, France gave this faraway territory, which was likely to form close trade links with its Asian neighbors, a considerable advantage.

It must be admitted, though, that what eventually happened was less inspiring, one could almost say disappointing. Three decisions, in particular, seem to have been untimely.

5.1 Long-Term Changes in the International Monetary System

This came about on several occasions when France chose the silver standard, linking the piastre to silver in 1878. There were certainly several motives. China, the main regional trade partner, was also using the silver standard. Furthermore, coins in circulation, in particular the ubiquitous

Mexican piastre, were in silver. France chose this course of action even though the circulation of coins decreased from 1870, and a range of countries (India, Japan, Siam [Thailand], the Philippines) began adopting the gold standard at the same time. Similarly, it is difficult to ignore the fact that in 1930, when, after decades of silver currencies, France changed to currencies convertible into gold, it failed to recognize that this also marked, in fact, the twilight years for convertibility into gold. Finally, when the piastre was linked closely to the French franc between 1936 and 1937, it was done so without regard to what we know today (Argy 1990)—namely, that the peg for the exchange rate of a small country compared with that of a larger country is justified only if the partners have stable inflation rates and an acceptable level of economic stability. But the piastre's link with the franc came about at the wrong moment, as subsequent devaluations demonstrated.

5.2 Inability to Stabilize the Piastre's Rate

Both before and after World War I, it is striking to note that France allowed the piastre's exchange rate to experience large misalignments in both directions. This resulted, first of all, because of the sharp fall in the price of the silver coin, which lost half of its value from 1890 to 1902. Then, its value reversed, climbing sevenfold between 1914 and 1920, only to decline again against the franc from 27 francs in 1926 to 10 francs in 1929. At each stage of these exponential disturbances, commissions were assembled and experts consulted to analyze the causes and propose solutions (Long Commission in 1902, Berru  in 1902, etc.). But too often, these commissions either recommended the status quo, or proposed unrealistic exchange rate levels (as in 1930, when the piastre was fixed at an increased value of 10 francs, just at the moment when the currency was collapsing in East Asia). The best example of this unsuitable parity is the one adopted in 1945, which set the piastre at 17 francs, a level that was ludicrously overvalued. Besides, it seems that after the silver standard was abandoned, and more clearly still after 1945, there was a clear preference for an overvaluation of the piastre. This appears to have had two causes. First, French groups and firms in Indochina (including the armed forces) put pressure on the government for a "strong" piastre to maintain the value of their income in francs. Second, it seems equally clear that the Bank of Indochina used its considerable influence to maintain the artificial rate for the piastre because this allowed it to receive substantial profits on the transfers it made to the metropolis. This situation also encouraged often-illicit transfers from Indochina to France before 1953, the so-called "traffic of the piastre."

5.3 Late Attempt at a Tripartite Monetary Union

France without a doubt lost many opportunities to help the states of Indochina move toward independence in a peaceful way. The principal one was the failed Ho Chi Minh–Sainteny Agreement of 1946. But, at a more modest level, it might still have been possible to prepare the future better by thoroughly seizing the opportunities offered by the Agreements of Pau. A real economic and monetary union of the Associated States would have had the benefit of avoiding the extreme “balkanization” of the Indochinese peninsula that resulted from the Geneva Agreements. Had it been launched earlier and not conceived as a barrier to external players but rather as a real union susceptible to later negotiation into a confederation, it might have succeeded. It is known, of course, that this was not the case. Unfortunately, Indochina was not able to avoid repeated conflicts later, even bloodier than the first Indochina war. Today, the conditions of these three countries are completely different. Understandably, given past experiences, these countries may be reluctant to cede their monetary sovereignty to a new experiment with monetary union. The example of the European Union and the euro shows that this could be a fruitful path to pursue, but it would be a long-term one and one that would require strong political commitment.

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Dealing with Multiple Currencies in Transitional Economies

The transitional economies of Cambodia, the Lao People's Democratic Republic, and Viet Nam—the CLV countries—share monetary and financial systems characterized to various degrees by the use of multiple currencies, such as the US dollar or the Thai baht, in addition to each country's domestic currency. Because there are costs as well as benefits associated with a multiple-currency system, national authorities need to assess the ramifications and adopt monetary strategies and exchange rate regimes in line with their development priorities.

While dealing with multiple currencies is ultimately an issue of national economic policy, the CLV countries could benefit from greater regional cooperation on monetary and financial issues. They would be able to exploit economies of scale, introduce best practices, and facilitate the adoption of common regulatory standards. Greater regional dialogue on monetary policy could also help the CLV countries find a solution to the so-called multiple-currency phenomenon and reap more benefits from their increasing regional economic interdependence.

This study, conducted by a team of economists from the Asian Development Bank, academics, and personnel from CLV finance ministries and central banks, explores the issues of multiple currencies and regional monetary cooperation among the economies of the Association of Southeast Asian Nations (ASEAN) in the context of increasing regional economic interdependence. It reviews the main issues related to the monetary and exchange rate policy decisions taken by CLV national authorities, and discusses the options and opportunities available for enhancing monetary and financial stability in the ASEAN region.

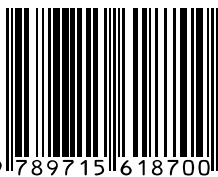
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