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RETHINKING CAPITAL CONTROLS:

THE MALAYSIAN EXPERIENCE

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Abstract: This paper reconsiders the role and effectiveness of capital controls for emerging market economies. While it is best to minimize the risk and severity of crises by reforming the international and regional financial architecture and by strengthening domestic policy and institutional frameworks, controls on short-term capital flows can have a role to play in managing the transition process of financial integration. Empirical evidence, however, generally challenges belief in the effectiveness of capital controls, particularly when they are introduced on outflows at a time of crisis. In this regard, Malaysia's recent experience with outflow controls is noteworthy, as the controls appear to have achieved the objective of securing monetary independence under a fixed exchange rate, allowing interest rates to decline substantially during a period of output contraction. We argue that this generally salutary effect of the Malaysian control measures was mainly due to the fact that the controls were explicitly introduced as time-bound measures, supported by a sound macroeconomic policy framework, bank and corporate restructuring, a currency widely perceived to be undervalued, and credible supervision and implementation. This experience suggests that use of capital outflow controls has a place in the arsenal of policy instruments, to be used within the context of a policy framework and circumstances specific to the country concerned.

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I. INTRODUCTION

The 1990s saw a number of capital account crises in emerging market economies. The crises, which were precipitated by a sudden reversal of capital inflows, occurred against the background of financial market deregulation, capital account liberalization, and financial sector opening. Deregulation and liberalization have undoubtedly brought about benefits in the form of greater financial resource mobilization for domestic investment and economic growth. At the same time, this has created new sources of vulnerabilities in the balance sheets of commercial banks, corporations, and the public sector.

The high frequency of emerging market crises has led policymakers in some of these economies to question the virtue of unrestricted capital mobility in an increasingly globalizing and potentially volatile world economy. It is thus not surprising that some Latin American countries—notably Chile and Colombia—have employed capital inflow controls, while Malaysia adopted capital outflow controls, in recent years. Through the use of capital control measures, these countries have tried to protect their economies from the vagaries of unstable capital movements. This paper is an attempt to assess the role and effectiveness of capital controls in the light of these recent emerging market experiences, with a particular focus on Malaysia.

The paper is organized as follows. Section II discusses capital controls as an instrument for managing the process of financial market integration, by making specific references to Chilean-style reserve requirements, prudential regulations on short-term external liabilities, and controls on short-term capital outflows. Section III reviews Malaysia's recent experience with capital outflow controls. The conclusion that emerges from our analysis is that the controls generally had a salutary effect, mainly because they were placed explicitly as a temporary measure and were supported by a sound macroeconomic policy framework, bank and corporate restructuring, a currency widely perceived to be undervalued, and credible supervision and implementation of the control measures. Section IV concludes the paper.

II. CAPITAL CONTROLS AS AN INSTRUMENT FOR MANAGING FINANCIAL MARKET INTEGRATION

1. Policies and Institutions for Crisis Prevention and Management

Sound macroeconomic and exchange rate policies. In order to enjoy the benefits of global financial integration, emerging market economies must minimize the risk of crisis first and foremost by pursuing sound policies designed to maintain macroeconomic stability, prevent an overvaluation of the currency, and avoid an unsustainable accumulation of short-term external debt.[1] With free mobility of capital, choosing an exchange rate regime is particularly difficult. The authorities must strike an optimum balance among the three

[1] The following discussion draws on Kawai, Newfarmer and Schmukler (2001).

objectives of exchange rate stability, free capital mobility and independent monetary policy. Once an appropriate exchange rate regime is chosen, it must be credibly backed by consistent macroeconomic policies and robust financial systems. Countries choosing fixed rate regimes must be willing, as necessary, to subordinate monetary policy objectives to fixing the rate.

Information disclosure. Much of the over-lending typically found prior to currency crisis might be avoided if international investors correctly appraise the macroeconomic and structural conditions of the host economy. Harmful herd behavior, both in the capital inflow phase and in precipitating or magnifying a crisis, can be mitigated to some extent by better information disclosure. As to the investors, the international financial community must coordinate its regulatory framework to limit their pro-cyclical tendencies. Particularly given the potential impact of large institutional investors on emerging markets, investor disclosure should cover, at a minimum, the value of open foreign currency positions, and the country and maturity breakdowns of portfolio investments. To the extent that financial flows are global, an internationally coordinated approach will be imperative to better regulate large investors and highly leveraged institutions.

Sequencing of capital account liberalization. While capital account liberalization provides emerging market economies with substantial benefits, it can be costly if the macroeconomic and supervisory policy framework is weak or if the domestic financial and corporate sectors are not able to manage risks prudently. For the right "sequencing" of capital account liberalization, the country in question must first establish a resilient and robust domestic financial system, by ensuring adequate capitalization, loan-loss provisions, risk management practices, and disclosure and accounting standards (McKinnon 1991; Eichengreen 2000). It is also important to put in place incentives for sound corporate finance practices so as to avoid high leverage and excessive reliance on foreign borrowing. These building blocks must be in place before an economy can benefit fully from free access to international capital markets.

International support with private sector involvement. If a currency crisis results from illiquidity, and not insolvency, internationally coordinated liquidity support to the crisis country can be justified in order both to prevent the crisis from becoming unnecessarily severe and to limit the contagion to other countries. When support is provided by international financial institutions (IFIs), it is essential to "bail in" private foreign creditors through debt restructuring, including standstills, rollover agreements, maturity extensions, and possibly interest or debt reductions. Private sector involvement is essential, not only because official resources are finite but also because a large official package can create moral hazard. Official standstills may constitute an essential strategic threat needed to limit moral hazard; they can also function as a floodgate that helps stop the sharp decline in currency value and give the authorities time to put in place a credible crisis resolution strategy.

Regional financial cooperation. Because a capital account crisis is often regional in character, simultaneously affecting several economies in the same region, a cooperative framework for regional financial management can become useful. Such a framework involves four aspects:

- Modalities for regional surveillance;
- Schemes to augment international liquidity;
- Mechanisms to ensure consistent exchange rates within the region; and
- Medium-term programs to assist countries for crisis resolution and recovery.

First, regional surveillance places peer pressure on each country to pursue macroeconomic and structural policies that reduce the risk of crisis and contagion. Second, a regional financial facility can supplement global sources of international liquidity. Third, choosing mutually consistent exchange rate arrangements is desirable, when the economies are interdependent. This process may entail coordinated efforts to ensure intra-regional exchange rate stability. Fourth, while mobilizing fiscal resources is essential to quickly resolving the crisis, the resources may be limited by the lack of fiscal headroom or constraints on external financing on market terms. Regionally concerted action to mobilize such resources, particularly from the core countries in the region, would contribute greatly to crisis resolution.

2. Rationales and Typology of Capital Controls

Rationales for capital controls. While the best protection against currency and banking crises is provided by sound policies and appropriate institutions, as noted above, the efforts to implement these measures may take a long time. Thus, controls on short-term capital flows may be useful as an instrument for managing the transition process of financial market integration (World Bank 2000b, Chapter 5). Capital controls may have the additional benefits of (1) providing a degree of monetary policy autonomy under fixed exchange rates, (2) reducing the wedge between the private and social returns of capital inflows when the systematic failure of speculators to evaluate the fundamentals causes private capital flows to be destabilizing, and (3) curtailing rapid capital outflows in a "second generation" environment—where self-fulfilling expectations lead to multiple equilibria—so as to prevent the economy from slipping out of a "good" equilibrium (Dooley 1996a). In these and other arguments, capital controls are justified as a second best measure, given some distortions or imperfections in the economy (Dooley 1996b).

Typology of capital controls. In discussing capital controls, several important distinctions should be made:

- Controls on inflows versus outflows;
- Permanent versus temporary controls;
- Selective versus comprehensive controls;
- Price-based versus administrative controls; and
- Imposition versus effectiveness of controls.

First, while controls on inflows may be intended as a measure of crisis prevention, controls on outflows are often used as a tool of crisis management. The conventional wisdom based

on a wide range of evidence suggests that outflow controls are less effective—particularly when introduced during a crisis—because they are often not incentive-compatible.

Second, permanent controls are less effective than temporary controls, because economic agents tend to find ways of evading controls over time. The possibility of evasion implies that if capital controls are effective at all, they are more effective in the short run than in the long run.

Third, selective controls that allow exemptions are less effective than comprehensive controls that cover all transactions. In a highly open economy with a commitment to transparency and accountability, there is a limit to the coverage of capital controls and the rigor with which they can be enforced (Neely 1999). Some transactions in some sectors are inevitably exempted from the application of controls. For most of the industrial and emerging market economies that are increasingly integrated with global financial markets, it is increasingly difficult to install comprehensive capital controls that cover all possible transactions. The controls, if ever introduced in these economies, are almost always selective.

Fourth, price-based capital controls are less distortionary and abrasive than administrative controls. As a result, there is a presumption that if capital controls are to be introduced, ideally they should be price-based so as to ensure greater benefits to the imposing country of access to international capital markets. A typical example of a price-based capital control regime is the well-known Tobin tax (Tobin 1978), also known as the system of "throwing sand in the wheels of international finance" (Eichengreen, Tobin and Wyplosz 1995; Eichengreen 2000). The Tobin tax is a small tax on foreign exchange transactions, which is intended to raise the cost of short-term capital movements relative to long-term capital flows. Its technical feasibility and effectiveness are seriously doubted, however, given the need for a complex transnational apparatus of tax collection and allocation—to avoid evasion—and the availability of various derivative instruments to transfer funds without the appearance of foreign exchange transactions (Garber and Taylor 1995).

Finally, the imposition of capital controls does not necessarily mean that they are effective in achieving the intended objectives. According to Dooley (1996b), both industrial and developing countries have been successful in using capital controls to drive wedges between domestic and international interest rates, generate revenue for the governments, and limit debt-service payments on domestic government debt. However, the empirical literature does not generally support the "power of capital control programs to affect other important economic variables, such as the volume or composition of private capital flows, changes in international reserves, or the level of the exchange rate." Nor have capital controls been effective in preventing "successful speculative attacks on fixed exchange rate systems" (Dooley 1996b, p. 641).[2]

[2] In this context, Johnston and Ryan (1994) have shown, from the sample of 52 countries during 1985-92, that capital controls are generally more effective for industrial countries than for developing countries, reflecting the difference in the competence of bureaucratic systems.

3. Recent Examples of Capital Controls

Three types of capital control regimes recently have been either used or proposed for emerging market economies:

- Chilean-style reserve requirements on short-term capital inflows;
- Prudential regulations on short-term external liabilities; and
- Restrictions on short-term capital outflows.

The advantages and disadvantages of each of these regimes are summarized in Table 1.

Table 1. Advantages and Disadvantages of Selected Short-term Capital Control Regimes as a Financial Safeguard

	Chilean-style Reserve Requirements	Prudential Regulations on External Liabilities	Restrictions on Short-term Capital Outflows
Costs and their Incidence	Raise domestic interest rates, but government obtains revenue and liquidity	Raise interest costs to domestic borrowers, as supply of funds is restricted	Lower interest costs but raise administrative costs
Ease of Implementation	Complex: Require comprehensive coverage of all inflows to be effective	Complex: Require careful monitoring to ensure compliance	Most complex: Incentives to evade are strong, especially if controls are permanent
Effectiveness	May increase maturity of outstanding debt but do not insulate economy from large international price and interest rate shocks	Directly reduce exposure to short-term debt and hence to vulnerability on account of currency mismatches	Have typically proved ineffective, although recent outcomes in Malaysia are consistent with stated goals

Source: World Bank, *Global Development Finance* (2000b), p. 101.

Chilean-style reserve requirements. During at least part of the 1990s, some countries imposed restrictions on capital inflows in order to protect the domestic economy from the volatility of global financial cycles (World Bank 2000b). Of these countries, several Latin American countries—Argentina, Chile, Colombia, Costa Rica, and Mexico—employed reserve requirements that borrowers of short-term foreign funds (usually with maturities of less than 12 months) must deposit at the central bank. Chile (introduced in 1991) and Colombia (1993) were the heaviest users of restrictions on capital inflows in Latin America.

In June 1991, ***Chile*** introduced what became known as an unremunerated reserve requirement (URR) on new capital inflows. In the initial phase, a rate of 20 percent was applied to all newly entering portfolio capital for up to one year, with reserves to be held in a non-interest bearing account with the central bank. In May 1992, the rate was raised to 30 percent for foreign currency borrowing except by corporations; in August 1992, the rate was made applicable to all transactions. The rate was lowered to 10 percent in June 1998 before being zeroed out in September 1998 (Ariyoshi et al. 2000). Two aspects of the Chilean regime deserve note. First, the coverage of the URR excluded some potentially volatile short-

term flows such as trade credits, creating scope for substitution between exempted and taxed transactions (Nadal-De Simone and Sorsa 1999). It was also discriminatory, in the sense that larger firms were better able to obtain direct trade credits from their foreign counterparts (Valdes-Prieto and Soto 1998). Second, the URR was implemented under the environment of a supportive economic policy, which moderated the appreciation of the real exchange rate. The Chilean authorities improved the prudential regulation of the financial system and ran fiscal surpluses. Inflation declined each year the URR was in force (Ulan 2000).

Likewise, in September 1993, ***Colombia*** adopted a URR on corporate liabilities in foreign currencies, except trade credits. Initially, the rate was set at 47 percent for one year on all foreign loans with a maturity of less than 18 months. The coverage was then extended during 1994 to loans with a maturity of less than 36 months (in March) and to those with a maturity of less than 5 years (in August), the reserve requirements were made progressively tighter for shorter maturity loans, and the holding period was set equal to the maturity of the loan. From 1996, the URR rates began to be lowered, with some vacillations in coverage (Cardenas and Barrera 1997). Unlike Chile, there was no supportive macroeconomic policy. Following the imposition of the URR, the Colombian authorities relaxed fiscal and monetary policies, so that the fiscal deficit grew from 0.7 percent to 4.9 percent of GDP between 1993 and 1998, and inflation averaged over 20 percent (Ulan 2000).

Several empirical studies have evaluated the effectiveness of the Chilean and Colombian capital controls (e.g., Edwards 2000; De Gregorio et al. 2000; Valdes-Priesto and Soto 1998; Cardenas and Barrera 1997). In both countries, there is some evidence to suggest that the URR changed the composition of capital inflows in favor of longer maturities, without reducing the overall volume.[3] In the sense of creating a wedge between domestic and international interest rates and generating government revenue, the Chilean controls were more successfully administered than the Colombian ones. The difference may reflect the presence of more supportive macroeconomic policies and institutions in Chile, including the allowance for fewer exemptions, a central bank with enforcement capacity, a long tradition of compliance with laws, and a relatively low degree of corruption (Ulan 2000). Even in Chile, however, there is no evidence to suggest that the URR helped contain the real exchange rate appreciation; there was some substitution of exempted for taxed short-term flows, so that the impact on the volume of short-term inflows was not substantial and the scope for independent monetary policy was limited.

***Prudential regulations on short-term external liabilities*.** Controls can take the form of prudential regulations over banks and corporations (Stiglitz and Bhattacharya 1999). They include limits on short-term external borrowing by domestic banks, limits on the net—as well

[3] This result, however, is by no means definitive. Laurens and Cardoso (1998) show that the controls in Chile had no permanent effect on the composition of capital inflows, as the negative impact on short-term capital inflows disappeared after two quarters. On the other hand, Montiel and Reinhart (1999) have shown on the basis of a panel of 15 countries during 1990-96—including Argentina, Brazil, Chile, Colombia, Mexico, Indonesia, Malaysia and Thailand—that capital inflow controls changed the composition of capital inflows in favor of longer-term portfolio and FDI flows, but did not reduce the overall volume.

as overall—foreign exposure of banks, higher capital adequacy standards, and tighter supervision of banks with inadequate risk management techniques, especially with respect to borrowers with significant foreign currency liabilities. As to the corporate sector, growth of foreign currency debt can be checked indirectly through proper risk management by domestic creditor banks, or directly through placing prudential limits on corporate borrowing, depending on creditworthiness. More intrusive regulations would be to limit corporate external borrowing on the basis of financial characteristics, such as overall leverage, the ratio of foreign to domestic borrowing, or the size of export earnings.

Such prudential regulations may be introduced when excessive international borrowing, particularly by banks or corporations, can have negative spillover effects on the safety and soundness of the whole domestic banking system. Whether prudential regulations are more effective and simpler to administer than outright controls likely depends on the nature of the problem being addressed and the institutional capacity of the authorities concerned. Practically, prudential regulations are limited to the established banking and corporate sectors, which are more amenable to government supervision and regulation. Often, some otherwise innocuous prudential regulations can have a capital control effect, including reporting or approval requirements, a system of authorized institutions, and limitations on foreign currency exposure. Outright controls may also have a prudential purpose. For these reasons, it may be hard to clearly define prudential regulations as distinct from capital controls in general.

Calvo and Mendoza (1999) have studied the effectiveness of prudential regulations on capital inflows in limiting foreign borrowing by banks. They show that while prudential regulations are less distortionary and less subject to evasion, they are less comprehensive than explicit control regimes with a wider coverage. As a result, prudential regulations on banks may not prevent the type of direct corporate borrowing that was prevalent in Indonesia before the crisis, but they do block the financial sector from becoming the largest contingent risk to the government. Prudential regulations on short-term capital inflows by banks and corporations both require a complex and sophisticated system of administration and careful monitoring, and tend to raise interest cost to domestic borrowers.

Restrictions on short-term capital outflows. Historically, controls on capital outflows have been more pervasive than controls on capital inflows (Johnston and Tamirisa 1998). If introduced as a tool of crisis management, outflow controls can be problematic not least because producers are quickly shut off from international sources of working capital, hampering export and domestic productive activities; they may also have an adverse signaling effect on future capital inflows. Such controls take the form of prohibitions or withholding arrangements on selected types of capital transactions, often capital invested for less than a specified period. Outflow controls are generally not effective because they can be easily evaded and tend to lose effectiveness over time as economic agents build surreptitious channels around them, and failures have outnumbered successes (Khan and Reinhart 1994; Dooley 1996a; Edwards 1999; Edison and Reinhart 1999; World Bank 2000b).

Before discussing the Malaysian controls on capital outflows, it is useful to point out that, in May 1997, Thailand also imposed controls. The Thai outflow controls were introduced at the height of the speculative attack on the baht, when there was heavy demand for baht credit. Borrowed baht was converted into U.S. dollars in anticipation of baht devaluation, thereby depleting foreign exchange reserves. The controls were effective in shutting down the swap market, i.e., domestic banking system sources of baht credit, and forcing speculators to incur large losses. However, alternative channels for baht outflows were exploited to arbitrage the gap between onshore and offshore borrowing rates, which widened to 12.9 percent in early June 1997. These outflows continued to drain reserves, eventually causing the central bank to float the baht on 2 July 1997.

By the time the controls were lifted in January 1998, the baht had fallen by more than 50 percent (Figure 1). The baht then appreciated by roughly 30 percent over four months and stabilized at that level. The realignment of the baht was critical in defusing the external pressure. The launching of financial and corporate restructuring and other structural reforms were necessary to reestablish sufficient confidence to allow interest rates to decline. One may argue that it was the removal of controls in January 1998 that contributed to the buildup of this confidence. In essence, Thailand used outflow controls in a vain attempt to defend an overvalued exchange rate. The Thai experience demonstrates the inherent difficulty of using controls on capital outflows effectively, particularly when the created incentives are incompatible with the underlying economic fundamentals.

III. MALAYSIAN CAPITAL CONTROLS

1. The Malaysian Economy in Crisis

With the devaluation of the Thai baht in July 1997, strong pressure began to mount against the Malaysian ringgit. The authorities intervened in the foreign exchange market to support the currency by reducing ringgit liquidity and raising interbank market rates on overnight money by as much as 40 percent. Essentially, the authorities attempted to defend the ringgit through interest rate hikes (Figure 2). But the persistence of the exchange market pressure and the floating of the Philippine peso indicated that the currency market instability would not dissipate soon and that a protracted period of high interest rates might be necessary.

In the latter half of 1997, the economy began to show signs of weakness (Figure 3). Nonetheless, the government adopted a tight budget in an attempt to generate confidence in the ringgit and the economy. Unfortunately, tight monetary and fiscal policies added contractionary impact to the already weakening economy. Non-performing loans (NPLs) in the financial system began to rise in late 1997 and expanded in 1998 as the economy contracted. The balance sheets of finance companies began to deteriorate because of their earlier overextension in real estate and share purchase lending. NPLs continued to mount and began to affect commercial and merchant banks as well. As financial institutions became more preoccupied with NPLs, loan loss provisions and capital adequacy requirements, the volume of lending began to slow, leading to fears of a credit crunch. The credit worthiness of

some borrowers was impaired by high interest rates and demand contraction. For other borrowers, the demand for credit declined in line with their sales. By early 1998, the authorities' main concern was the insufficient credit expansion for economic recovery.

While Malaysia had enjoyed net inflows of portfolio capital on an annual basis between 1992 and 1996, on the tide of speculative pressure, the capital account registered net outflows of portfolio capital in the first three quarters of 1997. On 4 August 1997, the central bank imposed a $2 million limit on domestic banks' offers side swaps with nonresidents in an effort to stem the speculative attack. This limit created a wedge between domestic and offshore ringgit interest rates, but had only a modest effect in slowing the exodus of portfolio capital.

In response to a deepening economic contraction and deteriorating financial-sector conditions, the Malaysian authorities adopted a comprehensive program of financial and corporate sector restructuring in June and July 1998. This program included the establishment of three new institutions: Danaharta to carve out NPLs from banks; Danamodal to recapitalize weak banks; and the Corporate Debt Restructuring Committee (CDRC) to assist the financial and operational restructuring of highly indebted corporations. Bankruptcy laws and courts were modernized, a major corporate governance drive was launched, and an initiative for strengthening banking sector supervision and regulation was begun.[4] In these areas, Malaysia made greater efforts than many of its neighbors.

At this juncture, the Russian default caused turmoil in Malaysia's currency and stock markets. By August 1998, interest rates on offshore ringgit deposits had risen to more than 20 percent, compared with 11 percent on domestic deposits. After a decline of 4 percentage points in July 1998, the ringgit dropped a further 12 percent in August (Figure 1). Fearing an acceleration of capital flight and pressure on domestic interest rates, on 1 September 1998, the authorities imposed a package of capital account regulations. On 2 September, they pegged the exchange rate at 3.8 ringgit per U.S. dollar. While the ringgit had depreciated by 80 percent during the first seven months following the Thai baht crisis, it appreciated by 20 percent from its January 1998 low to September—only then was the exchange rate pegged.

2. Capital Controls in Malaysia

Overview. The Malaysian authorities introduced capital controls in September 1998, aimed at restricting portfolio capital outflows and eliminating offshore ringgit activities. Portfolio investors were restricted from repatriating funds invested in Malaysia for at least one year, and the offshore trading of ringgit was prohibited. In response, the international credit rating agencies immediately downgraded Malaysia's sovereign debt ratings and major

[4] The World Bank's Economic Recovery and Social Sector Protection Loan, provided in June 1998, was instrumental in facilitating the establishment of a comprehensive framework of bank and corporate restructuring. Notable is the fact that Malaysia obtained the services of highly-regarded international private institutions to advise Danaharta, Danamodal and CDRC.

international investors removed Malaysia from their investment benchmarks—such as the IFC and Dow-Jones Investment indices, and Morgan Stanley Capital Indices (MSCI).[5] As the economy began to stabilize, however, controls on portfolio outflows were eased and eventually removed (Table 2). The 12-month holding period restriction on portfolio capital was replaced by a two-tier, price-based exit system in February 1999, which was further eased and simplified in September 1999 and February 2001, and finally eliminated in May 2001. Only offshore transactions in ringgit remain prohibited. Malaysia's sovereign ratings began to be upgraded in the fourth quarter of 1999, and the country was reinstated in the IFC and Dow-Jones Investment indices in November 1999 and in the MSCI in May 2000.

Table 2. Brief Summary of Major Exchange and Capital Controls

Date	Policy Objectives	Specific Measures
September 1998	To deter speculation on the ringgit and gain monetary policy independence	• Controls on transfers of funds from ringgit-denominated accounts for nonresidents not physically present in Malaysia, in effect imposing a 12-month holding period restriction for repatriation of the proceeds from sale of Malaysian securities, with retroactive effect. • Prohibition of offshore transactions of ringgit. • Ringgit pegged at RM3.8 per U.S. dollar.
February 1999	To preempt exodus of capital and reengage foreign investors	Easing of some controls, including replacement of the 12-month holding period restriction for repatriation of portfolio capital by a two-tier, price-based graduated exit levy system.
September 1999	To provide further relaxation	• Removal of the exit levy on repatriation of principals. • The two-tier graduated levy system on repatriation of profits simplified and replaced by a flat 10 percent exit levy, irrespective of when the profits are repatriated.
February 2001	To provide further easing	Removal of the 10 percent exit levy on portfolio capital profits repatriated after twelve months.
May 2001	To eliminate controls on portfolio investment	Complete removal of the 10 percent exit levy.

Source: Meesok et al. (2001), pp. 14-15, p. 53.

The September 1998 controls. The authorities introduced a set of complex but selective capital controls and a pegged exchange rate regime in September 1998. In short, they sought to eliminate any room for private investors to take speculative positions against the ringgit through restrictions on all international financial transactions unrelated to trade and foreign direct investment (FDI). They effectively closed the offshore market, cut off ringgit credit to foreigners and put a 12-month moratorium on the repatriation of portfolio capital. The main elements of the controls can be summarized as follows (for details, see Appendix Table):

[5] See Meesok et al. (2001) for the IMF's assessment of Malaysia's economic management during the 1997-98 crisis period.

- Imposition of a 12-month holding period restriction on repatriation of the proceeds from sale of Malaysian securities held in external accounts;
- Mandatory repatriation of all ringgit held abroad;
- Restriction on transfers of funds between external accounts;
- Limits on transport of ringgit by travelers;
- Prohibition of resident-to-nonresident credit arrangements;
- Prohibition of trade settlement in ringgit;
- Prohibition of resident-to-nonresident offer side swaps and similar hedge transactions; and
- Freezing of transactions in Malaysian shares traded at Singapore's Central Limit Order Book (CLOB) over-the-counter market.

Two measures are especially noteworthy: the 12-month holding period restriction on repatriation of principal on equity investments and the prohibition on international use of ringgit. On the other hands, foreign currency transactions for current account purposes—including the provision of up to 6 months of trade credit for foreigners buying Malaysian goods—and repatriation of profits and dividends from documented FDI were kept free of restriction.

A move to a system of exit levies and further easing. Concerns were raised that massive capital outflows might take place at the end of the 12-month holding period (i.e., September 1999), significantly reducing foreign exchange reserves and triggering financial turbulence for Malaysia. In the event, the authorities began to ease the capital controls well ahead of September 1999 to allow a certain amount of portfolio capital to flow out, thereby reducing the risk of potential difficulties. On 15 February 1999, the 12-month holding period rule for repatriation of portfolio capital was replaced with a two-tier, price-based system of graduated exit levies. The basic arrangement was to distinguish the repatriation of principal from the repatriation of profits—hence two-tier—as well as the investments made before 15 February 1999 from those made after this date. For investments made prior to 15 February 1999, principal was to be taxed at a declining rate in time—30 percent if repatriated in less than 7 months after entry, 20 percent if repatriated in 7-9 months, and 10 percent if repatriated in 9-12 months—and would cease to be taxed after one year from the time of entry or from 1 September 1998, whichever was later. For investments made after 15 February 1999, no tax would be levied on principal, but profits would be taxed at a declining rate in time—30 percent if repatriated in less than 12 months after the realization of profits, and 10 percent if held for one year or more.

The 1st day of September in 1999 did not signal the complete end of controls. On 21 September 1999, a further adjustment was made to exempt investments made between 1 September 1998 and 14 February 1999 from the 10 percent exit levy on principal. In addition, the two-tier exit levy system on repatriation of profits was replaced with a flat 10 percent levy, irrespective of when the profits were repatriated. On 1 February 2001, the 10 percent exit levy on repatriation of profits after one year was abolished, with profits repatriated

within one year still subject to the 10 percent exit levy. Finally, on 2 May 2001, the 10 percent exit levy on profits repatriated was abolished completely.

3. Effectiveness of Capital Controls

Together with the pegging of the exchange rate, the capital controls—announced to be temporary—were designed to insulate monetary policy from external volatility. By allowing interest rates to be reduced and containing speculative capital movements, the authorities expected the controls to facilitate economic recovery and provide breathing space needed to carry out economic adjustment and structural reforms.

Monetary independence. The introduction of capital controls in September 1998 had several effects. First, the prohibition of currency trading between external accounts put an immediate and virtually complete stop to offshore ringgit trading. Second, the 12-month holding period curtailed speculative capital outflows. The authorities were careful to identify and close off virtually all other channels for speculative outflows, including the freezing of trade in CLOB shares,[6] amendment of the Companies Act to prevent dividend distributions, and withdrawal of large-denomination notes from circulation. Third, the controls immediately succeeded in reducing the 3-month interbank rate to 7.75 percent, followed by further cuts in April 1999; by the end of 1999, the rate was down to 3.15 percent (Figure 2). Lending rates charged by banks and finance companies declined by 4-5 percent over the second half of 1998. Fourth, the controls allowed statutory reserve requirements to decline in several steps from 13.5 percent in February 1998 to 4 percent in September, thereby encouraging banks to meet the minimum targeted growth of 8 percent in extending loans. The controls thus appear to have been successful in providing greater monetary independence.

Effects on capital flows. The tightening of controls on capital outflows and offshore transactions in ringgit appears to have had a limited impact on portfolio flows in 1999-2000. Part of the reason may be that, by the time the controls were introduced, a substantial amount of capital—about US$10.4 billion since the onset of the Asian crisis—had already left the country. At the same time, the temporary nature of the controls—so declared from the beginning—must also have limited the negative impact on investor sentiment. The relaxation of controls in February 1999 was partly a signaling device to reinforce the view that they were temporary. Fears that portfolio capital would flow out of the country at the end of the 12-month holding period proved unfounded, as only a limited amount of outflows were recorded in February and March, followed by net inflows in April through July despite the further reductions in exit levies in April and again in June. While the elimination of exit levies on principal in September 1999 resulted in modest outflows, net outflows during the

[6] As a result, Singaporean investors became unable to dispose of an estimated US$4.9 billion worth of CLOB shares, presenting a source of irritation until February 2000, when the Singapore and Kuala Lumpur exchanges agreed to a registration and phased release of the shares through the Malaysian Central Depository.

control and immediate post-control periods were very small. In fact, foreign exchange reserves moderately rose during this period (Figure 4).[7]

To be sure, access to short-term financing was negatively affected by the capital controls, as Malaysia was removed from the list of countries in the major investment benchmarks and its sovereign rating was downgraded. This, however, proved to be temporary. With market sentiment turning bullish in response to monetary easing and the improvement in the overall national and regional prospects, Malaysia's credit ratings were upgraded, and portfolio inflows began to pick up in mid-1999. Inflows increased further in early 2000, as the rising equity market stirred up investor interests.

Administrative compliance. The central bank, Bank Negara Malaysia (BNM), administered the controls effectively through commercial banks. There is no evidence to suggest that the controls were circumvented on a large scale, as indicated by the fact that neither a nondeliverable forward market nor a black market emerged. Strict compliance was made possible by BNM's historically tight control over the banking system, with frequent reporting intervals and on-site supervision. Documentary evidence was required for all international financial transactions to demonstrate a clear link to underlying trade or FDI. BNM's reputation as a strict regulator may have also prevented foreign banks from exploring ways to circumvent controls, for fear of losing their local license. While the complexity of the controls caused some confusion at the outset, the central bank conducted an effective public relations campaign, clearly explaining the detailed descriptions of the control measures. Over time, it provided updates, clarifications and examples detailing how the controls were to be applied to a variety of transactions.

4. Costs and Benefits of Capital Controls

Benefits of capital controls. Two benefits of controls on capital outflows in Malaysia deserve attention. First, they represented a national safeguard against further turbulence in international financial markets and ensured greater policy autonomy—in lowering interest rates. At the time the controls were introduced, the Malaysian currency and equity markets were highly volatile, and it was uncertain whether financial instability in the region was likely to intensify or abate. In this sense, the controls together with the pegging of the ringgit contained currency speculation and provided a degree of certainty to market participants.

Second, the capital controls provided breathing space to pursue economic adjustment and to accelerate the structural reforms necessary for sustained economic recovery. Given the lack of a counterfactual, it is difficult to determine how these reforms would have proceeded in the absence of capital controls. Nonetheless, the controls arguably provided a margin of safety by insulating the economy from further potential shocks and allowed these critical

[7] There were other positive factors preventing massive capital outflows, including signs of improvement or stability in global financial markets, regional currency and equity markets, and export growth; capital outflows in the region had abated by early 1999.

programs to be launched with greater confidence. After experiencing a sharp fall in real GDP growth from 7.3 percent in 1997 to -7.4 percent in 1998, the economy bounced back to 6.1 percent in 1999 and 8.3 percent in 2000 (Figure 3). The imposition of controls roughly coincided with the turnaround in Malaysia's economic performance in the third quarter of 1998. While we cannot tell how much of the turnaround was due to the imposition of capital controls, it was certainly under the umbrella of the capital controls that interest rates were reduced and bank and corporate restructuring proceeded.

Costs of capital controls. On the negative side, the imposition of controls did have costs, as they created uncertainty for foreign investors and eroded their confidence. First, international rating agencies downgraded Malaysia's sovereign risk and credit ratings, immediately and substantially widening the spreads on sovereign debt in September 1998. While the spreads rose for almost all emerging economies following the Russian default in August, the widening of the Malaysian spread—about 300 basis points—was much larger than those for Thailand, Korea and the Philippines. Following the February 1999 shift to a system of exit levies, the spread declined significantly, though lagging behind those of the other countries by about two months. Hence, the controls had only a transitory adverse effect on Malaysia's access to international capital markets.

Second, despite the explicit exemption of FDI from controls and the institution of a more liberal regime in July 1998, FDI declined during 1999-2000 to less than half the pre-crisis levels. Several factors unrelated to capital controls may have contributed to this decline, including the general worsening of investor sentiment during the Asian crisis, slower growth in Japan and Taiwan, and the decline in overall investment in Malaysia. The imposition of selective controls may also have led foreign firms to take a more cautious approach towards making new direct investments in Malaysia.[8] However, it is difficult to draw any definitive conclusion regarding the indirect effect of capital controls on FDI from the limited evidence.

Third, international investors may have begun to view Malaysia's use of capital controls on portfolio outflows as a fundamental correction to its stated open policy and expect a similar action to be taken in future times of instability. It is too early to tell, however, if the recent use of capital controls has had a longer-term negative effect on Malaysia's access to international capital markets.

Cost-benefit analysis. Given these possible benefits and costs, it is striking that Malaysia's pattern of recovery was remarkably similar to those of the region's other countries. In each of Malaysia, Korea, Thailand and Indonesia, the nominal exchange rate against the U.S. dollar bottomed out in early 1998 and stabilized by the third quarter, allowing a monetary loosening and interest rate reductions (Figures 1 and 2). With the application and then expansion of fiscal stimulus in 1998, economic recovery began in the

[8] The rapid pace of investment in the pre-crisis period and the emergence and continuing presence of excess capacity throughout the region make it premature to tell whether the controls have had an independent depressing effect on FDI inflows to Malaysia.

second quarter of 1998 for Korea and Thailand, in the third quarter for Malaysia, and in the fourth quarter for Indonesia. The similarities in the nature and timing of these developments across different countries make it difficult to attribute a significant and distinct role to the capital controls in bringing about economic recovery in Malaysia.

Even so, Kaplan and Rodrik (2001) argue that a simple comparison of the timing in economic recovery in Malaysia with that in Korea and Thailand is misleading. While recovery was substantially underway in Korea and Thailand in the summer of 1998, with declining interest rates and stabilizing currencies, the situation in Malaysia was far from settled. The ringgit still faced intense pressure, having declined during most of 1998 (Figure 1), and offshore ringgit interest rates remained high. According to these authors, there was widespread speculation that Malaysia would be the next country to approach the IMF. To make matters worse, there was also political instability in the summer and fall of 1998. Thus, without the imposition of capital controls, the recovery path of Malaysia might have been substantially different. By carefully comparing the performance of Malaysia from the fall of 1998—when it would have gone to the IMF in the absence of capital controls—with that of Thailand and Korea from July and October, respectively, of 1997—when they did in fact approach the IMF—, Kaplan and Rodrik (2001) argue that Malaysia had a faster economic recovery, a smaller adjustment in employment, real wages, and stock prices, a lower inflation and a greater fall in interest rates.[9]

5. Assessments

The Malaysian capital controls were introduced at the height of the crisis. At that time, the ongoing economic crisis had been compounded by negative spillovers from the Russian default in August 1998. The bulk of the portfolio outflows had already occurred and the exchange rate had depreciated sharply. The subsequent turnaround in the stock market, the return to positive GDP growth, the build-up of foreign exchange reserves and the relaxation of interest rates were all coincident with the imposition of the controls. However, similar improvements were found in the other crisis-affected countries that did not adopt the same control policies, at least to the same degree.

The controls clearly provided a safeguard against possible further disturbance for a country that opted not to seek IMF assistance, and created breathing space for pursuing the necessary structural reforms. The authorities made significant progress in financial and corporate sector restructuring through the consistent framework of Danaharta, Danamodal and the CDRC; they also pushed ahead with the regulatory and supervisory reforms needed for a stronger financial sector and a resilient capital market—an important prerequisite for full capital account liberalization. Essentially, the authorities did not use the capital controls as a substitute for the needed restructuring and reform measures.

[9] Though Malaysia did not receive financing from the IMF, it obtained financial assistance from the World Bank, the Asian Development Bank and Japan during the crisis period, which undoubtedly eased the country's liquidity problem.

The controls were effective in achieving the immediate goal of discouraging capital outflows and closing offshore markets. It does not appear that there were serious attempts to circumvent the controls. The controls and subsequent exit strategy did not result in a lasting flight of portfolio capital, possibly owing to the confidence achieved by the restoration of a pegged exchange rate at what many perceived to be an undervalued level. As a result, scope for lowering domestic interest rates was created, thereby helping to ease the buildup of NPLs in the financial system. Domestic firms were insulated from the potential shocks of further interest rate hikes and exchange rate volatility. No doubt, in all of this, Malaysia has benefited from a competent bureaucracy capable of administering a complex set of regulations with a high degree of compliance, conditions not frequently met in many emerging market economies.

It is clear that the authorities exerted the strongest possible effort to make the capital controls a temporary measure, to disseminate information about the controls and their subsequent revisions, and to clarify misunderstandings. A clear signal of what was to be expected was provided to market participants by the announcement, made well ahead of time, to make a shift in the control regime to a system of exit levies and to terminate much of the controls. In this manner, market confidence was maintained in the long-term commitment of the Malaysian authorities to a fundamentally liberal capital account regime. In a sense, the Malaysian case can be thought of as a type of selective, unilateral "standstill," whereby the authorities of a country with basically sound fundamentals forced international portfolio investors who held private assets in Malaysia to accept the involuntary extension of repayment.

On balance, the Malaysian controls on capital outflows appear to have had a generally salutary effect, mainly because they were supported by a strong macroeconomic policy, bank and corporate restructuring, a currency widely perceived to be undervalued, and a competent bureaucracy. The favorable initial conditions—a sturdier banking sector and low short-term external debt—also helped the capital controls to be effective. The perception—made credible by government actions—that the controls were temporary also helped maintain market confidence, thus preventing large capital outflows from taking place. To be sure, not all of the subsequent recovery of the Malaysian economy can be attributed to the capital control regime. No doubt, favorable external environments were helpful. However, the Malaysian experience does suggest that use of controls has its place in the arsenal of policy instruments, to be used within the context of a policy framework and circumstances specific to the country in question. In the case of Malaysia, it appears that the costs of the controls were kept modest by careful and comprehensive design and execution, although the benefits may also have been equally modest.[10]

IV. CONCLUDING REMARKS

[10] Hood (2000) makes a similar assessment.

The series of capital account crises in emerging market economies in the past several years have heightened interest in policies and institutions needed for effective crisis prevention and management. While much focus has been placed on the reform of the international financial system, improvements in national policy and institutional frameworks, and regional financial cooperation, these efforts—as commendable and useful they may be—likely will take a long time to become effective. In the meantime, there may be a case for emerging market economies to use capital controls as an instrument for managing the transition process of financial integration. This paper has discussed the roles and effectiveness of capital controls and reviewed the recent examples of actual and prospective control regimes, with a particular focus on the experience of Malaysia.

Recent evidence indicates that capital controls are generally ineffective in changing the volume of capital flows, particularly when they are introduced on outflows during the time of crisis. The experiences of Chile and Colombia in the 1990s, however, provide limited evidence that price-based controls on inflows, though ineffective in influencing the overall volume or the real exchange rate, can still be effective in reducing the vulnerability of capital inflows by lengthening their maturity. In this respect, the experience of Malaysia is unique in that the controls, introduced on outflows at the height of the crisis, seemed to be able to achieve the stated objectives.

In September 1998, Malaysia suspended repatriation of nonresident investments in ringgit-denominated financial assets for a 12-month period and prohibited ringgit trading in offshore markets—Singapore in particular. The primary objectives of these controls, together with the pegging of the exchange rate, were to enhance monetary autonomy, thereby facilitating economic recovery and providing breathing space for the implementation of structural reforms. By de-linking monetary policy from exchange rate movements, the authorities allowed interest rates to decline without inducing further capital flight and a sharp depreciation of the ringgit. They maintained that the controls would be removed once stability returned to financial markets and an appropriate global regulatory framework governing international capital flows was in place.

The imposition of outflow controls put an immediate and virtually complete stop to offshore ringgit trading, curtailed speculative capital outflows, and allowed interest rates to be reduced substantially. At the same time, under the umbrella of the capital controls, the authorities pursued bank and corporate restructuring and achieved strong economic recovery in 1999 and 2000. With the restoration of economic and financial stability, administrative controls on portfolio outflows were replaced by a two-tier, price-based exit system in February 1999, which was finally eliminated in May 2001. Currently, only offshore transactions in ringgit remain prohibited.

Of the many episodes of capital outflow controls in recent years, the outcome in Malaysia probably comes closest to meeting the stated objectives of lowering interest rates, stabilizing exchange rates and ensuring greater policy autonomy (Edison and Reinhart 1999). Although the Malaysian case cannot be generalized without qualification, some earlier predictions of massive costs were not borne out. As long as capital outflows represent

speculative flight and capital controls are temporary, controls can be useful in reducing uncertainty for relevant economic decisions and providing the breathing space needed for domestic structural reforms.

Appendix Table
Key Changes in Malaysia's Capital Account Regulations, 1998-2001

Type of Transaction	Date	Measure
Ringgit Transactions	9/1/98	A number of selective exchange control measures were introduced, aimed specifically at eliminating the offshore ringgit market and restricting the supply of ringgit to speculators: ● A requirement was introduced to repatriate all ringgit held offshore, including ringgit deposits in overseas banks, by October 1, 1998; these required Bank Negara Malaysia (BNM) approval thereafter. An approval requirement was imposed on transfer of funds between external accounts and for the use of funds other than permitted purposes (i.e., the purchase of ringgit assets). Licensed offshore banks were prohibited from trading in ringgit assets, which had been allowed up to permitted limits previously. ● A limit was introduced on exports and imports of ringgit by resident and nonresident travelers, effective September 1, 1998. No prior limits existed. ● Residents were prohibited from granting ringgit credit facilities to nonresident correspondent banks and stockbroking companies. This practice had been subject to a limit previously. ● Residents were prohibited from obtaining ringgit credit facilities from nonresidents. This had been subject to limits previously. ● All imports and exports were required to be settled in foreign currency. ● All purchases and sales of ringgit financial assets could be effected only through authorized depository institutions. Trading in Malaysian shares on Singapore's Central Limit Order Book (CLOB) over-the-counter market was prohibited *de facto* as a result of strict enforcement of the existing law requiring Malaysian shares to be registered in the Kuala Lumpur Stock Exchange prior to trade.
	12/12/98	Commercial banks and finance companies were allowed to extend loans to nonresidents for the purpose of purchasing residential, commercial, or industrial property, or office space in Malaysia for the period from December 12, 1998 to January 12, 1999, subject to certain conditions.
	3/1/99	The ceiling on the import and export of ringgit for border trade with Thailand in selected areas was raised.
	7/8/99	Commercial banks were allowed to grant overdraft facilities not exceeding RM200 million in aggregate for intraday transactions and not exceeding RM5 million for overnight transactions to stockbroking companies.
	9/21/99	To provide foreign investors with more flexibility in managing their portfolios and risks. Bank Negara Malaysia (BNM) relaxed controls on lending in ringgit to foreign stockbroking companies. Commercial banks were allowed to enter into short-term currency swap arrangements with foreign stockbroking companies to cover payment for purchases of shares on the Kuala Lumpur Stock Exchange (KLSE) and for outright ringgit forward sale contracts with nonresidents who have firm commitment to purchase shares on the KLSE, for a maturity period not exceeding five working days and with no rollover option.
	10/4/99	Commercial banks and finance companies were allowed to extend loans to nonresidents for the purpose of purchasing residential, commercial, or industrial property, or office space in Malaysia for the period from October 29 to December 7, 1999. This policy was to support official housing companies and was subject to certain conditions.
	4/24/00	In line with the objective of promoting the development of the domestic bond market, resident companies in Malaysia were allowed to issue private debt securities for permitted purposes without prior written approval from Bank Negara Malaysia. Nonresident-controlled companies raising domestic credit facilities by way of private debt securities were exempted from the RM9 million limit and the 50:50 requirement for issuance of private debt securities on tender basis through the fully automated system for tendering.
	6/30/00	Guidelines on private debt securities were issued.

	9/30/00	Licensed offshore banks in the Labuan international offshore financial center were allowed to invest in ringgit assets and instruments in Malaysia for their own accounts only and not on behalf of their clients. The investments could not be financed by ringgit borrowing.
	12/1/00	Foreign-owned banking institutions in Malaysia were allowed to extend up to 50 percent of the total domestic credit facilities to nonresident-controlled companies, in the case of credit facilities extended by resident banking institutions. This policy was to fulfill Malaysia's commitment under the General Agreement on Trade and Services. Previously, foreign-owned banking institutions could only extend up to a maximum of 40 percent funding.
	12/20/00	Licensed commercial banks and Bank Islam Malaysia Berhad in Malaysia were allowed to extend intraday overdraft facilities not exceeding RM200 million in aggregate and overnight facilities not exceeding RM10million to foreign stockbroking companies and foreign global custodian banks.
Portfolio Investment	9/1/98	A number of measures were introduced aimed at preventing heavy capital outflows by residents and nonresidents: ● Imposition of an approval requirement for nonresidents to convert ringgit held in external accounts into foreign currency, except for purchases of ringgit assets, conversion of profits, dividends, interest, and other permitted purposes. No such restrictions existed previously. There were, however, no restrictions on conversions of ringgit funds in the external accounts of nonresidents with work permits, embassies, high commissions, central banks, international organizations, and missions of foreign countries in Malaysia. ● A 12-month waiting period for nonresidents to convert ringgit proceeds from the sale of Malaysian securities held in external accounts. This restriction excluded foreign direct investment flows, repatriation of interest, dividends, fees, commissions, and rental income from portfolio investment. No such restriction existed previously. ● Imposition of a prior approval requirement, beyond a certain limit, for all residents investing abroad in any form. This demand was previously applied only to corporate residents with domestic borrowing. ● Imposition of a specific limit on exports of foreign currency by residents and up to the amounts brought into Malaysia for nonresidents. Previously there was no restriction on the export of foreign currency notes and traveler's checks on the person or in the baggage of a traveler. Exports by other means required approval, regardless of the amount.
	1/13/99	Capital flows for the purpose of trading in derivatives on the commodity and monetary exchange of Malaysia and the Kuala Lumpur options and financial futures exchanges were permitted for nonresidents, without being subject to the rules governing external accounts, when transactions were conducted through "designated external accounts" that could be created with Tier-1 commercial banks in Malaysia.
	2/15/99	The 12-month holding period rule for repatriation of portfolio capital was replaced with: ● Imposition of a graduated system of exit levy on the repatriation on the principal of capital investments—in shares, bonds, and other financial instruments, except property investments—made prior to February 15, 1999. The levy decreased over the duration of the investment, and thus penalizing earlier repatriations; the levy was 30 percent if repatriated less than seven months after entry, 20 percent if repatriated in seven to nine months, and 10 percent if repatriated in nine to twelve months. No levy was imposed on the principal if repatriated after twelve months. ● Imposition of a graduated exit levy on the repatriation of profits from investments made after February 15, 1999 in shares, bonds, and other financial instruments, except property investments. The levy decreased over the duration of investment; the levy was 30 percent if repatriated in less than twelve months after the profit was realized and 10 percent if repatriated after twelve months. No exit levy was imposed on capital repatriation.
	2/18/99	The repatriation of funds relating to investments in immovable property was exempted from the exit levy regulations.

	4/5/99	Investors in the Malaysian Exchange of Securities Dealing and Automated Quotation (MESDAQ), where growth and technology shares are listed, were exempted from the exit levy introduced on February 15, 1999.
	9/21/99	The two-tier levy system was replaced with a flat 10 percent levy on repatriation of profits on portfolio investment, irrespective of when the profits were repatriated.
	3/14/00	Original nonresident holders of securities purchased on the Central Limit Order Book (CLOB) were allowed to repatriate all funds arising from the sale of these securities without payment of the exit levy.
	6/29/00	Administrative procedures were issued to facilitate the classification of proceeds from the sale of the Central Limit Order Book (CLOB) securities as being free from levy.
	2/1/01	The 10 percent exit levy on profits repatriated after one year was abolished. Profits repatriated within one year remained subject to the 10% levy.
	5/2/01	The 10 percent exit levy on the repatriation of portfolio profits was removed completely.

Source: Meesok et al. (2001).

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Figure 1. Monthly US Dollar Exchange Rates for Malaysia, Indonesia, Korea and Thailand, June 1996-December 2000

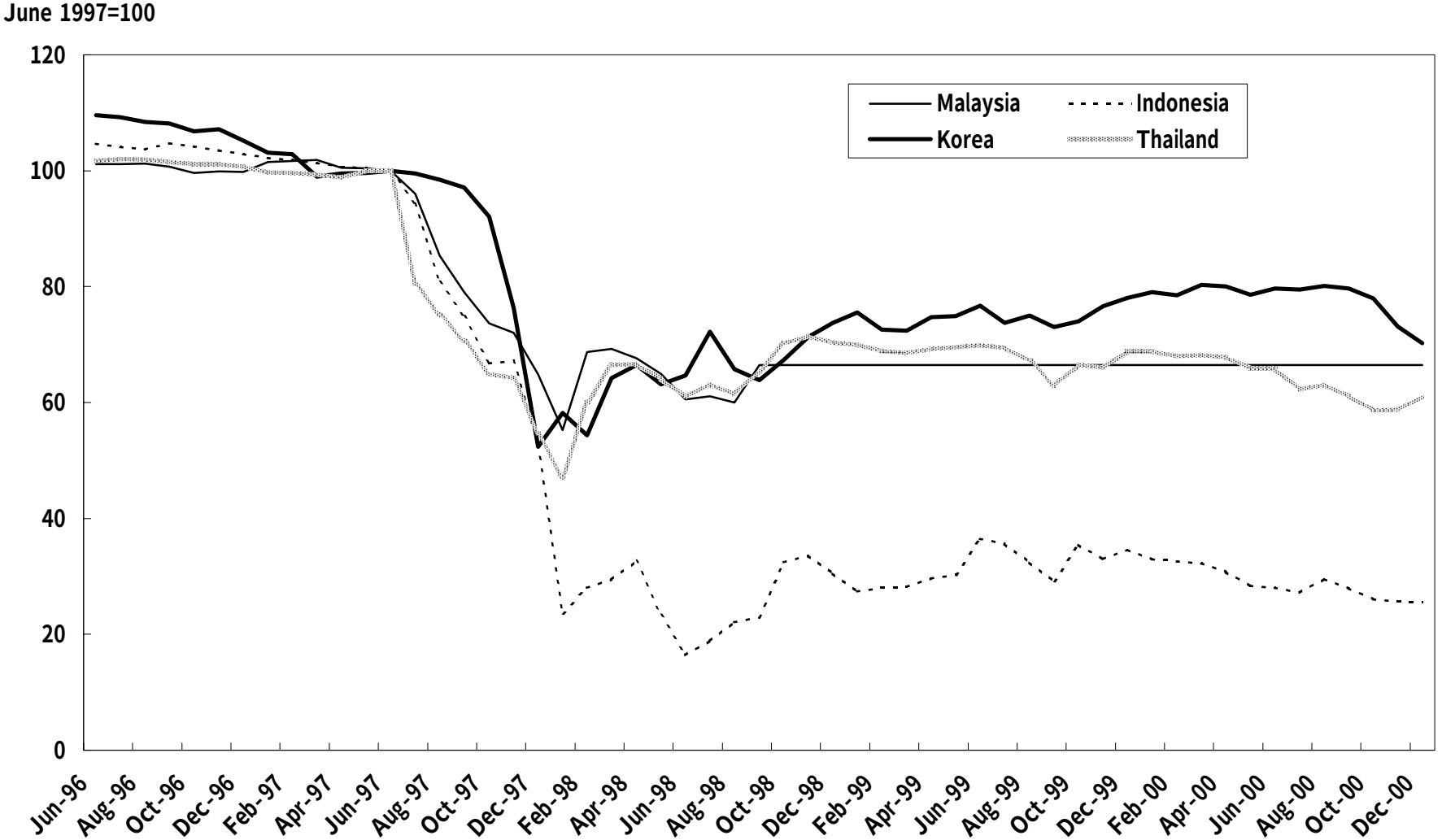

Figure 2. Monthly Short-term Interest Rates in Malaysia, Indonesia, Korea and Thailand, June 1996-Desember 2000

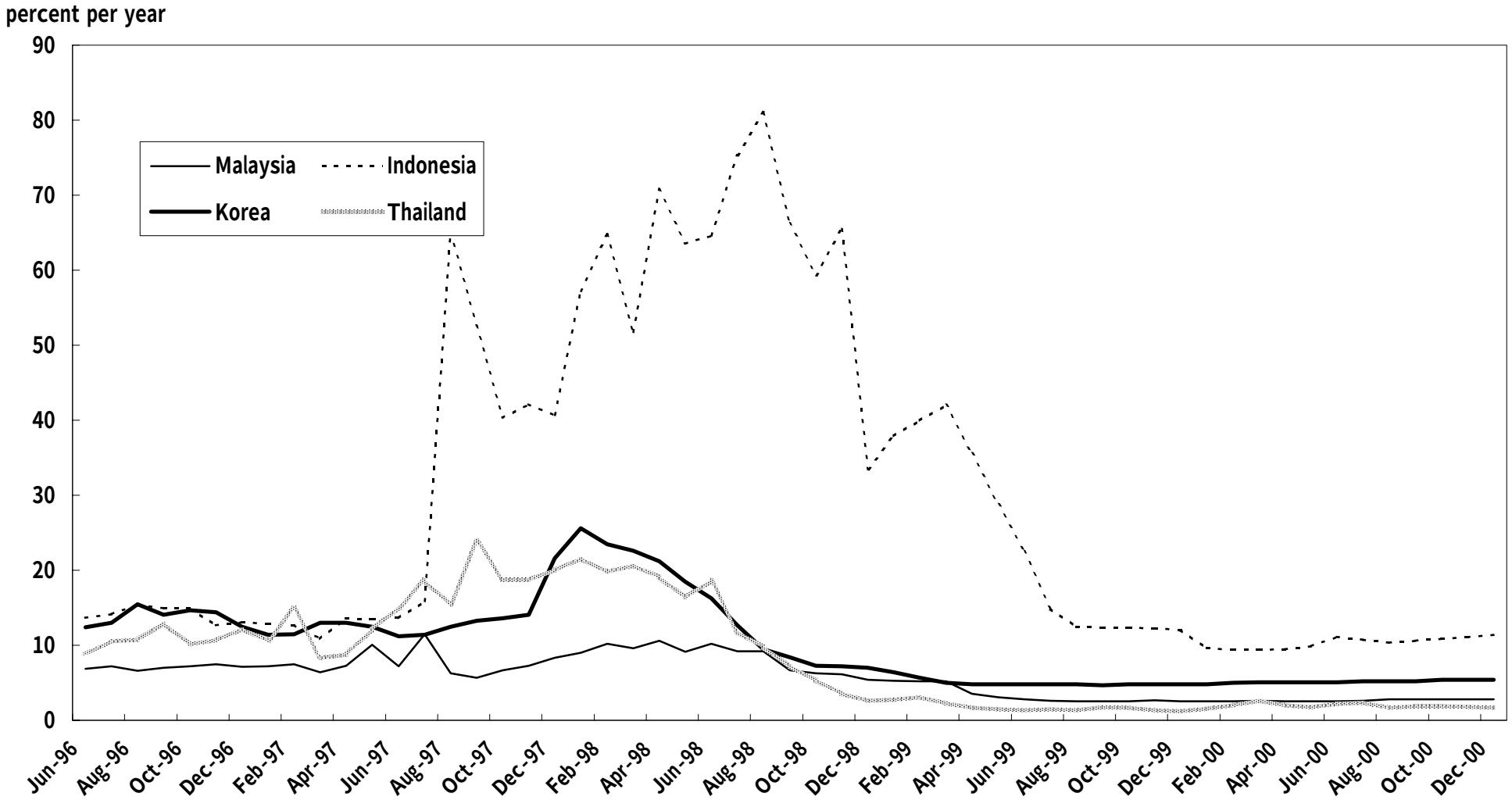

Figure 3. Quartely Real GDP Growth in Malaysia, Korea, and Thailand, 1997-2000

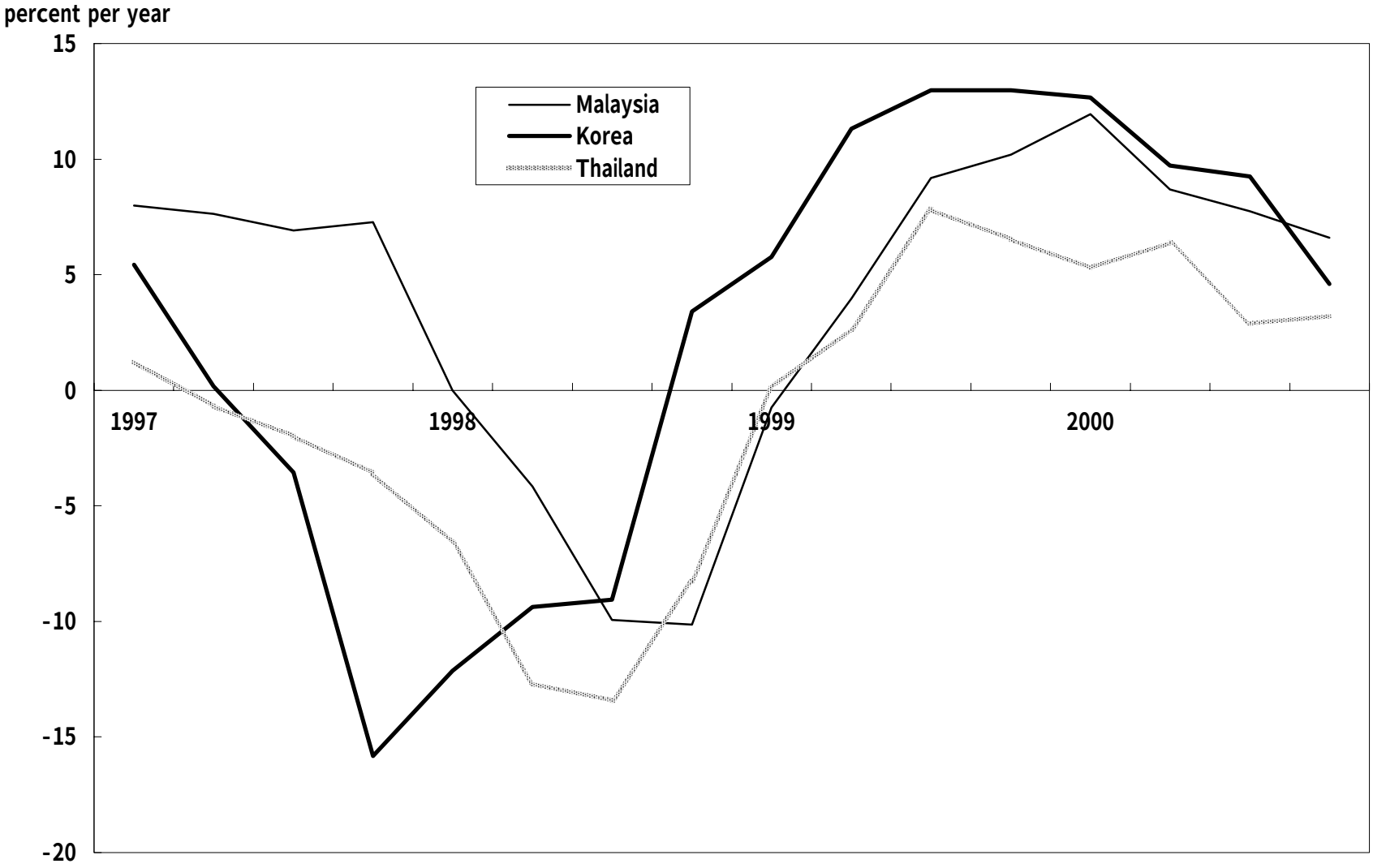

Figure 4. Monthly Foreign Exchange Reserves