Managing Capital Flows in East Asia

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IN EAST ASIA

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FOREWORD

East Asian developing countries have been the beneficiaries of substantial foreign capital inflows so far in this decade. They now receive for more than half of both total and private flows to all developing countries. One reason for such strong investor interest is the continued outstanding economic performance in these countries. Most East Asian developing countries maintained economic stability and rapid growth during the 1980s, when the rest of the developing world was suffering from the debt crisis. The pace has not slackened. Another reason for the inflow is the growing internationalization of capital markets and the adoption of broader horizons by investors in the capital rich countries. A combination of rapid evolution in financial instruments, advances in communications technology, and declining returns in OECD investments were instrumental in the surge in investment, particularly portfolio investment, in developing countries in recent years. While the increase in US interest rates and the negative fall-out from Mexico’s crisis in early 1995 may have dampened these flows temporarily, most factors indicate that East Asia will be an attractive destination for international capital flows for some time to come.

Greater integration and participation in world capital markets is a natural consequence of the success that East Asia countries have enjoyed in integrating into world goods markets through their trade liberalization and export promotion policies. Foreign Direct Investment flowed into these countries in response to their market-oriented policies and low production costs, and it has been beneficial to the recipient countries. It has increased fixed investment by several percentage points of GDP, transferred technology, and increased external reserves. So, these economies have been able to maintain their growth rates and thus attract additional foreign investment. It is noteworthy that most of the flows to developing countries in the region originate within APEC, including the so-called Asian Tigers.

Today, capital moves internationally in the form of an ever expanding variety of instruments, including increasing amounts of portfolio investment. These flows create pressures to appreciate exchange rates, expand domestic credit, and increase domestic consumption more than may be desirable. Portfolio investment, in particular, has created more pressure to accelerate liberalization programs in domestic capital markets. Managing economies in the face of such large external flows is more complex than before and requires greater sensitivity to external factors. How to maintain macro-economic stability and rapid growth in these circumstances is a primary concern for authorities in East Asia.

This paper addresses a number of related issues that policy makers in the region and elsewhere must face:

- Maintaining macro-economic stability in a more complex policy environment while continuing to attract beneficial capital flows.
- Managing the diverse micro-economic impacts of the growing variety of instruments in the markets.
- Matching the development of domestic capital and financial markets with the demands imposed by the foreign flows.
- Increasing the availability of necessary information to officials and investors so capital markets can function effectively.
The specific country experience in East Asia demonstrates that authorities have adequate policy tools at their disposal to deal with these capital flows. Policy makers are also developing informal and formal networks for discussing issues of common concern and sharing information. This has proven particularly valuable in times of stress, such as after the recent Mexico crisis. How to manage capital flows is also a priority for discussion within APEC.

This report is intended to contribute to that discussion of capital flows within the region. It follows earlier papers in this series that have addressed infrastructure and environmental issues, *Sustaining Rapid Development in East Asia and the Pacific* (1993), and trade and investment issues, *East Asia's Trade and Investment* (1994). It is my sincere hope that this report will help policy makers to see these issues in a broader context as well as making these topics accessible to a wider audience. It is vital to the continued rapid growth of East Asia and the Pacific that readers understand the complexity of the issues faced by policy makers.

Russell Cheetham
Regional Vice President
East Asia and the Pacific
Managing Capital Flows in East Asia

Chapter 1

Introduction and Executive Summary

Introduction

1. The developing countries of East Asia have grown quickly for two decades.\(^1\) This growth has been led by rapid export expansion and supported by substantial capital inflows. Initially, most of the inflows were in the form of official lending, followed by commercial bank lending with government guarantees. More recently, the composition has shifted even more toward private sources, often without government guarantees. Private to private flows now constitute most external capital flows. The bulk of these flows to East Asia take the form of Foreign Direct Investment (FDI), which also provides transfer of technology and management skills, enhanced access to external markets, and improved competitiveness and efficiency. Portfolio investment, however, has shown the most remarkable growth in the past few years. These flows also contribute to the development of domestic capital markets, though recent events also indicate they can be more volatile than FDI.

2. External savings have been a welcome addition to already high domestic savings in East Asia, augmenting investment and helping to spur growth. However, in addition to their generally acknowledged potential to bring substantial benefits, large capital inflows confront recipient countries with new risks and challenges that require careful management to assure those benefits are realized. At a macro level, large external flows can affect an economy’s competitiveness, savings and investment performance, expose it to external shocks, and ultimately reduce its degree of policy independence from the rest of the world. At a micro level, sustained capital inflows can have profound effects on the financial, industrial, and other sector policy, on the shape and regulation of domestic capital markets, and even on the extent and form of government activity in the economy. Furthermore, since not all external capital flows have the same characteristics, different types of capital flows will have different impacts and require different policy responses in the recipient country to take best advantage of them. This paper will look in more detail at the relation between the macro and micro impacts of external capital flows and the range of policy responses to best manage these flows.

3. This chapter will review the evolution of capital flows to developing countries in general and summarize the findings of the rest of the report. Chapter 2 will look at the composition and volumes of capital flows into East Asia in some detail and examine their characteristics and sustainability. Some recent experiences coping with capital flows in several countries in East Asia will be presented in Chapter 3. Chapter 4 will discuss the macroeconomic and microeconomic issues that determine the scope for policy response in countries receiving capital inflows. Chapter 5 examines concerns about the overall environment within which capital circulates — the regulatory structure and the institutional infrastructure. The final chapter will bring the various threads of analysis together into a framework to better understand

\(^1\) Developing East Asia includes China, Indonesia, Republic of Korea, Laos, Malaysia, Mongolia, Papua New Guinea, Philippines, and Thailand, which are the countries that comprise the regional totals. In addition, the economies of Hong Kong, Singapore, and Taiwan (China) play an active role in the region. Japan, Australia, and New Zealand are the developed countries in the region. References in the text to East Asia refer to the developing economies in the region.
the challenges and policy options for managing capital flows. Most of the individual elements presented are known to policy makers directly involved in capital markets. This paper pulls the various elements together into a larger strategic framework and lays out the fundamental issues for interested parties not directly involved in capital markets.

Evolution of Capital Flows to Developing Countries

4. The current surge of capital into East Asia represents a new phase in the evolution of capital flows to developing countries. It is the consequence of the liberalization of capital markets in both source and recipient countries, and it is characterized by an increasing variety and complexity of the instruments. The dominant trend since the Second World War has been increasing internationalization of economic activity, beginning with the international support for rebuilding war-torn Europe and Asia, expanding through successive rounds of trade liberalization in the GATT, and continuing through more general removal of constraints on capital flows. In its early stages, this was part of an effort by the United States and its allies among developed countries to immunize developing countries against the threat of communism. International economic activity has since blossomed and outgrown the need for official nurture. Indeed, international transactions have received further impetus from the end of the Cold War and the demise of the economic and ideological threat of communism. Some nominally communist countries are now major participants in expanding international markets, and in East Asia they may soon become leaders.

Box 1-1  Is there a little *deja vu* in the internationalization of capital markets?

The international outlook that is currently pervading capital markets may not be such a new phenomenon. It harks back to a similar golden age at the end of the last century and the beginning of this, as so aptly described by John Maynard Keynes:

"The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and shrug, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the towns-people of any substantial municipality in any continent that fancy or information might recommend... But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable."

*Economic Consequences of the Peace,*
London: Macmillan, 1919

Modern improvements in communications, production, and transportation have rendered Lord Keynes' 1919 hyperbole eerily prescient for inhabitants of almost any city almost anywhere in the world today.
5. Substantial official capital flows and trade reforms leading to growing intraregional and international trade were the initial pillars of the post-World War II global economic expansion. The greater flow of goods and vastly improved communications led to an expansion of multinational enterprise and a greater liberalization of trade. The internationalization of capital flows followed — first to support the migration of production to low cost areas and to finance the growth of trade; and currently as part of portfolio management in a truly international capital market. As developing countries integrate more into the international flows of goods, so they are being pulled into the international capital markets. East Asia is in the forefront on both counts.

6. The nature and content of international capital flows has changed dramatically over the past two decades. As recently as 1970, few developed or developing countries were without substantial restrictions on capital movements; most exchange rates were fixed and managed under the Bretton Woods system; and the majority of external capital available to developing countries was from official sources — bilateral and multilateral. Direct foreign investment to developing countries, other than for natural resource exploitation, was low. Developing countries were asserting their national economic interests and encouraging domestic, often government, control of industry. Commercial bank lending and portfolio investment were nearly nonexistent. Private capital flows to developing countries first surged in the mid 1970s in the form of commercial bank lending following the first round of oil price increases. Governments of developing countries were typically borrowers or guarantors (explicit or implicit) on these loans, and they often used the capital inflows to fill budget and balance of payments gaps, either to support or (unfortunately) postpone more fundamental adjustment. International banks had a great deal of liquidity to recycle, and Eurocredits emerged as what appeared to be a low risk way to lend to developing countries. The countries themselves bore the interest and exchange risk, and sovereign risk was considered minimal at the time. These flows had reached their peak by about 1980.

**Box 1-2  The Growth of Euro Currencies**

In the 1960s, the Eurodollar market developed as the first large body of international capital (i.e. effectively beyond the control of national monetary authorities) since gold had been removed as a medium of exchange among non-governmental agents by the Bretton Woods system. Other strong currencies emerged later to expand the "Euro" pool, including the Japanese Yen. As capital controls have been dismantled in the major industrial countries, indefinitely large portions of the national wealth of "Eurocurrency" countries can potentially become international capital in that such funds can move across borders without any official sanction. Many large corporations and financial institutions now actively manage large portfolios as international assets. These international assets dwarf the liquid resources of major central banks and national governments, and daily transactions of fixed income bonds and notes amount to tens of billions of dollars. Straight currency transactions are even larger. Some estimate them to be as high as one trillion dollars per trading day.
### Table 1-1  Total Net Flows to Developing Countries by Type (US$ billions)

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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Bank</td>
<td>5.7</td>
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<td>55.1</td>
<td>33.2</td>
<td>45.5</td>
<td>62.9</td>
<td>102.7</td>
<td>159.2</td>
<td>172.9</td>
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<td>Bonds</td>
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<td>33.9</td>
<td>8.5</td>
<td>0.1</td>
<td>3.9</td>
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<td>2.2</td>
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<tr>
<td>Other Private</td>
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<td>0.2</td>
<td>2.6</td>
<td>5.6</td>
<td>3.4</td>
<td>12.5</td>
<td>12.9</td>
<td>42.1</td>
<td></td>
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<tr>
<td>FDI</td>
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<td>11.5</td>
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<td>15.7</td>
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<tr>
<td>Portfolio Equity Flows</td>
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<td>124.8</td>
<td>153.0</td>
<td>213.1</td>
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7. Too much lending by banks, borrowing by many developing countries and a severe tightening of monetary policy by OECD countries caused a sharp reduction in these flows, much higher interest rates, and a debt crisis that began in 1982. Borrowers most affected by this were in Latin America, Africa, and Eastern Europe. With the exception of the Philippines, East Asia was spared the worst, though several countries wrestled with heavy debt burdens. Voluntary commercial bank lending to developing countries nearly ceased, and net flows on private lending turned negative in many countries as they were unable or unwilling to roll over their private debt. Official lending rose to partially offset the decline in private lending and eventually official support was provided for debt relief to some of the largest debtors through the Brady Plan, but it was a wrenching period for both borrowers and private lenders. Toward the end of the 1980s, there was widespread concern that all developing countries would face a long dry period before private capital flows returned. The scars remaining from the debt crisis, the expected high demand from investors in the OECD, and the investment required for the reconstruction of Eastern Europe left many wondering if there would be enough capital available for the Third World. As it turned out, the debt crisis was more of an aberration in a longer term trend toward increasing international capital flows, and other demands were less than predicted. Aggregate flows to developing countries have recovered strongly since the end of the 1980s, and they have taken a much wider variety of forms. For example, the share of global FDI directed toward developing countries rose from 14% in 1990 to 33% in 1993. The reason is simple: the potential returns from investment in many Third World countries are much higher than in Worlds One and Two.

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2 The repeated rescheduling agreements led to some so-called involuntary lending to sustain debtors until a more lasting solution could be found. This shows up as new flows in the data.

3 A few voluntarily paid down debts out of current account surpluses or other capital flows during the late 1980s, including Korea, Malaysia, and Thailand.

4 The Brady Plan provided a means for debtors to renegotiate unserviced debt with creditors and convert most of it to bonds with lower face value or interest, but enhanced security. Clearing delinquent debt opened up the possibility for debtors to return to capital markets (though few were expected to do so soon) and generated speculative interest in the "Brady" bonds themselves. See Cline (1995) for a thorough review of the whole debt crisis.
East Asia and Latin America have led the surge in capital flows.

Chart 1-1  Net Capital Flows to Developing Regions

8. The speed and magnitude of the resurgence of the private flows in the 1990s has surprised many observers. The increasing internationalization of business and finance and the vast increase in speed and volume of information flows have allowed much more rapid reassessment and response to the real growth possibilities in many developing countries. And however misguided the spate of commercial lending in the 1970s, it permanently placed developing countries on the radar screens of international financiers. Investors in developed countries are more willing and able to move funds internationally, and to a growing extent, wealth holders in developing countries have international assets to place. Furthermore, the volumes of international flows involving developing countries create very profitable opportunities for those promoting and handling the transactions. Private flows now greatly exceed official flows in aggregate and constitute 80% of total net flows to developing countries. However, it should be noted that the surge in private flows is concentrated in only 18 developing countries, which together received over 90% of all private flows over the period 1990-93.5

5China (24%), Mexico (12.4%), Korea (7.2%), FSU (7.1%), Argentina (6.6%), Malaysia (6.0%), Portugal (6.7%), Brazil (4.7%), Thailand (4.0%), Turkey (3.3%), Venezuela (2.5%), Hungary (2.3%), Iran (2.2%), India, Chile, Indonesia, Philippines, Poland (all between 1% and 2%).
9. East Asian countries borrowed cautiously in the 1970s. They were better able to adjust and ride out the oil shocks and debt crisis of the 1980s while maintaining high growth rates. East Asia's good policy record, dynamic growth, outstanding export performance, and continued reliance on the private sector created a high level of confidence among international investors. It was not excluded cut off completely from private lending despite general retrenchments. Furthermore, East Asia was able to attract substantial amounts of foreign direct investment during this period, and it maintained high levels of investment and growth. Not surprisingly, East Asia has been the favorite region for private capital flows in

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6 Philippines was an exception to this. It was unable to maintain high growth rates through the 1980's and suffered from the debt crisis. It now appears to be getting back on track.
the 1990s. Over one-third of expected growth in world income and trade is projected to come from the region between now and the end of the decade.\(^7\)

10. The growth in private capital flows to East Asia is part of a global trend of increasing integration of capital markets. Foreign Direct Investment has grown from $1.3 billion, or 10% of net capital flows to East Asian countries in 1980, to $36.5 billion, or 50% in 1993.\(^8\) Portfolio investment has increased from nil to $18.1 billion, or 24% of capital flows, in the same period. East Asia is now the destination of over half the total of direct and portfolio investment flows to all developing countries, and it is expected to remain the leading recipient region. These flows now represent 3% of GDP and 10% of investment on average in East Asian countries. Foreign capital from all sources is about 15% of investment. This surge in private capital flows since the late 1980s has been the result of “pull” factors — rapid growth and high rates of return in recipient countries — and “push” factors — declining rates of return, fewer restrictions on foreign investment, and large pools of investable funds in source countries. Recent regulatory changes in the source countries have allowed developing country securities to be issued in developed country markets as well as investment in emerging markets. Technological advances in communications and financial instruments make it much easier to undertake these transactions.

11. There are strong reasons to believe that the flows we are seeing will be sustained, with variations from country to country. Favorable economic policies and liberalization of investment requirements will continue to attract FDI flows seeking lower cost production for an expanding list of products. These contribute to high rates of growth that help to generate the high yields that are attractive to portfolio investors in the developed countries, particularly the US and UK. Portfolio optimization models indicate that more international diversification would improve the risk-return profiles of developed country investor portfolios. The current international and emerging market share is well below that indicated by the portfolio allocation models on the basis of their current and expected share in world market capitalization. So one would expect to see a period of portfolio stock adjustment take place that would generate sustained demand for the better developing country assets, and many of which are in East Asia. The GATT Uruguay Round agreement to lower protection in consuming markets worldwide will make investment in efficient export producers more attractive, which will favor East Asia. On the other hand, higher interest rates in capital exporting markets and turbulence in other developing areas (e.g. Mexico) will tend to reduce the attractiveness of emerging markets everywhere. However, these are unlikely to impede the long term growth of rising capital flows to successful developing countries, such as those in East Asia. Capital flows and their sustainability will be the subject of Chapter 2.

Managing the Impacts on East Asian Economies

12. Freer capital flows improve the allocation of capital globally, allowing resources to flow to areas of high rates of return. Furthermore, attempts to restrict capital flows will result in distortions that are generally costly to the economy imposing the controls. Where there are significant gains to be made, capital controls can be evaded, and they usually are, though often at substantial costs to the parties involved and to the orderliness and integrity of the financial system of the country concerned. But large capital flows challenge some traditional policy approaches in East Asia and have led to periodic stresses in capital markets and financial sectors. Inevitably, countries will continue to open up their capital accounts and capital markets to more private international capital flows; and as they do, they will experience some loss of policy independence and face more risks from external shocks.\(^9\) Thus, it is important to ensure that the

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\(^7\) World Bank (1994a) includes developed countries as well.

\(^8\) In 1993, China received more FDI inflows than the US, and only slightly less in 1994.

\(^9\) Earlier opening of trade policy had similar effects in goods markets, but quite positive net effects on growth.
increased capital flows, greater capital mobility, and access to greater portfolio diversification produce the expected benefits to compensate for the increased risks. Evidence suggests that the potential gains can far outweigh the risks, but the burden is on domestic policy and its implementation to ensure that this occurs. Prudent macroeconomic management is essential if capital inflows are to be absorbed effectively and there is to be efficient allocation of domestic resources. However, as capital markets become more open, policy management becomes more complex. Because some form of capital flows can be highly mobile, there is less scope for deviation from international levels of key variables and greater weight needs to be put on getting the right mix.

Box 1-3  Foreign Investment is a powerful tool for development, if handled well.

Foreign investment can be a powerful force for development and growth in less developed countries. But if can also disrupt the development process if not managed carefully. Experiences over the past three decades have generally been beneficial in East Asia, but in Latin America, the results have been much more mixed. The potential benefits and dangers listed below may apply more to direct (FDI) or portfolio (FPI) investment, depending on the circumstances.

Benefits of foreign investment:

- Additional resources available for productive investment
- Risk sharing with the rest of the world (equity)
- Greater external market discipline on macro policy
- Enhanced access to technology and management skills (FDI)
- Broader access to export markets through foreign partner (FDI)
- Training and broader exposure of national staff (FDI)
- Greater liquidity to fill domestic financing needs (FPI)
- Broadening and deepening of national capital markets (FPI)
- Improving financial sector skills (FPI)

Dangers of foreign investment:

- Currency appreciation
- Reduced scope for independent macro policy actions
- Greater exposure to external shocks
- Demands for protection in local markets (FDI)
- Some loss of control of foreign-owned domestic industry (FDI)
- Disruption of national capital markets, asset inflation (FPI)
- Increased volatility in financial and exchange markets (FPI)
- High sterilization costs (FPI)

Obviously, countries can obtain these benefits or face these dangers with little or no foreign investment, but they are greater when there are high levels of foreign investment. Astute policy can enhance the benefits. And the various dangers posed by foreign investment can be managed with clear policy directions and prudential regulations from the authorities. One cannot simply assume that the market will take care of itself.

13. **Varying Country Experience.** Large capital flows have an impact at all levels of an economy. The benefits of greater capital flows into East Asian countries are demonstrably substantial. They permit higher levels of investment, facilitate the transfer of technology, enhance management skills, and enlarge
market access. The countries of East Asia have been able to increase investment and related imports and to mitigate pressures on exchange rates, thus helping to sustain their high growth rates. In comparison, investment shares of GDP have not increased in many Latin American recipients of large capital inflows. But East Asian countries have discovered they are less able to interfere in their financial markets to promote industries, and they may face less scope for managing the exchange rate to promote exports.

14. Countries in East Asia have followed different paths in opening their external capital accounts and domestic markets to foreign participation. Indonesia has had an open account for over two decades, but it only began to expand the range of domestic assets foreigners could own through a series of reforms beginning in the mid-1980s in conjunction with policies to move the economy away from heavy dependence on oil exports. Chronically high interest rates have led to short term capital inflows as authorities liberalized the financial sector. These inflows resulted in high sterilization costs, and the government had to shift the mix toward tighter fiscal policy to dampen the economy. Malaysia and Thailand have liberalized their capital accounts during the 1980s and attracted large amounts of FDI. They have been able to absorb these flows effectively without exchange rate appreciation by a combination of policies that liberalized imports and tightened their fiscal stances. But they have also been exposed to market pressures that have called for judicious intervention by the authorities. The Philippines also began liberalizing capital flows in the 1970s, but was caught with excessive debt levels in the 1980s as it was less successful than its neighbors in promoting growth and exports. It was the only East Asian country to go through a debt workout, which delayed its development for nearly a decade. It is now beginning to recover and continue its capital market liberalization program. Korea has been much more cautious in opening its capital account and market to foreigners, beginning only after it had achieved a relatively high level of per capita income. It encouraged the development of its domestic capital markets much earlier. It recently began to open them to foreign participation. China has undergone the greatest adjustment. It has been reforming and opening its capital markets as it engineers a transition to a market-based economy. Its capital account is porous if not open. The reform process, while not entirely smooth, has a clear direction.

15. Countries in earlier stages of development should encourage high domestic saving and investment habits and concentrate on attracting FDI for competitive (not protected) markets. Once domestic capital markets and their regulatory structure have had a chance to take root and promote effective capital allocation, there is more scope to expand liberalization of portfolio investment. Chapter 3 examines selected elements of the experiences of countries in the region in managing capital. It is to the credit of policy makers in these countries that they have learned and adapted from their experience while continuing to liberalize. They have developed a network for sharing experiences.

16. **Macro and Micro Economic Impacts of Capital Flows.** Large inflows of capital can create pressures that lead to inflation, real appreciation of the exchange rate, lower domestic savings, and a reduction in the domestic interest rate or cost of capital more generally. The impact depends on the volume of the flows, the macroeconomic policy framework, the micro structure of the flows, and the incentives to actors in the financial sector. The more the economy can direct the capital flows into increased productive investment, the less impact they will have on the interest and exchange rates. Governments can also sterilize the flows through monetary intervention, though usually at some cost. It has generally proven difficult to sustain this practice, though it can provide a breathing space in which other policies can be put in place.

17. The balance between monetary and fiscal policy is a critical factor in managing capital flows. Creating greater public savings is one long run option that several countries have adopted. This reduces demand pressures on domestic resources and allows an easier monetary stance and lower interest rates, reducing the pull of high interest rates on short term capital inflows. Government deficits, however, have
not been a major problem in East Asia. The increase in public savings influences the level of public expenditures, particularly public investment. There are large infrastructure demands in the region, and while there are increasing expectations that private sources will provide a large part of the funding, governments will still have to finance the bulk of infrastructure investment. Governments will need to develop long term strategies to manage capital flows that take into account the sectoral and distributional aspects of the flows as well as the aggregate macroeconomic effects on both monetary and fiscal policy. In recent experience, a tighter fiscal stance has proven more effective than tight monetary policy (high interest rates) in managing capital flows in the medium term.  

18. The capital flows themselves are not monolithic, but represent a variety of different instruments, maturities, and risks to the country. There have been substantial changes in the kinds of instruments underlying these flows, and different instruments have different implications for policy making. East Asia has traditionally been a major recipient of FDI, including large flows within the region. More recently it has experienced a surge in portfolio investment. Experience has shown that direct investment is more likely to go directly into productive investment, increasing demand in capital goods markets and for capital imports. The pressure to appreciate the exchange rate will be eased if the current account is allowed to run a larger deficit, which may be facilitated by further trade liberalization. Portfolio investment poses a different set of problems depending on whether it is placed abroad or invested in local securities. The former may act more like direct investment if the resulting inflow is used for new investment. But firms seeking financing abroad may undermine domestic monetary policy, and large inflows may lead to other perturbations in the capital markets of the country. Portfolio investment going directly into the domestic capital market may be even more worrisome as it may lead to asset inflation and have a greater impact on reducing domestic savings than on increasing investment. It is also more likely to have an impact on the exchange rate and to be volatile, because it is much more liquid and more sensitive to short run external factors, such as interest rate movements. Portfolio investment adds urgency to ongoing regulatory and prudential reform programs as it promotes the development of domestic capital markets and brings greater depth and expertise. Although these phenomena are too recent to prompt hard conclusions, recent experiences in East Asia and Latin America indicate that such flows can be disruptive, and governments may be forced to take strong short-term actions.

19. The fundamentals justifying both FDI and portfolio investment in East Asia are sound, supporting the belief that the increase in flows is structural and fluctuations transitory. Nevertheless, market perceptions can change very rapidly, requiring continual vigilance to ensure that domestic policies remain sound. Even so, external events can trigger sharp market reactions; witness the fallout from Mexico’s problems on East Asia. The issue is not whether capital flows are good or bad. The challenge is to conduct both macro and micro economic policy to ensure that the additional resources provided by foreign capital inflows are used to best effect in, promoting growth and development.

20. Foreign direct and equity investment provides a degree of risk sharing with foreign investors. Corresponding expected returns will be higher. However, the existence of large volumes of mobile funds seeking profitable investments opens up fertile ground for speculators and arbitrageurs seeking to profit from distortions in risk adjusted yields across markets and countries. This imposes a great deal of discipline on national financial markets and their underlying economic policies, which should encourage sound overall policy. The more a country becomes integrated into the international market, the less room there is for distortions in major policy variables (e.g. interest rates, exchange rates) that deviate from the

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10 Changes in short term interest rates may be effective in curtailing short term surges of capital in or out, as occurred following the Mexico crisis early in 1995.
norms expected by the international financial community. Furthermore, there will be pressure for policies and regulations in domestic capital markets, and other sectors exposed to external markets will be under pressure to conform to international standards. However, markets can overreact as well, and countries must also be prepared to protect themselves from specific runs unrelated to the fundamentals. The difficulty is knowing when this is the case or when fundamental adjustment is called for. Chapter 4 analyzes the impacts of capital flows at both macro and micro levels.

21. Regulatory Implications of Capital Flows: As East Asian countries have become more integrated into global markets, their domestic capital markets have had to adjust more closely to international norms and practices, albeit at varying paces. Moreover, governments are finding that they need to rely to a greater extent on indirect policy tools, and much of the effectiveness of these instruments depends on the sound functioning and depth of local capital markets. Most capital markets, particularly bond markets, are still in an early stage of development in the region. They lack depth and liquidity, and are subject to many imperfections. While they have been small in relation to global markets, that is rapidly changing, and equity markets in Korea, Thailand, and Malaysia now rank within the top twenty in the world. As they expand, there will be increased information requirements as well as the need for effective prudential regulation that minimizes market distortions. Further development in these markets is to be expected and encouraged. Domestic capital markets have been largely insulated from international markets and subject to a variety of controls. Reforming and liberalizing these markets will be necessary to promote the orderly absorption of foreign capital, particularly portfolio investment and short term money market flows.

22. Direct controls that have been popular in the past, such as those on interest rates or ownership, impede capital flows and may cause them to be misallocated. They cannot be maintained as capital accounts open. Similarly, capital market regulations or practices that amount to implicit or explicit government guarantees or insurance (against sharp declines in equity value, bank failure, or sharp exchange rate changes) tend to encourage uneconomic risk taking and speculation by national and foreign investors that can be quite costly to governments. When direct controls are reduced, enhanced disclosure, accounting standards, and prudential regulation are indispensable partners to the liberalization process. Furthermore, financial sector legislation needs to be designed to encourage and reward prudent behavior by financial agents. Allowing more portfolio diversification by banks, encouraging contractual savings, and expanding options for other asset holders is an important element of financial sector reform. As Chapter 5 elaborates, the development of effective prudential regulations and transaction infrastructure in capital markets (and in the financial sector more generally) are as essential to managing capital flows as appropriate macro policy.

23. Towards a Framework. Dealing with substantial foreign capital flows is a difficult and complex issue, particularly when they are volatile. Developed countries have been wrestling with it for some time with only mixed success. There is no obvious policy response. While country strategies will have to adjust to individual situations, some general guidelines are useful. They are reviewed in Chapter 6. In the face of persistent pressure from external capital markets, developing countries in East Asia will have to adjust their longer-term policy frameworks to accommodate these flows in a sustainable way. This will involve action on fiscal policy, trade policy, financial sector regulation and development, and investment policies as well.

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11 The recent experiences of the ERM and the dollar indicate the extent of influence the financial markets have on national monetary policies of even the most developed countries.

12 Even though Indonesia, for example, has had an open capital account for over two decades, the combination of other financial sector controls, limitations on foreign ownership of domestic assets, and relative lack of interest of international portfolio investors until recently has allowed its domestic capital market to remain isolated to a substantial degree. However, its open capital account has resulted in longer experience with the attendant constraints on policy than in countries with more closed capital accounts.
as on monetary and exchange rate policy. While the emphasis should be on medium- to longer-term policies, policy formulation will also have to consider managing transitions and short-term surges. These can threaten longer-term strategy and will require non-distorting interventions that are designed to mitigate their effects without sending mixed signals on policy fundamentals. Such interventions should be of short duration and are likely to become less frequent as capital markets mature. The critical objective is not adjusting to short-run surges, but managing the economy to encourage stable long-term flows.

24. In assessing the potential impacts of large scale capital inflows, policy makers need to be concerned about their durability in order to develop and implement policies to manage the flows. Are the flows witnessed in recent years sustainable? Will the high levels of capital inflows continue for a prolonged period of time? Are the flows reversible? Will they stop coming or flow out again? And are they volatile? In part, answers to these questions lie in areas beyond the control of policy makers in East Asia, being influenced by global events and decisions in the major economies. So authorities must be more sensitive than in the past to external factors and be prepared to react quickly. But they can do much to enhance the durability of beneficial capital flows, both in their macro policy stance and in a number of micro policy areas that affect productive allocation of the capital inflows. Careful planning, the honing of appropriate policy instruments, the establishment of credibility, and the sending of clear signals are important in managing capital flows.

25. Sound macroeconomic policy is, of course, fundamental. That “old time religion” of low inflation, a balanced fiscal stance, and prudent credit creation regains some of its luster as countries become more integrated into world capital markets. It is worth noting that most of these guidelines were developed in an earlier period of free capital flows under the gold and gold exchange standards (at least for that part of the world that participated), so their relevance is appropriate.

26. At a strategic level, managing capital flows is an issue for countries that have structured their economies to achieve rates of real growth that generate high enough real rates of return to attract foreign capital. To achieve a desirable and sustainable level of dependence on foreign capital, a country would then have to ensure that interest rates are consistent with international rates adjusted for risk and expected exchange rate movements. The latter is a function of export promotion policy. Fiscal and trade policy should be set to accommodate the real transfer of foreign capital and limit demand-driven inflationary pressure domestically. This policy framework should provide incentives for high rates of domestic savings and for investment in productive activities rather than rent-seeking behavior. Trade openness is important to enhance absorption of capital inflows in the short run and to develop foreign exchange earning capacity for eventual repayment. Liberalization and reform of domestic goods and capital markets will be a necessary concomitant of adapting to more open capital flows externally, and they will increase growth benefits to the recipient country. As countries become richer, the scope for nationals to invest abroad should be expanded. This would help to balance large capital inflows and increase portfolio yields to nationals. The balance of policies within this strategic framework will evolve over time as the country develops and the external environment changes.

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13 This turns out this is less an issue of the nominal denomination of an instruments’ maturity than the willingness of investors to sustain or increase net exposure.

14 It is useful to distinguish between volatility -- which is a measure of short term fluctuation around a mean or trend, and reversibility which refers to a discrete cessation of inflow -- or even an outflow -- in response to a shock of some sort. The former makes short run management difficult. The latter can cause serious economic disruption if unexpected and unmitigated.

15 If a country is experiencing large capital inflows and does not have high yield real investment opportunities, this may be a warning signal about the speculative nature of the capital flows and reason for some kind of control until the economic fundamentals are in better shape.
27. At a tactical level, countries still have to deal with fluctuations and potentially sharp movements in capital flows, in response to external shocks and to implement changes in their strategic policy stances. To modulate capital flows, countries may take recourse in sterilization policies, using wider bands for exchange rate interventions, changing reserve requirements on foreign deposits, adjusting short-term interest rates, or imposing a variety of taxes or fees on short-term foreign transactions — even temporary direct controls. These latter interventions can easily become distorting and lead to potentially costly evasions. They should only be used in an emergency. If they need to be maintained, there is good reason to suspect that more fundamental policy problems must be tackled.

28. The challenge for East Asian countries is i) to manage the transition to more open capital markets and dynamic international capital flows so that the capital is used effectively; ii) to develop more efficient domestic capital markets that will absorb foreign investment without excessive risk and volatility; iii) to allow nationals the benefits of participating in the global capital market; and iv) to minimize the pain of the transition. In the 19th century, a massive movement of capital from Europe to America led to a dramatic shift in the center of economic power. The current movement of capital from the Western economic powers to East Asia may signal a similar event at the end of this century.
Chapter 2

Capital Flows into East Asia

1. East Asia's total debt to both public and private sources has burgeoned in the 1990s. It rose to an estimated US$415 billion at end 1994, up 14% over the previous year. FDI is much harder to estimate, but cumulative net flows since 1980 are about US$150 billion. Portfolio equity net flows sum to nearly US$50 billion through 1994. Thus, a rough estimate of total external liabilities of the region would be something over US$600 billion, which would include some intraregional obligations. East Asian countries do receive substantial official flows, but they have historically been less reliant on these flows than other regions. These flows amounted to about 0.7% of GDP per year in aggregate for the region, but with considerable variation by country. A number of countries in East Asia are likely to "graduate" from eligibility for most official flows by the end of the century. Korea, Hong Kong, Taiwan (China), and Singapore already have. Among the lower income countries, which still constitute the bulk of the region, official flows are likely to continue to play an important role, particularly for the economies in transition.

2. The exciting story in East Asia is the dramatic increase in private capital inflows, not only in absolute terms, but also in relation to GDP and investment. These flows are much more differentiated than the commercial bank lending of the 1970s and are less likely to be used simply to fill budget or balance of payments gaps. The instruments themselves can have quite complex features, and the extent and diversity of capital flows now argue for a much more disaggregated approach to the analysis and management of capital flows. The rest of this chapter will look at the various types of capital flowing into East Asia.

*Private capital is the largest source of external funds in East Asia*

<table>
<thead>
<tr>
<th>Table 2-1</th>
<th>Capital Flows to East Asia (US$ billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sources</td>
<td>1.3</td>
</tr>
<tr>
<td>Official Dev Assistance</td>
<td>1.2</td>
</tr>
<tr>
<td>Other Official Finance</td>
<td>0.1</td>
</tr>
<tr>
<td>Private Flows</td>
<td>0.8</td>
</tr>
<tr>
<td>Commercial Bank</td>
<td>0.5</td>
</tr>
<tr>
<td>Bonds</td>
<td>0.0</td>
</tr>
<tr>
<td>Other Private</td>
<td>0.1</td>
</tr>
<tr>
<td>FDI</td>
<td>0.3</td>
</tr>
<tr>
<td>Portfolio Equity Flows</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Net Flows</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Source: World Debt Tables. Data not available.*

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1 This discussion is based on the source of the funds, public or private. Some portion of the private source funds receive government guarantees in the recipient country and is thus counted as official in the World Bank Debt Tables. However, the value of government guarantees has considerably diminished since the debt crisis, and in terms of decision-making by lenders, it is more useful in this paper to consider sources. Private lenders also sometimes seek guarantees (full or partial) from their own governments or multilateral agencies.
3. The current high volume of foreign private capital flows into East Asia is concentrated in direct investment, and it has been since the mid 1980s. In East Asia, these flows tend to augment rather than replace already high investment rates (about 30% in most of these countries), and the additional resources - financial, managerial, and technical -- have helped sustain high growth rates. This differs from the experience in Latin America, where increased foreign capital has not generally raised investment rates, but rather displaced domestic savings. Capital flows have been surprisingly large in East Asia in relation to the levels of investment in the recipient countries, adding a substantial amount of resources. On average over the 1990-93 period, net capital inflows have amounted to between 4 and 30 percent of gross domestic investment (Table 2.2). The increase in the share in the second period is a result of the surge in flows in 1993. 1994 has seen some easing of these flows.

Foreign investment constitutes a significant share of domestic investment

<table>
<thead>
<tr>
<th>Table 2-2</th>
<th>Capital Flows as a Percentage of Gross Domestic Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of GDI (3-year averages)</td>
</tr>
<tr>
<td></td>
<td>Total Flows/GDI</td>
</tr>
<tr>
<td>China</td>
<td>10.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>16.9</td>
</tr>
<tr>
<td>Korea</td>
<td>4.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>22.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>14.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Source: Calculated based on data from World Bank (1994b), and World Bank database.

4. The low share in Korca reflects that country’s reluctance to allow foreign investment and its modest external borrowing requirement. There is a large potential external demand for investment in (supply to capital to) Korca, as indicated by the popularity of new country investment funds now that Korca has begun to open its market to foreign investors. In the Philippines, the much more substantial public share is one of the effects of the debt crisis endured by that country, resulting in more difficulty in attracting private investors until the reform program began to produce tangible results. In the past two years, a workout on the commercial bank debt has been achieved, and the macro reforms have begun to take hold. There has been a sharp increase in the share of private source capital to more than half of all capital in 1993. Malaysia is the most successful in attracting foreign flows to support its growth.

5. The magnitude of these capital flows is remarkable. In fact, not all foreign private capital inflows have been absorbed in investment. They have been in excess of what would have been required to fund the increase in domestic investment over domestic savings and the resulting increase in the current account deficit. This "overfinancing" initially has shown up in reserves, which have shot up by about US$90 billion between 1989 and 1993 for these countries shown on Table 2-3. The increase in reserves has been the result of explicit sterilization actions on the part of central banks and of increased private holding of foreign assets in the banking systems (where allowed). These reserves represent both an indicator of the strength of these economies and a potential threat to macroeconomic stability if they lead to expanded credit and domestic demand. This is one measure of the policy challenges faced by these economies.

2 The high volume of foreign capital that moved into Latin America in the period around 1980 (the only other period of sustained high private flows into a region) was largely in the form of syndicated loans and frequently did not increase productive investment. Rather it led to the debt crisis.

3 see Bercusson and Koenig (1993).
Capital inflows have overfinanced domestic resource requirement in East Asia

<table>
<thead>
<tr>
<th>Percent of GDP</th>
<th>Average over 1989-1993 (Percent of GDP)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>38.0</td>
<td>38.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30.0</td>
<td>27.8</td>
</tr>
<tr>
<td>Korea</td>
<td>36.1</td>
<td>35.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>33.0</td>
<td>29.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>22.3</td>
<td>18.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>39.8</td>
<td>33.6</td>
</tr>
<tr>
<td>Average</td>
<td>33.2</td>
<td>30.6</td>
</tr>
</tbody>
</table>


Major Components of Capital Flows

6. All types of private capital have contributed to the recent flows into of East Asian countries, as shown in Table 2.1 above. These countries remain attractive for commercial bank lending, but have avoided overuse of this source. Most of the capital inflow has been in FDI. This is most favorable for the recipient countries, as it is most likely to create additional investment. The biggest increases recently have been in portfolio investment, both equity and fixed income securities, though their levels remain below that of FDI. This reflects growing confidence by institutional investors, but the link of portfolio flows to new investment is less direct and potential volatility is greater. Short term capital flows have also increased. These are more varied in nature, most volatile, and least likely to end up as increased investment, in no small part because of the maturity mismatch risk. What is not adequately reflected in the table is the growth of complex instruments: convertible bonds, derivatives, or packaged project financing. They may be counted in one category or another, but are less easy to categorize because of their complex and contingent structure.

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4 These flows can either increase investment, or they can fill an ex-ante current account deficit, but not both. In the latter case, they also validate lower domestic savings, which may not be desirable, particularly if the capital inflow is not likely to be sustainable.
7. **Commercial Bank Syndicated Loans.** In the 1970s and 1980s, these were the most common form of private source capital flows to developing countries. Initially denominated in US$, these loans are now available in a variety of major currencies. They are typically for terms of 5-10 years with floating interest rates set at a spread above the rate on the lenders' source of funds (e.g., LIBOR or SIBOR). These spreads typically range from 50-500 basis points, depending on the credit standing of the borrower, special features of the loan, and the competitiveness of the market. Borrower government guarantees are typically required, though this is considered less protection than in the past, and some firms can borrow on their own. Loans can be for general budget or balance of payments support purposes, or they may be associated with a project. The borrower assumes both the interest and the exchange risk. As with any loan, repayment is required regardless of the outcome of the investment they support or of the overall state of finances of the borrower. These loans can be relatively easy to arrange through a lead bank. They are not subject to a broad market test, though the lead bank must be able to syndicate the loan to other banks. Net flows on these loans have diminished as countries are repaying earlier loans and restraining new borrowing. The action is elsewhere.

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5 Because the funding base was initially the Euro dollar market, which was outside the control of national monetary authorities, such Euro lending was possible despite capital controls in many developed countries. With the demise of these controls, the funding base of these loans is potentially larger, and the primary limit on volumes is the prudent decisions of the lenders.
8. East Asian countries have generally been prudent in their use of these loans and have maintained access to these markets, despite high debt levels in some countries (Table 2-4). When Indonesia was faced with a potentially over-expansive spate of proposed foreign borrowings seeking public support in 1992–93, it established a committee to screen and regulate the volume of large borrowings to be consistent with overall economic stability. At various periods of time, Korea, Malaysia, and Thailand have used balance of payments surpluses to pay down their commercial loans. In the case of the Philippines, the net outflow of bank loans was linked to its inability to attract loans during the debt crisis. Old loans were repaid and no new ones were forthcoming. China, Thailand, and Indonesia are now the primary borrowers in this market, and recent disputes between China and some lenders over repayment responsibility may dampen interest by banks for some time. Preliminary 1994 estimates indicate a return of positive net flows to East Asia.

Commercial bank lending is again on the rise after almost disappearing in the mid-1980s

Chart 2-2 Net Bank Lending to Developing Regions

Source: World Debt Tables

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The core of the dispute is whether the central government is responsible for repayment defaults by local governments and state-owned enterprises which did not obtain an explicit guarantee from the central government. Lenders argue there was in implicit guarantee, which the government denies.
Some countries have repaid bank lending when other resources were available

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0</td>
<td>0</td>
<td>-3</td>
<td>623</td>
<td>2,436</td>
<td>596</td>
<td>3,016</td>
<td>2,852</td>
</tr>
<tr>
<td>Indonesia</td>
<td>134</td>
<td>1,580</td>
<td>825</td>
<td>-318</td>
<td>2,534</td>
<td>1,500</td>
<td>1,966</td>
<td>-1,459</td>
</tr>
<tr>
<td>Korea</td>
<td>52</td>
<td>337</td>
<td>1,408</td>
<td>1,629</td>
<td>-1173</td>
<td>428</td>
<td>1,225</td>
<td>-387</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3</td>
<td>570</td>
<td>716</td>
<td>-2,355</td>
<td>-389</td>
<td>89</td>
<td>993</td>
<td>-146</td>
</tr>
<tr>
<td>Philippines</td>
<td>101</td>
<td>281</td>
<td>766</td>
<td>532</td>
<td>-349</td>
<td>-343</td>
<td>-1,429</td>
<td>-365</td>
</tr>
<tr>
<td>Thailand</td>
<td>62</td>
<td>87</td>
<td>1,234</td>
<td>736</td>
<td>1,488</td>
<td>2,887</td>
<td>1,287</td>
<td>-2,141</td>
</tr>
<tr>
<td>TOTAL</td>
<td>351</td>
<td>2,855</td>
<td>4,945</td>
<td>847</td>
<td>4,547</td>
<td>5,157</td>
<td>8,792</td>
<td>-1,846</td>
</tr>
</tbody>
</table>

Source: World Debt Tables. Data not available.

9. Foreign Direct Investment (FDI) is perhaps the oldest form of foreign capital flow. Funds are directly linked to the construction and/or operation of a project in the recipient country, either wholly or jointly with national interests - public or private. In contrast to bank loans, there is risk sharing by the foreign investor, who only benefits if the activity turns a profit. The recent growth in FDI can be credited to the policy reforms and expected high rates of growth in recipient economies. Low effective wage rates, reductions in distortions (at least for export production), and the promise of stable economies constitute the basic attraction to investors. Continued liberalization of world trade under GATT/WTO and the accession of more developing countries to that group have given further impetus to the internationalization of many corporate horizons and to increased investment in low cost countries as part of increasingly global production processes. Changing relative cost structures and saturation in certain markets may change the sector composition and country allocation of these flows, but there is every indication that the flows will continue and will expand to new countries and products as old ones become less interesting. Malaysia and Thailand are only the most recent examples of countries shifting the product mix of their FDI-based industries as they move up the income scale, following Korea, Singapore, and others.
10. Reminiscent of the 19th century, there is again a great deal of interest in foreign investment in infrastructure in developing countries, but with regional difference. In Latin America and to a lesser extent Eastern Europe, much of the investment is purchasing existing firms or utilities in privatization programs and taking over their operation. In East Asia, there is greater interest in foreign investment in new infrastructure. The needs are vast. These projects will create additional opportunities and should contribute to sustaining or increasing FDI flows. It should be noted, however, that most recent FDI (other than resource based) has resulted from a foreign producer looking for a low cost site to manufacture his product, usually for export, but sometimes for accessing the local market behind a tariff barrier. In contrast, infrastructure based FDI stems from governments seeking foreign, low cost producers to come and supply infrastructure to the domestic market. Traditional FDI produced tradables, exports or import substitution goods. Infrastructure FDI will produce non-tradables for a local market, often with limited competition. Even more than manufacturing FDI in protected import substitution activities, FDI in infrastructure will not typically generate or save a great deal of foreign exchange directly. Countries will have to be sure that future export earnings are large enough and available to the investors for eventual repatriation. Infrastructure which facilitates the production and export of tradables naturally comes to mind as most appropriate for this kind of activity — telecommunications, power, transport.
11. East Asian countries have clearly increased their receptiveness to FDI, in large part due to their greater reliance on market forces and exports. They are now the largest recipient region, surpassing LAC and capturing more than half of all FDI flows. The NIEs (Taiwan (China), Hong Kong, Singapore, and Korea) were initially mixed in their receptiveness to FDI. The city states welcomed such flows, but the larger economies were more resistant and severely constrained foreign investment in order to promote domestic entrepreneurs. The newly emerging countries of Southeast Asia and China have generally been more receptive to FDI, which has grown rapidly in recent years to the point where China is one of the largest recipients among all countries. Former concerns that high levels of FDI may crowd out domestic entrepreneurs are fading as strong indigenous classes of entrepreneurs have developed (often behind earlier restrictions on foreign ownership). Countries in East Asia now view the benefits as outweighing their former reservations. An important feature in the growth of FDI has been the expansion of clear property
rights allowing foreign ownership of a broader range of domestic assets. The Nonbinding Investment Principles adopted at the November 1994 APEC meeting signals a further strengthening of the region's openness to FDI. Recent actions in several countries are also encouraging in this regard.

The volume and growth of FDI has been phenomenal in most East Asian countries

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,659</td>
<td>3,487</td>
<td>4,366</td>
<td>11,156</td>
<td>25,800</td>
<td>30,000</td>
</tr>
<tr>
<td>Indonesia</td>
<td>83</td>
<td>476</td>
<td>180</td>
<td>310</td>
<td>1,093</td>
<td>1,482</td>
<td>1,777</td>
<td>2,004</td>
<td>2,450</td>
</tr>
<tr>
<td>Korea</td>
<td>66</td>
<td>57</td>
<td>6</td>
<td>234</td>
<td>715</td>
<td>1,116</td>
<td>550</td>
<td>516</td>
<td>700</td>
</tr>
<tr>
<td>Malaysia</td>
<td>94</td>
<td>351</td>
<td>934</td>
<td>695</td>
<td>2,333</td>
<td>3,999</td>
<td>4,469</td>
<td>4,351</td>
<td>4,800</td>
</tr>
<tr>
<td>Philippines</td>
<td>-25</td>
<td>98</td>
<td>-106</td>
<td>12</td>
<td>530</td>
<td>544</td>
<td>228</td>
<td>763</td>
<td>1,000</td>
</tr>
<tr>
<td>Thailand</td>
<td>43</td>
<td>22</td>
<td>190</td>
<td>163</td>
<td>2,444</td>
<td>2,014</td>
<td>2,116</td>
<td>2,400</td>
<td>3,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>261</td>
<td>1,004</td>
<td>1,204</td>
<td>3,073</td>
<td>10,601</td>
<td>13,521</td>
<td>20,295</td>
<td>35,834</td>
<td>41,950</td>
</tr>
</tbody>
</table>

Source: World Debt Tables

12. A great deal of FDI in East Asia is related to export production, partly by investor preference and partly due to host country regulations that have tended to direct foreign investment into export activities. This has had the beneficial effect of forcing such projects to be competitive and efficient. In some cases, however, FDI has been attracted by the benefits in local markets. Extensive liberalization in most East Asian markets has rendered such rent seeking behavior less important, but it cannot be ignored.

13. It is particularly noteworthy that in East Asia, an increasing amount of FDI comes from other countries within the region. These capital flows are often linked to expanding intraregional trade flows. A large part of that trade is in intermediate goods, indicating strong intrafirm trade and integration of production processes among firms furnishing components for final assembly. Japan was initially the hub of this process and the source of much of the FDI, but the network has become more diverse and includes many connections among Chinese and other investors as well. The more advanced developing countries are investing in the more recently industrializing countries. Rapid growth in the more advanced countries raised wages and shifted comparative advantage. Rather than continuing to protect labor-intensive activities, firms have often shifted production facilities to other lower wage countries in the region, often through FDI. It is plausible to believe that export quotas under MFA may have contributed to this in the early stages of FDI flows to low wage countries. Furthermore, successive rounds of yen appreciation have encouraged Japanese firms to shift more productive capacity to other countries, primarily in East Asia. The current surge of the yen will continue this pressure for FDI from Japan.

14. China is the primary recipients of these flows, and Hong Kong is both a primary investor and an intermediary of funds from elsewhere in the region and from developed countries (US & UK). Some part of this flow is likely to be capital from some countries in the region converting itself into FDI to flow back into its own market in order to benefit from the more favorable treatment accorded foreign investment. It has been estimated that significant amounts of capital from China and Malaysia have been cycled through offshore points to FDI. Although East Asian countries have not suffered capital flight to anything like the

---

7 Prior to this liberalization, foreign investors often acted through local nominees or partners.

8 In general, investment in export oriented or import substituting activities are both beneficial in a relatively non-distorted economy. However, in the presence of distortions favoring import substitution, investing in those activities may have fewer or even negative welfare effects, despite profits earned by the activities themselves.
extent of Latin America or Eastern European countries, some of these flows probably represent the return of prior capital flight, more likely in Philippines than elsewhere.

Box 2.1  China: Roundtripping Capital Flows

China has achieved remarkable success in attracting FDI, but some of this may not in fact be foreign investment. Rough estimates by Hongkong Bank, suggest that more than 25% of annual FDI flows are actually “roundtripping” flows, i.e. illicit capital outflows being repatriated back to China.

One indication of this is observed in other outflows of the capital account. By the end of 1992, China’s worldwide direct investment was estimated at around $US6.5 billion spread over 120 countries and territories (Source: PBC and IMF). Another $US4.4 billion was invested abroad in 1993, making the net FDI inflow $23.12 billion ($27.52 bn official inflow - $4.4 bn outflow) (see table below). Moreover, the IMF Balance of Payment data also shows that “net errors and omissions,” which were insignificant in the early 1980s, in the 1990s, reaching to over US$10 billion in 1993. This is generally viewed as an index of capital flight.

Where did the money go? It appears that Chinese SOEs and provincial authorities set up shell companies in Hong Kong to funnel their hard currency to other destinations, invest in Hong Kong, or invest back in China as FDI. The capital outflows are primarily motivated by a desire to avoid exchange rate and other risks at home, rather than seeking a higher rate of return abroad. China’s official exchange rate fell 21% against US dollar in 1990, 10% in 1991 and another 8% in 1992-93. With the unification of the swap and official rates in January 1994, the exchange rate risks had been reduced after the exchange rate depreciated from 5.8 yuan to 8.7 yuan to a dollar. The amount of repatriation is expected to have increased significantly in 1994.

Until January 1994, China’s preferential tax treatment, tariff exemption and other incentives to foreign investors provided an incentive for domestic enterprises to invent fictitious foreign partners and repatriate capital as disguised FDI. While China might want to relax the restrictions for capital outflows, it is clear that roundtripping is neither beneficial nor efficient to China’s economic growth. Tax concessions and other preferential regulations on FDI should be eliminated. The role of government is to ensure a favorable environment for all private investment, eliminate price distortions, and level the field for competition between domestic and foreign firms.

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<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Investment (netrnb)</td>
<td>2,344</td>
<td>2,613</td>
<td>2,651</td>
<td>3,453</td>
<td>7,156</td>
<td>23,115</td>
<td>30,007</td>
</tr>
<tr>
<td>Portfolio Investment (net)</td>
<td>876</td>
<td>-180</td>
<td>-241</td>
<td>235</td>
<td>-57</td>
<td>3,049</td>
<td>-</td>
</tr>
<tr>
<td>Other Capital, rie</td>
<td>3,913</td>
<td>1,290</td>
<td>839</td>
<td>4,344</td>
<td>-7,349</td>
<td>-2,690</td>
<td>-</td>
</tr>
<tr>
<td>Resident Official Sector</td>
<td>3,364</td>
<td>4,628</td>
<td>2,898</td>
<td>2,236</td>
<td>-3,222</td>
<td>-2</td>
<td>-</td>
</tr>
<tr>
<td>Deposits Money Banks</td>
<td>1,108</td>
<td>-2,661</td>
<td>-2,135</td>
<td>1,655</td>
<td>-786</td>
<td>-415</td>
<td>-</td>
</tr>
<tr>
<td>Other Sectors</td>
<td>-559</td>
<td>-677</td>
<td>256</td>
<td>453</td>
<td>-3,334</td>
<td>-2,273</td>
<td>-</td>
</tr>
<tr>
<td>Net Errors and Omissions</td>
<td>-457</td>
<td>115</td>
<td>-3,205</td>
<td>-6,767</td>
<td>-8,211</td>
<td>-10,096</td>
<td>-7,800</td>
</tr>
</tbody>
</table>

East Asian countries are major investors in their neighbors

Table 2-6  Sources of FDI in East Asia based on data from recipient countries

<table>
<thead>
<tr>
<th>Source Country</th>
<th>Amount Invested (US$ billion)</th>
<th>China</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Thailand</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIEs</td>
<td>32.1</td>
<td>70.9</td>
<td>25.1</td>
<td>37.7</td>
<td>17.9</td>
<td>35.4</td>
<td>50.7</td>
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<tr>
<td>Taiwan (China)</td>
<td>6.4</td>
<td>6.4</td>
<td>8.0</td>
<td>22.3</td>
<td>2.7</td>
<td>8.2</td>
<td>10.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>21.7</td>
<td>62.8</td>
<td>7.6</td>
<td>3.1</td>
<td>10.4</td>
<td>17.1</td>
<td>34.3</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.6</td>
<td>1.3</td>
<td>3.8</td>
<td>6.8</td>
<td>1.5</td>
<td>9.5</td>
<td>4.1</td>
</tr>
<tr>
<td>Korea</td>
<td>1.4</td>
<td>0.4</td>
<td>5.7</td>
<td>5.5</td>
<td>3.3</td>
<td>0.6</td>
<td>2.2</td>
</tr>
<tr>
<td>ASEAN</td>
<td>1.1</td>
<td>0.8</td>
<td>0.5</td>
<td>5.4</td>
<td>0.5</td>
<td>0.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Japan</td>
<td>11.7</td>
<td>10.2</td>
<td>17.6</td>
<td>22.2</td>
<td>26.4</td>
<td>35.6</td>
<td>18.4</td>
</tr>
<tr>
<td>US</td>
<td>6.9</td>
<td>8.0</td>
<td>6.8</td>
<td>10.8</td>
<td>36.9</td>
<td>13.6</td>
<td>10.9</td>
</tr>
<tr>
<td>Europe</td>
<td>6.5</td>
<td>4.4</td>
<td>16.1</td>
<td>19.6</td>
<td>11.7</td>
<td>11.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Australia</td>
<td>1.0</td>
<td>0.6</td>
<td>0.8</td>
<td>4.6</td>
<td>2.0</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Total US$ billion</td>
<td>59.3</td>
<td>94.9</td>
<td>66.9</td>
<td>100.3</td>
<td>95.4</td>
<td>97.0</td>
<td>93.6</td>
</tr>
</tbody>
</table>


15. Another contributing factor to the surge in FDI has been the growing number of privatizations in developing countries. This has been led by Latin American countries as a major element of their reforms, but East Asian countries have also been active, particularly Malaysia and the Philippines. Fortunately, East Asian economies have had better overall records with their public enterprises and macro management, and they have not had to undertake distress sales of burdensome public expenditures, as has more frequently been the case elsewhere. The economies in transition in East Asia have opted for a gradual process of conversion to private ownership and have not engaged in the massive privatization exercises that have characterized Eastern Europe and the FSU. Other East Asian governments have chosen to privatize to free up scarce public resources — financial and human — in order to concentrate on other areas where government expenditures are more appropriate, (e.g. health and education), leaving commercial enterprises and some utilities to the private sector. Many of these privatizations have been through the issuance of a proportion of the total equity in the enterprise rather than sale of the entire enterprise. The former would be categorized as portfolio investment. It is expected that the pace of privatization will increase. However, encouraging private investment in new infrastructure remains a higher priority.

Privatization has been much less important an explanation of FDI in East Asia than elsewhere

Table 2-7  Investment in Privatizations (US$ millions)

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</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>1.3</td>
<td>0.0</td>
<td>0.7</td>
<td>88.0</td>
<td>1,555.9</td>
<td>3,439.0</td>
<td>5,084.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>0.0</td>
<td>0.1</td>
<td>10.6</td>
<td>4.2</td>
<td>41.8</td>
<td>16.2</td>
<td>72.9</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>0.0</td>
<td>13.8</td>
<td>38.1</td>
<td>11.1</td>
<td>49.4</td>
<td>544.7</td>
<td>657.1</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>213.7</td>
<td>183.3</td>
<td>2,559.0</td>
<td>6,718.0</td>
<td>3,729.5</td>
<td>3,392.2</td>
<td>16,795.7</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>0.0</td>
<td>1.0</td>
<td>0.0</td>
<td>3.2</td>
<td>19.2</td>
<td>302.5</td>
<td>325.9</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>18.9</td>
<td>641.2</td>
<td>628.4</td>
<td>2,083.4</td>
<td>3,705.7</td>
<td>3,153.8</td>
<td>10,231.5</td>
</tr>
<tr>
<td>Total</td>
<td>233.9</td>
<td>839.4</td>
<td>3,236.8</td>
<td>8,907.9</td>
<td>9,101.5</td>
<td>10,848.4</td>
<td>33,167.9</td>
</tr>
</tbody>
</table>

Source: World Bank Group Estimates

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*Over the past decade, Malaysia has privatized over US$4 billion in assets. However, the bulk of this has been to national investors as part of a program to diversify ownership of capital.*
16. Like most countries, East Asian economies offer a number of special benefits to attract foreign capital, including special assurances on repatriation, tax relief, and other benefits, often administered by a board of investments. In the not too distant past, these boards were often impediments to foreign investment, trying to direct the flows, limit access to special privileges, and protect local entrepreneurs. As countries have realized the benefits of FDI, these boards have become more active promoters. Privileges are often granted on the justification that they offset real or perceived distortions in the domestic economy and match similar benefits offered in competing countries. Studies have indicated that specific incentives are far less important to potential investors than sound fundamentals, which remain the primary attraction for FDI in East Asia. Some of these benefits have encouraged nationals to take their capital out and then return it (see Box 2-1 above). There is little value in competing on special investment enhancements. At best they will lead others to match them, transferring resources on average from East Asian countries to foreign investors. At worst, they will distort investment decisions in the offering countries and help governments ignore more fundamental distortions that should be corrected.¹⁰ Far better would be to devote these efforts to reducing the domestic distortions that are used to justify the special incentives in the first place. The APEC principles to harmonize investment codes is a welcome step in this direction.

17. **Portfolio Investment.** Although not yet so large or widespread as FDI, the very rapid increase in portfolio investment in East Asia represents a more dramatic and profound step in the integration of East Asia into world capital markets. FDI was a result of the successful expansion of East Asia into the global goods market, exporting products based on exploitation of low cost labor into major consuming markets. The surge in portfolio investment into East Asia represents increased integration into global financial markets. It signals a major step in the economic maturity of these countries. Latin America first led the surge in portfolio investment and attracted the bulk of the flows in 1993. These flows declined in 1994, particularly in Latin America, although the final data is not available. A substantial portion of the flows into Latin America in the early 1990s were into Mexican stocks, probably related to NAFTA, and into Argentina and Brazil following the resolution of the debt disputes with international banks. The recent experience in Mexico illustrates the reversibility of these flows.

18. There are a variety of forms that portfolio investment can take. Investors may purchase bonds (debt) of developing country governments or firms, either in a major international currency in a major international market or in local currency in the host country market. They may also purchase equity (stocks) in either international or domestic markets. Of course, not any security in any market, but it is now much easier for securities of developing countries and their firms to be listed and traded in major markets or over the counter in industrial countries. Equity and bond investment differs from FDI and commercial bank lending discussed above in that the ultimate provider of funds is removed from direct involvement in the use of the funds. The investor is buying a claim on the income streams of the issuer, and is primarily interested in the yield and security of his funds. In the case of equity, the investor is also sharing the risks. There is some evidence that in emerging markets, the country is the primary explanatory factor in foreign investor decisions: the specific firm choice is secondary.¹¹ This implies that as markets open to foreign investors, they are initially investing more in country prospects in general and are less discriminating across instruments within the country. The still limited number of large issues in most emerging markets partially accounts for this. Investors are likely to become more discriminating among issues as more information becomes available and as more companies are listed. The growth of country funds also indicates the attraction of investing in fast growing countries.

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¹⁰See World Bank (1994a) and Kawaguchi (1994) for further discussion of the value of these incentives.
¹¹See, for example, World Equity, November 1994.
Global Portfolio investment has increased seven-fold since 1990

| Table 2-8 Types of Portfolio Investment in developing countries (US$ million) |
|--------------------------------------------------|---------|---------|---------|---------|---------|---------|
| Commercial Paper                                 | 2.129   | 5.115   | 6.723   | 10.466  | 6.530   | 6.41    |
| Bonds placement abroad                           | -51     | -114    | 1.973   | 1.215   | 3.982   | 17.441  |
| Total portfolio equity flows                     | 2.623   | 2.268   | 1.049   | 5.102   | 19.107  | 17.885  |
| Equity placed abroad                             | 0       | 40      | 205     | 1.452   | 2.963   | 7.800   |
| Direct Equity Purchases                          | 1.268   | 342     | 694     | 2.795   | 15.144  | 8.150   |
| Closed-end Funds                                 | 1.355   | 1.886   | 150     | 855     | 1.000   | 1.935   |
| Total                                            | 4.701   | 7.269   | 9.745   | 16.783  | 29.619  | 53.852  |

Source: Staff Estimates, IEC.

19. Portfolio investment offers an easier means for existing firms... to raise foreign capital than seeking an FDI partner. The large volumes of funds available in global markets facilitate such transactions. However, since portfolio securities are normally traded in secondary markets, these investors have the option of getting out of an investment relatively easily, though perhaps at some loss, compared to direct investment. This has two important implications for recipients of portfolio investment. The first is that demand for and hence prices of individual issues or groups of issues may be volatile, particularly for short term instruments\textsuperscript{12}. And the second is that not all purchases of portfolio investment bring in new capital or create new investment. New issues of stocks and bonds will bring in new capital, but purchases in secondary markets, even if new foreign buyers are coming in, will not necessarily increase investment and may reduce domestic savings. The net impact depends on whether the seller uses the proceeds to undertake new investment, buy other existing assets, repatriate the funds (if the seller is foreign), or consume. Even new issues may not contribute to additional investment if the proceeds are used to retire other domestic debt or fund current expenditures. Refinancing foreign debt with equity simply results in a net zero flow, but changes the structure of external liabilities, which may be desirable.

\textsuperscript{12} Some evidence indicates that opening domestic capital markets leads to a decline in volatility often about a year (Kim \& Sengal (1993) in Claessens \& Gooptu (1993). Others disagree (Ilowell (1993) in the same volume).
Portfolio flows have risen sharply in 1993

Chart 2-5: Net Total Portfolio Investment in Developing Regions

Portfolio investment in East Asia countries depends on both the openness and stability of domestic capital markets.

<table>
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<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>971</td>
<td>-48</td>
<td>677</td>
<td>993</td>
<td>4,334</td>
<td>5,485</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>-40</td>
<td>338</td>
<td>381</td>
<td>275</td>
<td>1,844</td>
<td>2,726</td>
</tr>
<tr>
<td>Korea</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>1,271</td>
<td>860</td>
<td>3,365</td>
<td>5,92I</td>
<td>9,663</td>
<td>6,943</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-30</td>
<td>-3</td>
<td>-11</td>
<td>2,253</td>
<td>81</td>
<td>143</td>
<td>11</td>
<td>3,740</td>
<td>2,252</td>
</tr>
<tr>
<td>Philippines</td>
<td>-1</td>
<td>-2</td>
<td>80</td>
<td>-71</td>
<td>395</td>
<td>124</td>
<td>281</td>
<td>1,770</td>
<td>2,446</td>
</tr>
<tr>
<td>Thailand</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>60</td>
<td>362</td>
<td>-37</td>
<td>552</td>
<td>4,864</td>
<td>2,682</td>
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<tr>
<td>TOTAL</td>
<td>-31</td>
<td>-5</td>
<td>248</td>
<td>4,445</td>
<td>1,987</td>
<td>4,653</td>
<td>8,033</td>
<td>26,215</td>
<td>22,534</td>
</tr>
</tbody>
</table>

Note: Includes both bond placement and portfolio equity investment. Source World Bank (1994b).

20. The development of portfolio investment in East Asia has been varied. Some countries have been slower in opening their domestic capital markets to foreign ownership than they have been in liberalizing direct investment; for others their access to foreign markets for portfolio placements has been more discretionary. The former reflects either the weak state of development of domestic capital markets or a reluctance to allow foreigners to become too involved or both. The latter reflects more stringent market listing requirements in advanced capital markets that have kept some borrowers out.\(^{13}\) Two principal factors have been driving the growth in portfolio investment. On the recipient country side, governments

\(^{13}\) Some governments (Thailand, Indonesia, Korea) have been able to place bonds in advanced country markets for over a decade and even have investment grade ratings. But access to these markets by private borrowers is a more recent phenomena.
and both public and private enterprises have been seeking additional funding and have often found more favorable terms and larger placements available in foreign rather than in local markets. Sustained rapid growth in developing countries has assured that many firms, as well as governments, are sufficiently creditworthy to gain access to foreign equity and bond markets. On the source side, the interest in overseas portfolio investment has grown due to reductions on controls on foreign capital placements in investor countries and to growing interest by large institutional investors in emerging markets as a portfolio diversification measure with potential high yields. In addition, the recent relative decline in interest rates in developed countries (primarily the US) in 1992-93 has increased the attractiveness of investment in the better performing foreign assets, particularly from East Asia. The more recent increase in interest rates (particularly in the US) has moderated the supply push, but the expansion of the past few years may be enough of an impetus to permanently change the structure of investment patterns. East Asian countries have been "discovered" and are now regularly included in investor horizons.

Box 2-2  Alternative Methods of Raising Capital Overseas

A number of facilities have been created to allow developing countries to raise capital in major developed country markets.

Equity Instruments

*American Deposit Receipts* (ADRs) are equity-based financial securities that are denominated in US dollars and pay dividends in US dollars. They are issued by banks as evidence of ownership of the underlying stock of non-US corporations and are publicly traded in the US securities exchanges (NYSE, AMEX, NASDAQ).

*Global Depository Receipts* (GDRs) are similar to ADRs except that they are offered in the US private placement market (under SEC Rule 144a which places fewer requirements on the issues but restricting the ownership to certain large investors) as well as in stock markets other than the US. GDRs can be traded in several currencies.

*Euroequity* issues, just like Eurobond issues, are those issued simultaneously in several national markets by an international syndicates. The Euroequity markets began in 1980, and experienced rapid growth till 1986, declined in 1987-88, and recovered by 1989 to approximately $15 billion.

Bond Instruments

*Eurobond* are bonds with the following features: (1) they are underwritten by an international syndicate, (2) at issuance they are offered simultaneously to investors in a number of countries, (3) they are issued outside the jurisdiction of any single country, and (4) they are in unregistered form. The Eurobond market is divided into different sectors based on the currency in which the issue is denominated. In particular, the bonds are referred to as *Eurodollar bonds* when they are denominated in US dollars.

*Yankee bonds* are bonds issued by foreign entities and traded in the US foreign bond market. A country's national bond market can be divided into two parts: the domestic and the foreign bond market. In Japan, yen-denominated bonds issued by non-Japanese entities are nicknamed *Samurai bonds*. Foreign bonds in the UK are nicknamed *Bulldog bonds*, in the Netherlands *Rembrandt bonds*, and in Spain *Matador bonds*. *Dragon bonds* are bonds of similar nature issued in Hong Kong and Singapore.
21. Bonds. The most conventional portfolio investments have been bonds placed abroad in the currency of the lender. These are fixed maturity and may be at fixed or floating interest rates. The borrower faces exchange risk and may face interest rate risk if rates are floating. Bond placements are governed by the rules of disclosure and credit standing in the market where they are issued. In recent years, developed country markets have moved to facilitate such issues, subject to adequate prudential requirements. Latin American borrowers pioneered these placements in US markets, East Asian, and Eastern European borrowers are not far behind. After years of quiescence, this market is now flourishing. The increase in these placements has been quite striking, and a growing portion of the bonds carry enhancements, such as puts or convertible features. Nearly all East Asian foreign bond placements have been in US dollar. Yen placements are a distant second. This is not surprising since the Dollar market is the largest, interest rates have been attractive, and the exchange risk is less since a large portion of East Asian exports are denominated in US dollar. Low interest rates, particularly in US dollar markets in 1993 offered many borrowers the opportunity to lock in favorable rates. The subsequent increase in rates made such issues less attractive, and action slowed in 1994.

Bond flows took off in three regions

![Chart 2-6 Net Bond Flows to Developing Regions]

22. There has been interest in bonds in local markets as well, though this is more limited in East Asia. Domestic bond markets are either not well developed or not open to foreigners (Korea). Fixed term instruments tend to offer more risk for the return (including currency and sovereign risk) than bonds in foreign markets or stocks in either domestic or foreign markets, especially for medium or longer maturities. Short term instruments have attracted some interest when domestic rates have been particularly high. In

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14 It is interesting to note that the global debt crisis prior to the one in the 1980s involved Latin American bonds placed in the US and UK markets in the 1920s and early 1930s, which were defaulted. This led to the use of bank lending more recently: to no better avail. And now bonds are once again viewed as a desirable vehicle for lending to developing countries, in part because they were serviced during the last bank debt crisis.

15 see study of Asian Bond Markets by Dalla, forthcoming.
those cases, flows have been large, but it has been difficult to identify the extent of these flows among other short term flows and errors and omissions. They have been considered substantial in Indonesia, Malaysia, and Philippines at various times.

Bonds are used mostly by China, Korea and Thailand to raise capital

<table>
<thead>
<tr>
<th>Table 2-10</th>
<th>Bond placement by country (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0</td>
</tr>
<tr>
<td>Korea</td>
<td>0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-30</td>
</tr>
<tr>
<td>Philippines</td>
<td>-1</td>
</tr>
<tr>
<td>Thailand</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-31</td>
</tr>
</tbody>
</table>


23. **Stocks.** Much of the recent surge in portfolio investment has been in the form of equity investment. Active equity markets are a relatively recent phenomenon in East Asian countries, and they have grown in fits and starts. They took off as domestic markets became more open and foreign investors "discovered" emerging markets. On the demand side, the development of a middle class interested in investing, interest by foreign investors, and active promotion of stock markets from governments and market agents have all encouraged expansion. On the supply side, most corporations in the region have heretofore been closely held, but must now address markets as they need to expand their sources of financing. Some East Asian companies have attained a size and degree of profitability that has enabled them to raise equity funds directly in international capital markets. Some must turn to this market as domestic markets are not yet mature enough nor deep enough for their needs. As in the case of bonds placed in foreign markets, equities issued and traded in foreign markets have no direct effect on national securities or exchange markets beyond the initial inflow of funds. Some corporations have issued stocks in both international and domestic markets, and investors tend to feel more comfortable when issues are traded in their home markets.
The bulk of the foreign investor interest in equities and the expansion in trading has occurred in the recipient country markets themselves. The development of these markets has been advanced by the interest of a number of international investors specializing in emerging markets who have encouraged governments to open up their domestic capital markets to more foreign participation. The combination of the speculative profits made in Latin America after their reforms and initial resolution of debt problems, the high degree of interest in the privatizations in Eastern Europe and FSU, and the continued high growth rates in East Asia have all fueled the interest of high risk, high yield investors in emerging markets. Since stocks in developing countries rarely pay substantial dividends, these investors are looking for appreciation, and the sharp increases in price-earnings ratios in these markets have demonstrated this potential. They are hoping to get in on the ground floor of long term bull markets. A brief flurry of activity in stocks occurred in some countries in 1989-90, but was cut short by the effects of the Gulf war on international investment. Confidence has been restored, and East Asian countries have moved to open their markets. A more serious influx began again in 1992 and has surged since. Latin America has heretofore been the leader in attracting equity placements and enjoyed a real boom in 1993 as investors moved to take advantage of NAFTA in Mexico and the expected recoveries in Brazil and Argentina. The general fall in overseas investment from the US in 1994 most sharply affected this region, and investment fell by more than half. East Asia has retained its luster and preliminary data indicate a further increase in equity flows in 1994, despite less favorable conditions in source country markets (e.g. higher interest rates).
Box 2-3  Developing countries must compete for portfolio capital flows

The rapid increase in foreign portfolio investment flows (FPI) to emerging markets has led to concerns about a sudden reversal of these flows and the possibility of “country portfolio switching” of foreign investors in the short run, which would have severe macroeconomic implications to these countries. A recent paper by Dr. Gopu (1994) investigates the question of whether portfolio investment flows to one developing region are significantly related to those going to another region. In other words, are the flows coming from new investable resources in industrial countries, implying independence or perhaps complementary in flows to developing regions? Or is there a relatively fixed allocation to developing markets, making flows to different regions or countries competitive?

The study employs quarterly World Bank data on gross portfolio flows for eight emerging markets including India, Indonesia, South Korea, and Thailand in Asia; and Argentina, Brazil, Chile and Mexico in Latin America for the period 1989 (Q1) to 1993 (Q2). Results from econometric analysis show a negative relationship between total portfolio flows to Asian emerging markets and those to Latin America. The study examines separately the debt portfolios through bonds, certificates of deposit and commercial paper, and equity portfolio flows through closed-end country fund, depository receipts and direct purchases of stocks by foreign investors. The negative relationship holds both for debt and equity portfolio flows.

Thus, despite the fact that there has been a surge of total portfolio inflows to developing countries in the 1990s, there is evidence that investors view different destinations as alternatives, supporting the hypothesis that these markets compete for portfolio investment. This reinforces the view that developing country policy makers must continue to provide the right signals to international capital markets, in terms of economic reforms, institution-building, and regulations, if they are to compete successfully with the other developing countries for the pool of private capital. Over the long run, the right policy mix matters in sustaining the capital flows to those “well performing” economies with improved creditworthiness. The results also highlight the potential benefits from increasing the pace of financial sector and macro economic reforms in order to maintain the sustainability of capital flows.

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Table 2-11  Equity Investment by country (US$ millions)

<table>
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<tr>
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</thead>
<tbody>
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<td>653</td>
<td>1,194</td>
<td>2,278</td>
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<tr>
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<td>0</td>
<td>199</td>
<td>312</td>
<td>0</td>
<td>119</td>
<td>1,836</td>
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<tr>
<td>Korea</td>
<td>94</td>
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<td>518</td>
<td>345</td>
<td>3,045</td>
<td>6,029</td>
<td>1,566</td>
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<tr>
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<td>0</td>
<td>195</td>
<td>293</td>
<td>0</td>
<td>385</td>
<td>3,700</td>
<td>-2</td>
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<tr>
<td>Philippines</td>
<td>0</td>
<td>0</td>
<td>253</td>
<td>0</td>
<td>0</td>
<td>333</td>
<td>1,082</td>
<td>742</td>
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<tr>
<td>Thailand</td>
<td>44</td>
<td>487</td>
<td>1,426</td>
<td>449</td>
<td>41</td>
<td>3,117</td>
<td>483</td>
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<td>138</td>
<td>487</td>
<td>2,073</td>
<td>1,571</td>
<td>1,039</td>
<td>5,080</td>
<td>18,042</td>
<td>17,479</td>
</tr>
</tbody>
</table>


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25. The surge of investment from these funds into rather shallow markets has had a large impact, driving up values and trading volumes, and initially generating high yields. The market capitalization in some of the East Asian countries now exceeds that of some of the smaller OECD markets.
National Stock Markets are expanding rapidly in East Asia

### Table 2-12 Market Capitalization, 1984-94 (US$ billions)

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</thead>
<tbody>
<tr>
<td>China</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>18.3</td>
<td>40.6</td>
<td>43.5</td>
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<tr>
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<td>3.1</td>
<td>0.1</td>
<td>0.3</td>
<td>2.3</td>
<td>8.1</td>
<td>6.8</td>
<td>12.0</td>
<td>33.0</td>
<td>47.2</td>
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<td>7.4</td>
<td>94.2</td>
<td>140.9</td>
<td>110.6</td>
<td>96.4</td>
<td>107.4</td>
<td>139.4</td>
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<td>58.6</td>
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<td>199.3</td>
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<td>0.7</td>
<td>4.3</td>
<td>12.0</td>
<td>5.9</td>
<td>10.2</td>
<td>13.8</td>
<td>40.3</td>
<td>55.5</td>
<td>683.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.7</td>
<td>1.9</td>
<td>8.8</td>
<td>25.6</td>
<td>23.9</td>
<td>35.8</td>
<td>58.3</td>
<td>130.5</td>
<td>131.5</td>
<td>763.5</td>
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<tr>
<td>Total</td>
<td>28.3</td>
<td>26.3</td>
<td>130.9</td>
<td>220.7</td>
<td>197.1</td>
<td>209.9</td>
<td>303.8</td>
<td>604.1</td>
<td>668.8</td>
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<tr>
<td>Dev. East Asia</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Japan</td>
<td>667.0</td>
<td>978.7</td>
<td>3,906.7</td>
<td>4,392.6</td>
<td>2,917.7</td>
<td>3,130.9</td>
<td>2,399.0</td>
<td>2,999.8</td>
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<td></td>
</tr>
<tr>
<td>USA</td>
<td>1,862.9</td>
<td>2,324.6</td>
<td>2,793.8</td>
<td>3,505.7</td>
<td>3,089.7</td>
<td>4,099.5</td>
<td>4,497.8</td>
<td>5,223.8</td>
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</tr>
</tbody>
</table>


26. The number of new issues in East Asian stock markets has been increasing, partly as a function of the growing foreign portfolio investor interest. Thus the number of listed stocks in the IFC's Emerging Markets Database in continually expanding. A substantial part of the growth in market capitalization in the East Asian markets has been due to new issues.

More companies are listing on East Asian stock exchanges

### Table 2-13 Number of Listed Companies, 1983-94

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<tbody>
<tr>
<td>China</td>
<td>-</td>
<td>-</td>
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<td>14</td>
<td>52</td>
<td>183</td>
<td>291</td>
<td>-</td>
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<tr>
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<td>19</td>
<td>24</td>
<td>125</td>
<td>141</td>
<td>155</td>
<td>174</td>
<td>216</td>
<td>94</td>
<td>1,036</td>
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<tr>
<td>Korea</td>
<td>328</td>
<td>342</td>
<td>669</td>
<td>686</td>
<td>688</td>
<td>603</td>
<td>699</td>
<td>10</td>
<td>113</td>
</tr>
<tr>
<td>Malaysia</td>
<td>204</td>
<td>222</td>
<td>282</td>
<td>321</td>
<td>369</td>
<td>410</td>
<td>478</td>
<td>12</td>
<td>134</td>
</tr>
<tr>
<td>Philippines</td>
<td>208</td>
<td>138</td>
<td>153</td>
<td>161</td>
<td>170</td>
<td>180</td>
<td>189</td>
<td>-0.8</td>
<td>-9</td>
</tr>
<tr>
<td>Thailand</td>
<td>88</td>
<td>100</td>
<td>214</td>
<td>276</td>
<td>305</td>
<td>347</td>
<td>389</td>
<td>31</td>
<td>342</td>
</tr>
<tr>
<td>Total*</td>
<td>847</td>
<td>826</td>
<td>1,443</td>
<td>1,585</td>
<td>1,687</td>
<td>1,714</td>
<td>1,971</td>
<td>12</td>
<td>133</td>
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<tr>
<td>USA</td>
<td>7,722</td>
<td>8,022</td>
<td>6,599</td>
<td>6,742</td>
<td>7,014</td>
<td>7,607</td>
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</tr>
</tbody>
</table>

Source: IFC (1994)

* excluding China

27. Rapid price movement and volatility have characterized East Asian stock markets almost since their inception. There have been some wild rides. The infusion of new, outside money has added to the excitement of these markets. In addition to increasing overall demand, foreign investors trading in domestic markets may also introduce more volatility as foreign investors seek high yields across various stocks and indeed across national markets. It has been estimated, for example, that 80% of the turnover in the Indonesia stock market is due to foreign investors, who own about 20% of the value. So far, the high
turnover within national markets has not led to sharp outflows. However, high double-digit returns based on initial appreciation are not sustainable. As impressive as the underlying economic and sector growth rates are (up to 10-20% pa in manufacturing sectors), they cannot sustain 40-60% rates of return in equities, as market declines in early 1994 demonstrated.\(^\text{16}\)

**P/E ratios are high but volatile**

<table>
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</thead>
<tbody>
<tr>
<td>China</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Korea</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Philippines</td>
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<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Thailand</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: IFC (1994).

28. One result of these inflows into East Asia’s stock market has been that the wealth of all equity holders increases. Higher P-E ratios lower the cost of capital for new issues and may encourage more firms to raise capital through equity, thereby deepening the market. To the extent wealth is a positive factor in consumption functions, this would lead to higher consumption and lower current savings. Some companies have been able to raise equity in local markets to retire debt, improving their balance sheets and reducing overall liquidity. This has also helped the liquidity of the banking system, but may increase lending in other areas, such as real estate. The greater ease in raising capital might encourage more domestic investment and perhaps attract more savings as well. The evidence is sparse and mixed on this point.

29. **Other Instruments.** In addition to the conventional instruments discussed above, recent innovations in international financial markets are making new financing options available to many countries. One of the most promising takes the form of integrated or *structured project finance packages*. These packages often include a combination of equity (possibly both FDI and portfolio) and debt (possibly both bonds and loans). They are usually structured from private sources, but official source lending may be included, depending on the nature of the investment. These packages are typically for large scale infrastructure projects where massive private participation is increasingly necessary. The private funding component is usually a mixture of domestic and foreign finance, and the structure is usually “non-recourse”, meaning that the lenders have only the project itself to seek repayment from. BOT, BOOT, BOO\(^\text{17}\) types of financing come under the general umbrella of project finance. There is generally no sovereign guarantee from the government, but in the case of infrastructure and public utilities, the government usually agrees to long term tariff setting rules, purchase/supply contracts, and other economic conditions related to the specific project to assure it is “marketable.” Since the government controls many of the economic factors related to the project, private investors require the government to offer certain assurances against what are called “sovereign” risks. The private operators bear the “commercial” and “project” risks. In some cases, official agencies such as the World Bank, MIGA, IFC, or developed country public financial institutions (e.g. OPIC) may provide insurance against specified non-commercial risks. Project financing packages may also be arranged for entirely private projects where the project organizers are sufficiently creditworthy and experienced.

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\(^\text{16}\) Equity investors and funds cite these as target rates of return.

\(^\text{17}\) Build, Operate, Transfer; Build, Own, Operate, Transfer; Build, Own, Operate respectively.
30. Philippines has already concluded some 33 BOOT projects valued at an estimated US$4 billion. Indonesia has also completed several, and more projects are under negotiation in other countries in the region. There is an estimated US$5 billion being raised in infrastructure investment funds that will be seeking equity interests in such projects, often arranging additional debt finance as well. Finally, many of these projects are planned with an exit point for the initial investors, usually equity sales on local or foreign markets.

This assumes that the markets will be able to absorb the issues and the country will be able to absorb the eventual foreign exchange outflow. Since infrastructure projects rarely earn foreign exchange directly, countries will have to assure export growth continues to permit repatriation of dividends and eventually principal. The infrastructure supported by these investments may well contribute to enhanced export earnings.

Other factors

31. **Credit ratings.** Commercial bank lenders and direct investors are presumed to have direct country knowledge on which to base their investment decision. Even these investors however, cannot always know the country intimately or be sure they are protected from adverse factors beyond the immediate concerns of the project. Association with local partners is often sought to provide vital local knowledge. It is also sometimes required by the recipient country, though such restrictions are declining in East Asia. Beyond whatever assurances direct investigation and local partners can bring, foreign investors will be influenced by the general reputation and credibility of the country receiving the investment and by the stability of the macroeconomic policy environment. Banks and other investors have learned to their loss that weaknesses in these policies can have adverse effects on the best of projects and sovereign loans.

32. Indirect investors typically have a less direct involvement in a country and tend to rely more on intermediate sources of information. These investors rely on credit ratings for both country and individual issues. Some institutional investors are constrained by their regulatory authorities to invest only in securities that have a formal credit rating above a specified category. Thus, the higher the credit rating, the larger the potential market for an issue. Good credit ratings by internationally recognized rating agencies are increasingly important in supporting investor decisions to move into a particular country. Typically these ratings apply to issues traded internationally and to a country's sovereign rating for borrowing abroad. Standardized credit ratings are also important for the development of national securities markets, and several countries are creating reputable rating capacity for their own issues. Malaysia and Thailand have already established agencies. Others are planning them. These ratings will help both national and foreign investors participate in domestic securities markets with greater comfort. Beyond the formal rating, investors often look to reports or actions of multilateral institutions and reputable research institutions for information on a country's prospective overall performance.

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18 The typical structure of these funds is to raise substantial capital to invest in a series of infrastructure projects. The Fund would take some combination of equity and debt, with a strong preference for the former. Its expectations would be to earn dividends for a number of years, and sell the equity to complete a cycle and return the expected large investment yields to the initial investors. Sale of the equity would occur on national markets (to national or foreign investors) and perhaps abroad, depending on the enterprise. This structure depends on the development of national capital markets and their continued attraction to investors worldwide.

19 Typically a country is rated for sovereign risk on specific issues, and companies within a country may also be rated. Firms are usually rated no higher than the country, due to the issue of sovereign risk. Rare exceptions occur when firms have independent access to foreign exchange to service the security.
Almost all borrowers in East Asia are investment grade

<table>
<thead>
<tr>
<th>Table 2-15</th>
<th>Credit ratings of Selected East Asian Sovereign Borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moody's Ratings</td>
</tr>
<tr>
<td>Singapore</td>
<td>Aa2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Aa3</td>
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<tr>
<td>Korea</td>
<td>A1</td>
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<tr>
<td>Thailand</td>
<td>A2</td>
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<tr>
<td>Malaysia</td>
<td>A2</td>
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<tr>
<td>Hong Kong</td>
<td>A3</td>
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<tr>
<td>China</td>
<td>A3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Baa3</td>
</tr>
<tr>
<td>Philippines</td>
<td>Ba3</td>
</tr>
</tbody>
</table>

Source: Financial Times: International Financing Review; and Solomon Brothers
*Ranked in descending order according to rating. Ratings by Standard and Poor's and Moody's

Investor Service. The ratings are ranked from highest to lowest as follows:

<table>
<thead>
<tr>
<th>Moody's Rating</th>
<th>Standard &amp; Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Grade</td>
<td>Aaa, Aa, A, Baa</td>
</tr>
<tr>
<td>Noninvestment Grade</td>
<td>Aa, B, BB, BB-, B+, B-</td>
</tr>
<tr>
<td>Default grade</td>
<td>Caa, Ca, C, D</td>
</tr>
</tbody>
</table>

In addition, numbers from 1 (highest) to 3 are often attached to differentiate borrowers within a given grade.

33. In terms of international credit ratings, Table 2-15 shows East Asian countries have earned high marks. Most countries in the region have attained investment grade ratings for sovereign issues, and some countries rank as well as or better than some OECD countries. This is further evidence of their integration into world capital markets.

34. **Nationality of funds.** Although we speak in terms of the nationality of the foreign investor, the nationality of the owner of the capital is no longer a critical factor in determining the “foreignness” of an investment; it is the “currency of domicile” of the capital. A national who brings foreign exchange from an offshore account (directly or through an intermediary) is no different in terms of external capital flows than a foreign investor. It has been estimated that much of the external capital flows out of and back into Latin America has been so called “flight capital” owned by nationals. Flight capital appears to have been less of a problem in East Asia. This is true for both FDI and portfolio investment. Conversely, to the extent capital accounts are open, or porous, domestic currency assets can turn into foreign capital, either for flight or to benefit from advantages accorded foreign investment. Table 2-6 above identified the sources of FDI investment into East Asia, although the data only indicate the proximate source and not ultimate nationality of investment. Origins of portfolio investment is less clear. It is broadly assumed that a large part of it is from institutional investors in the US and UK. This is because the most active organization and marketing of mutual and emerging market funds occur in these countries and because their institutional investors have the greatest freedom and propensity to invest internationally. Japan and Continental Europe investors tend to have less global investing horizons. But many of Asian-oriented funds are managed out of Hong Kong. Furthermore, there is no way of determining the nationality of the investors in these funds. For all intents and purposes, it is global and capital.

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30Where exchange regulations would force a national to convert his foreign exchange on entry or otherwise treat it differently from a non-national, it is likely the national would act through a non-national intermediary, such as a shell corporation located in a tax haven.
Box 2-4 Flight Capital

The issue of capital flight has traditionally been important in Latin America and seems to have contributed again to the latest series of devaluations in Mexico. Amounts of uncontrolled capital flows are difficult to estimate, but a rather substantial "errors and omissions" in the annual balance of payments give an idea of how substantial these flows can be.

In the case of Latin America, it has been estimated that the total stock of capital owned by Latins outside the southern Hemisphere reached between US$210 and 250 billion in 1991, up by over US$100 billion from 1984. In Mexico alone, there was an estimated increase of over US$40 billion in the mid-1980s to the early 1990s, twice the foreign exchange reserves that country had in early 1994.

In Asia, estimates of flight capital are harder to come, mainly because those capital flows have not played such havoc with economic policy and exchange rates. Nevertheless, Philippine economists have estimated that of every dollar which comes in, 25c goes out in capital flight. In Thailand, the errors and omissions category averaged over US$700 million in unaccounted capital flows between 1987 and 1991 and an average of US$430 million in unaccounted outflows during 1992/93. The Indonesian errors and omissions were more serious, with outflows averaging nearly US$1.5 billion for all but two years between 1987 and 1993. China and Malaysia have also experienced large outflows in the errors and omissions account, but much of this has apparently been reinvested in the country with the benefit of special treatment accorded "foreign" investment. See Box 2-1. However, the relative openness of capital accounts in East Asia and the close working relations among financiers in most countries offer a large potential for substantial amounts of capital flight. Hence the importance of maintaining sound policy. So far these countries have avoided serious flight after the Mexico crisis, though there was a clear threat.

35. **Sustainability.** Substantial private capital flows are likely to continue to those countries with sound policies and growth potential. Although the overall rate of growth has slackened in 1994, this can be explained by cyclical factors. The variety of sources, the private to private structure, and the diversity of instruments all indicate that in the aggregate, the flows are more sustainable than was the commercial bank borrowing of the 1970s and early 1980s. There are several reasons that lend confidence to this belief. First and foremost, the policy reforms and sound macroeconomic environments in recipient countries coupled with high real growth rates make these markets highly attractive to investors in terms of risk adjusted yields. This was true even in the 1980s for most of East Asia, and that accounts for the continued strength of flows into the region. A recent survey of Japanese companies by the EXIM Bank of Japan revealed that seven of the ten countries judged most promising for long-term FDI lie in East Asia. Second, the liberalization of capital transactions in both recipient and source markets has lowered transactions costs and risks, and this has facilitated international investment.

36. Third, developing countries represent a very small portion of assets in global portfolios and much less than normal portfolio diversification theory would suggest. It is estimated that institutional portfolios in the United States alone amount to US$9 trillion, of which $2.6 trillion is in stocks. Only 10% is invested abroad, and only one-tenth of that is in emerging markets. It has been suggested that an optimized global portfolio would have perhaps 4-5% of its assets in quality emerging market issues based on a model of weighted proportional representation of global assets. Thus the scope for expansion is large.

37. Recent analysis in portfolio management theory and experiences with various high yield, high risk assets have demonstrated the possibility of raising returns more than risk by diversifying into assets in
markets that are not fully integrated with markets where most of the portfolios are invested.\textsuperscript{21} Research has confirmed the weak integration of most emerging markets with OECD markets. High returns in developing countries combined with the decline in returns on assets in developed countries have made investments in these markets relatively more attractive, despite higher risks. As such flows become easier for both regulatory and technical reasons, the basic economics are overwhelmingly in their favor. Sophisticated asset valuation models are also used to help determine fundamental values and to identify market pricing anomalies that offer potential short term gains to exploit. Gains related to short term exchange rate and interest rate movements or new stock issues are sought, and market expectations play a large role in portfolio investment decisions. Hence, there is a substantial speculative undertone to some of these investments.\textsuperscript{22}

38. Perhaps a simpler view would be based on a straightforward stock adjustment process, which indicate the recent expansion of investment flows could continue for some time, until the share of emerging market issues in portfolios is closer to the theoretical equilibrium level. The existence of large mutual funds and pension funds in developed countries, particularly the US and UK, enhance this process of portfolio diversification. These institutional investors aggregate large volumes of funds from small savers and add them to the pool of professionally managed global capital. The larger pools are better positioned to diversify risks along the lines suggested above. However, we have no way of estimating the time path or rate of adjustment of portfolios to include more international and emerging market assets and no assurance that the stock adjustment will be smooth or affect all countries similarly. The basic trend of the adjustment may be relatively slow, as research also indicates a strong home country bias in most portfolio, despite theoretical models urging international diversification. This may be a benefit, since market capitalization in East Asia or Latin America is small relative to potential external capital movements, and small portfolio reallocations could have large impacts on individual markets.

39. \textit{Reversibility and Volatility.} On the top of the fundamental trend of expanding capital flows into emerging markets, one can also expect substantial volatility in short term prices and volumes, which encourages speculation. Volatility is more likely to be a short-term problem in specific countries at specific times where there is uncertainty or speculation. By itself, volatility does not entail a shift in underlying trends, though increases in volatility may foreshadow more fundamental changes in market views. Reversals are more discrete changes in trends and may occur, as just occurred in Mexico in response to discrete shocks that change expectations. In aggregate, the flows are likely to be more stable because of the strength of underlying forces supporting greater internationalization of capital markets. Nevertheless, the flows are likely to vary over time as a function of many factors in international and industrial country markets, as well as local factors. Potential variability of flows will have to figure in the decision matrices of authorities in recipient countries.

40. It is in the nature of private portfolio flows to be extremely sensitive to factors that affect yield, and changes in expected yields may lead to changes or reversals in trends. Part of the recent surge in capital flows was due to investors seeking short term capital gains, as asset prices skyrocketed in emerging

\textsuperscript{21} Basically, if markets are fully integrated, rates of return movements would be highly correlated and the benefits of diversification into these markets would derive from spreading risks across a wider variety of assets and from the fundamental differences in growth rates among the various economies. In theory, these differentials would be offset by exchange rate movements, but in practice, the short- to medium-term fluctuations in exchange rates do not reflect the fundamentals, and diversification among integrated markets proves to good strategy. When markets are not fully integrated, their price movements are not highly correlated, and diversification into poorly integrated markets offers greater risk protection. If the non-integrated markets also have high yields, then this investment can considerably strengthen a portfolio.

\textsuperscript{22} The recovery of Latin American debt values and the subsequent rapid growth of share values in those heretofore depressed markets created many profit opportunities that have led risk tolerant investors to seek to replicate in other emerging markets.
markets in 1993. As the increase in values slowed in 1994, so did the flows. Some part of the recent surge is also attributable to the decline in US interest rates over the past two years, and the more recent increase in US rates is leading to some reversals. Furthermore, institutional investors are highly sensitive to potential losses, or even comparative declines in their own yields, so they may move out of these markets at any early sign of a problem. Because information is imperfect in emerging markets and transaction costs relatively high, foreign investors may demand a premium to initially enter a market. Once relative yields exceed such a premium, there may be a surge of capital, giving the appearance of herd behavior. The same may be true on the outflow side as well. There is also evidence that many investors tend to react to the actions of others in a more direct demonstration of herd actions. In circumstances of imperfect information, the actions of agents presumed to be sophisticated performs a signaling function to other agents, leading to herd behavior.\footnote{This was clearly evident in the surges of syndicated bank lending before and during the debt crisis. The recent reactions following the Mexico devaluation in December 1994 further demonstrate the power of herd behavior. Many institutional portfolio managers bailed out so they wouldn’t have to explain why they held Mexican paper. See Wall Street Journal of January 12, 1995.} When such decisions are based on expectations about policy or other factors, it further complicates matters.

41. **Risks.** Investing abroad has always been perceived as carrying extra risks — different procedures, different legal structures, sovereign factors. No simple measure exists to indicate whether risk overall has been increasing or decreasing over time, but price fluctuations indicate greater variability in recent years. Despite vast increases in availability of information and the speed of its transmission and processing, risks for international flows remain high. The increased use of floating or variable exchange rates by most countries; the large swings in interest rates in major commercial countries; and the systemic stresses that have resulted from the oil crises, the fall of the eastern bloc, lack of policy coordination among industrialized countries, and national and international financial sector crises have all contributed to uncertainty and volatility in international financial markets. These risks are faced in varying degrees by lenders and borrowers alike.\footnote{There is growing concern that, in particular, movements in exchange rates are poorly correlated with long-term economic fundamentals, which is worrisome for those who believe this price is critical for proper allocation of resources internationally. Consideration is being given to ways of reducing such volatility on a global basis.}

42. Two important implications of such risk factors are: (i) that investors are going to require higher rates of return to place funds internationally, especially when investing in another currency; and (ii) risk management tools will become more important in these transactions.

43. Spreads on loans and bonds to developing countries are typically above comparable rates for most developed countries — depending on the instrument, borrower, and time period.\footnote{In some cases, however, the stronger developing country is perceived to be as good or better than some of the weaker OECD borrowers.} But their loans and bonds represent a small portion of total flows. Rates of return on FDI and equity are generally considered to be quite high, hence the large flows. Target rates of return above 30% are often mentioned. Though actual data is scarce, actual returns of over 25% per year have been reported by US FDI investors. Yields on equity investments (including appreciation) were very high in 1993, but slumped in early 1994. Partial evidence from early negotiations for BOOT infrastructure investment indicate that high rates demanded by private investors have slowed conclusion of a number of projects.

44. Countries opening their financial markets, as well as international investors, are taking steps to reduce or manage the risks involved. Management of risk is important, as private investors are very sensitive to risk factors. There are two elements of risk management to consider: absolute reduction in risk
and reallocation of remaining risk to agents best able to deal with it. The absolute level of risk can be reduced by matching assets and liabilities, by stable economic management, by assuring predictable and orderly markets, by increasing information and reducing uncertainty, etc. Many of these factors can be influenced by government policy, and reducing them should be a major objective of government policies.

45. To better deal with the remaining risks inherent in uncertain investment decisions, capital markets have developed a number of financial instruments to spread risks, insure against a variety of adverse outcomes, and otherwise protect participants in uncertain markets, both domestic and international. These instruments come under the general headings of derivatives and hedges and can take on a bewildering variety of forms. Futures, forwards, and options are the commonest. Developing countries as well as investors can use them where derivatives*markets exist. Most are in financial centers and deal in instruments denominated in major currencies, which limits their usefulness in emerging markets. As developing country markets grow, they are adding derivatives to their offerings. Brazil has the largest derivatives market in a developing country to help with the uncertainties faced in dealing with its currency fluctuations. Hong Kong and Singapore have also developed active markets in some forms of derivatives. Derivatives require large and active underlying markets and sophisticated investors on both sides. They have their own costs, and their availability is differentiated, in a large part, on the basis of a participant's creditworthiness. Recent experiences have shown that derivatives can also be misused, and lead to large losses, so care must be exercised when dealing in these sophisticated instruments. There is a large literature on the use and risks of derivatives, and further treatment is beyond the scope of this paper.
Chapter 3

Country Experience in East Asia

1. The expanding investor interest and capital inflows have affected nearly all countries in the region posing dilemmas for policy makers. The issues are more pronounced for the low and lower middle income countries in early stages of high growth phases because of their greater degree of interdependence with the rest of the world and the greater scrutiny accorded to their actions and policies, whether by official bodies (e.g., GATT/WTO on Trade) and by the private sector. All have responded positively to the increased capital flows, generally by liberalizing capital markets, facilitating more foreign investment, and easing ownership restrictions. Country situations and specific reactions have been varied, as circumstances and policy objectives have dictated. Countries have experienced pressures for currency appreciation, growing reserves, and some volatility. As with trade and macro economic policy, the financial sector policy response is being handled in a pragmatic way, crises have been managed or avoided, and the results are heartening.

Key issues faced by East Asian countries

2. The stylized situation faced by these countries can be viewed as follows. They have achieved high growth rates through market based development and export orientation. Basic macroeconomic stability has been key across the board. But East Asian governments, like many other developing countries, have also used policy interventions and incentives to aid growth. They have also been cautious in how and when they have opened their economies. Interventions have included, to varying degrees, repression in the financial sector, allocated credit, managed exchange rate policies, and a variety of controls on foreign capital. In most cases, the distortions have been mild, and maintenance of low inflation and high growth have helped avoid some of the worst problems associated with more extreme forms of interventions, compared, for example, to Latin America. Furthermore, governments have encouraged exports to promote efficiency and have generally forced economic agents to meet market tests to merit government support. The scope, extent, and type of policy intervention have differed from country to country. There has been considerable debate as to whether interventionist policies contributed significantly to the observed high rates of growth. That debate will not be pursued here. Whatever degree of intervention might have occurred, it has not prevented these economies from growing rapidly.

3. Monetary policy and financial sector incentives have been used to promote development, moderate domestic demand, and on occasion protect the capital account and reserves. Countries were able to isolate many of these policies from external forces by the structure of capital controls established and, until recently, by the relative lack of interest/mobility of international capital into these markets. Interest rate controls have reduced costs to selected producers. Exchange rate policies, usually gradual depreciation, have helped exporters. Governments have been seen to stand ready to cushion financial markets against losses by a variety of measures that have amounted to implicit or explicit guarantees that have not been

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1 Countries which launched into rapid, export oriented growth in the 1960s and 1970s faced a simpler world and less scrutiny.
2 See Corbo and Hernandez (1994) for a comparison of experiences in Latin America and East Asia.
3 See, for example, The East Asian Miracle (World Bank, 1993), for further discussion of the pros and cons of financial repression and other interventions in East Asia.
fully priced to the recipients. In many cases, implicit guarantees of the government have contributed to poor decisions in the financial sector, and that sector is still fragile in many East Asian countries.

4. Reform programs have gradually reduced direct controls and opened capital accounts and capital markets to more foreign participation. Market responses to these reforms have highlighted the weakness of some of these markets and have led to further reform and more liberal market environments. Important consequences of greater integration into global capital markets has been that the options for managing macroeconomic policy have changed, and the scope for direct intervention by the authorities is more circumscribed. International factors now play a larger role in determining national policy options, and governments need to take a much broader view of economic forces in formulation and executing policy. The more open the economy, the more the potential gains for the economy, but the more complex the policy framework for achieving stability and sustained high growth. Increasingly, economies have little choice but to open up more in order to sustain rapid growth.

5. Countries in the region represent a wide variety of income levels and economic experiences, factors which affect their implementation capacity, and objectives in managing capital flows. This diversity is not amenable to a linear taxonomy of, say, income-based stages for policy reforms, as the country experiences presented below demonstrate, but there are broad typologies that may be useful to policy makers.

6. **Transitional vs market economies.** The most important distinction is, of course, between the economies in transition and those who have had a longer exposure to market-based economic systems. In the former, establishment of clear rules on property rights, asset transactions, and capital markets is of paramount importance in facilitating capital flows. This has to be coordinated with appropriate modification of policy instruments to move away from direct controls and credit allocations. China demonstrates that credible commitment to reform is as important as completing the reform process, as it has been able to attract substantial amounts of foreign investment, primarily FDI, while the reform process is still in progress. The shift to a market-based system does not imply the absence of government action, but rather a shift from government intervention from direct allocative decisions in the economy to one of establishing and enforcing a set of rules which encourage private agents to make efficient allocative decisions and assure commitments can be credible carried out. These concerns also apply to other lower income countries to a degree.

7. **Low vs middle income economies.** As countries strengthen their market structures, it would be reasonable for the low income countries to concentrate more on attracting FDI because of the ancillary benefits it brings in terms of management skills, technology, and access to markets. These investment pose less of a macromanagement challenge to governments, whose administrative capacity may be weak, and they require a less developed financial market structure. Since lower income countries are less likely to have the kind of liquid wealth needed to support an active capital market, this emphasis would be consistent with its own economic capabilities. As countries grow and accumulate more assets, the natural pressures to expand the base for private resource mobilization and for investment in intangible assets will support an expansion of domestic capital markets. This will facilitate accommodation of more portfolio investment. It is also likely that over this period, macroeconomic management will have become more sophisticated and better able to deal with the impacts of such flows on domestic aggregates. Quite clearly, only after

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4The dangers of such underpriced guarantees are well known and a threat to any financial market. The recent Savings and Loan debacle in the US is but one example. Historically, financial markets have been able to claim special treatment from the public purse because of the importance of a functioning financial sector to modern economic activity. This special relation is also a basic justification for prudential regulation of financial markets. Problems tend to occur when the balance between activities in the market and the extent of regulation gets out of whack.
relatively broad and deep markets have been established in the fundamental instruments can a country move on the more sophisticated instruments, as only a few of the most advanced countries in the region are doing.

8. East Asian countries have demonstrated rapid learning curves in economic management as new challenges have presented themselves, regardless of income level. Perhaps most important is their commitment to a stable macroeconomic environment. They have also shown a strong preference for encouraging FDI in most cases. However, the range of models is broad. Korea and Taiwan, China, discouraged foreign investment for much of their early growth periods and relied more on foreign borrowing than many would now be comfortable with. Indonesia opened its capital account at a very early stage and learned to manage monetary policy in that situation. In fact, some attribute its success in maintaining stability to the discipline imposed by the open capital account. Others have been more open to FDI from relatively early stages in their development.

9. Looking forward, all these countries have large capital requirements to sustain their high rates of growth, both for directly productive investment and for economic infrastructure. Traditional resources for the latter — government savings and foreign official borrowing — are constrained and not likely to be sufficient to meet the demand for infrastructure investment, which is estimated at $US1.5 trillion over the next ten years. Private sources of finance are going to be required to augment the public sources, and foreign investment is expected to be a large component of that financing. Maintaining or augmenting foreign flows and directing them into productive investment are important policy objectives for these countries. Before turning in more detail to the policy and regulatory issues related to managing external capital flows, we will present a brief synopsis of some recent experiences of some East Asian countries in dealing with the external capital flows. For a fuller discussion of country experiences, the reader should look at the relevant references.

Country Experiences

10. China's capital market has been developing rapidly from essentially nothing as the country has embarked on rapid market reforms. China's opening up and integration into the international capital market has attempted to follow orderly, natural, and sequential steps: official borrowing first, private FDI second, and private portfolio investment last, but its markets are still fragmented, and the development of these markets far from complete.

11. As it opened its trade regime and product market, the Chinese government entered the international capital market through commercial bank borrowing and issuing of international bonds in the late 1970s. Official borrowing totaled US$10.6 billion during 1979-82 and continued to increase throughout the 1980s. In the first stage of domestic capital market development (1981-1990), the government issued bonds and corporations issued stocks only to domestic investors. These were essentially to mobilize saving. Although the total amount of securities issued reached over 175 billion yuan by the end of 1990, a formal secondary market could not develop due to the absence of an adequate legal framework and institutional infrastructure. In the real sector, however, investment climate was greatly improved. Governments at all levels attempted to attract FDI through favorable tax concessions and tariff exemptions, and by creating various special economic development zones with more flexible policies towards FDI. Most FDI was in the form of joint ventures. FDI inflow increased gradually from $0.6 billion in 1983 to US$4.4 billion in 1991, and then rose dramatically to reach $23 billion in 1993, and nearly $30 billion in 1994.
12. As a result of the rapid growth of the informal equity market, gradual building of a legal and institutional infrastructure, and increased openness to foreign investments, China was able to open two Securities Exchanges in 1991. This marked the beginning of a real capital market in China. In 1993, nationwide regulations on stock issuance and exchanges went into effect, and a national regulatory body, China Securities Regulatory Commission (CSRC), was established. To attract foreign portfolio investors under a non-convertible currency system, the Shanghai and Shenzhen Exchanges started to list “B” shares in 1992, beginning its integration into world capital markets. These shares were denominated in RMB yuan, traded in China, and open exclusively to foreign ownership. “A” shares were open only to Chinese nationals. By December 1994, among the 291 companies that listed their “A” shares for domestic investors, over 40 also listed “B” shares for foreign investors. The Chinese government also encourages healthy domestic companies to list on overseas exchanges through ADRs and GDRs.5

13. China’s equity market is still segmented by the “A” shares designated for citizens and “B” shares for foreigners. In time, this segmentation is expected to be eliminated. Meanwhile the government has intervened to regulate the rate of new issues in both markets and the extent of foreign participation, partly to influence the volume of shares and the effective cost of raising new capital in these markets. The government recently decided to allow domestic pension funds to invest in A shares, adding more demand to the market to strengthen its depth and liquidity. Other actions also appear designed to enhance shared values in a slumping market. Intervention is perhaps unavoidable at this early stage of market development, but excessive manipulation will run the risk of discouraging stable, long-term investors and will create opportunities for speculators, domestic or foreign. In view of China’s daunting tasks of restructuring thousands of SOEs, equity market should be allowed to expand and play a bigger role in ownership restructuring.

14. Indonesia has maintained an open capital account since the 1970s, but has also repressed the financial sector, though the degree of repression is diminishing. Interest rates were controlled, credit was allocated through the state-owned banking institutions, and preferential rates were accorded strategic industries. With much of the financial sector in the hands of state enterprises and high intermediation spreads, the open capital account allowed financial intermediation to move offshore for major players, but there was little incentive for portfolio investment to flow in. The open capital account also provided a check on government policies in that the threat of capital flight prevented domestic disequilibria from becoming too great. L-o-n-g oil revenues, evidence of slowing growth, and persistent “Dutch disease” problems led the government to initiate a broad gauge reform program in the 1980’s, including financial sector reform. In a series of policy packages beginning in 1983, the government undertook substantial reform of the financial sector in parallel with other reforms of trade and investment policy. Major packages followed in 1988, 1990, 1991, and 1993. Over time they deregulated interest rates, reduced direct lending by Bank Indonesia, opened the market to greater private, and eventually foreign, bank participation, lifted off-shore banking restrictions, and strengthened the regulatory regime. The objective of these policy actions was to lower spreads, improve the efficiency of the financial sector, increase financial deepening, and reduce government dominance. Due to exchange and country risk, real domestic interest rates remained high in comparison to neighboring countries, despite the open capital account, and the financial sector remained fragile.

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5 A regulation on corporations issuing and listing shares overseas was passed in August 1994. Around 16 companies have listed “I” shares in the Hong Kong Exchange, and 5 companies have been allowed to list their shares in NYSE. “N” shares, I1 and N shares must meet the listing requirements of the Hong Kong and New York stock exchanges, respectively. They may be traded as any other security on those exchanges, often through ADRs in New York.
15. The combination of the open capital account, limited open market instruments of monetary policy, and the weakness of government owned financial institutions constrained the effectiveness of monetary policy and led to occasional reversion to direct controls in the face of undesirable short term flows. In 1987, and again in 1991, the government required state-owned enterprises to convert their time deposits in commercial banks into holdings of Bank Indonesia deposit certificates, which also removed an equivalent amount of exchange to Bank Indonesia to meet their reserve requirements, in effect a sterilization. Continuation of restrictive monetary and credit policies throughout 1991 and 1992 led to high interest rates and further inflow of foreign capital. Bank Indonesia had to sterilize more than US$5 billion, at a substantial cost. In 1989, the government tried to stimulate the economy through lowering interest rates, but the decline in interest rates led to a loss in reserves as short term funds moved abroad. Monetary policy had to be reversed, and an increase in interest rates restored the reserves. In an attempt to provide further stimulus, the government lowered reserve requirements from 15% to 2%, hoping spreads would fall and credit expand. This occurred, but the deposit rates remained high and continued to draw in capital. Interest rates were again allowed to ease and more attention was paid to fiscal tightening to rebalance domestic policy. Some reserve losses were tolerated. In mid-1993 Bank Indonesia shifted its open market operations to more flexible, market-determined interest rates and committed to minimising reliance on direct bank reserve transfers in the future. This helped to restore confidence in monetary policy and resulted in a narrowing of interest rate spreads between the Rupiah and the US Dollar and eventually between Rupiah lending and deposit rates. This more flexible, market-oriented approach to monetary policy proved capable of managing both sizable outflows and inflows of foreign capital in 1994.

16. Throughout this period, Indonesian interest rates have remained high, as much as double its neighbors in real terms. It has been argued that this reflects both an exchange premium, due to lingering memories of the sharp devaluations of 1978, 1983, and 1986; and a country risk premium, reflecting concerns about the stability and security of the financial system. Econometric analysis has also shown that the offset factor — the amount of monetary creation or contraction that "leaks" into the foreign sector is relatively high at 60%. These factors, combined with the open capital account, have considerably reduced the ability of Indonesia to pursue an independent monetary policy. In order to achieve lower domestic interest rates, further reform will be required in the financial sector to increase confidence and reduce the country risk factor. Continued liberalization, maintenance of low rates of inflation, tight fiscal policy, and steady growth should reduce the exchange risk factor. The effect of these measures would be to better align the level of Indonesia interest rates with the international rate, i.e. at a lower absolute level. While financial reform and liberalization have helped saving and investment performance in Indonesia, the openness of the capital account has raised some costs to the country in terms of higher interest rates and constraints on monetary policy. It is argued that these constraints were beneficial in preventing macro policies from getting out of hand, and Indonesia's overall performance has been impressive, particularly in view of the chaotic history of the 1960s.

17. Korea's financial sector, including its securities markets, was heavily regulated and closed to foreign investors in the 1970s and early 1980s. The "internationalization" of Korean domestic finance and the capital market started in mid-1980, and has since taken three steps: First, banking sector was opened in 1985 to allow foreign banks into the domestic market on an equal footing with domestic banks. Foreign insurance companies were allowed access to the Korean market in 1987. At the same time, international investment trusts were permitted, and foreign and domestic security companies were allowed to do business with each other. This allowed limited foreign ownership of Korean equities through the funds.

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6 Refer to studies by Hanna (1994) and DasGupta (1994).
18. The second stage extended the opening of the domestic securities market through indirect methods, such as issuing convertible bonds in 1985, bonds with warrants in 1987, and depository receipts in 1990. The government allowed foreign securities companies to individually own up to 10 percent of the paid-in capital of large domestic securities companies, subject to the provision that the total stake of foreign securities companies in a domestic securities company should not exceed 40 percent. Under a guideline announced in November 1990, foreign securities companies were allowed to establish branch offices or joint ventures in Korea.

19. In the third stage, foreign investment in Korean stocks was permitted in 1992, subject to certain limitations. As a consequence, substantial overseas capital flowed into the Korean stock market, especially after the 4th quarter of 1992. In 1993, foreigners made net investments of $5.7 billion in the Seoul bourse, bringing the net total investment to $7.8 billion since the market first opened in January of 1992. By the end of 1993, nearly 9% of shares listed on the exchange were owned by foreigners, accounting for 9.8% of total market capitalization. In 1994, the Korean Bond market was also opened to foreign investors on a very limited basis. Foreigners are allowed to invest in non-guaranteed bonds of small scale industries. Furthermore, effective February 1995, Koreans will be allowed to hold foreign currencies without any restrictions, and to invest up to $300,000 in overseas real estate and deposit up to $30,000 in overseas banks.

20. Due to the high growth rate of the money supply and the resulting inflationary pressure by the end of 1993, Korean authorities attempted to slow foreign portfolio investment. When market prices soared, the Korean Stock Market Stabilization Fund sold roughly $500 million of stock. When that proved ineffective, the following new rules were announced: (a) requiring a 20% cash deposit in trust account; (b) introducing a new foreign investor ID card; and (c) introducing new stock settlement and proxy standards. The longer term effects of these measures are unclear, and the first two should be reconsidered once the perceived crisis has past.

21. The integration of Korean capital market into the global market has been proceeding in an orderly and regulated fashion with preannounced plans and clear formulated steps since 1981. This trend toward more openness is likely to continue, according to the government’s blueprint for financial liberalization and market opening (see Box 3-1). The pace of liberalization, however, has been deliberate and late in the development process compared with other East Asian liberalizing economies. Korea was able to use its own high savings and foreign bank borrowing to finance its rapid development, and it often had close technical arrangements with foreign firms to acquire technology, so it had less desire or need to rely on FDI.
<table>
<thead>
<tr>
<th>Stage and Market</th>
<th>Major Items</th>
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<tbody>
<tr>
<td><strong>First Stage (1993)</strong></td>
<td></td>
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<tr>
<td>Financial Market</td>
<td>- Introduce BIS capital adequacy requirements incrementally</td>
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<tr>
<td>Capital Market</td>
<td>- Completely liberalize operations of short-term money market</td>
</tr>
<tr>
<td>Foreign exchange Market</td>
<td>- Eliminate ceilings on foreigner's stock investment in companies with over 50% of equity held by foreigners</td>
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<td>- Allow foreign investment trusts and investment consulting firms to participate in the equity of domestic investment trust firms</td>
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<td></td>
<td>- Expand range of daily interbank foreign exchange rate fluctuations from 0.8% to 1.0%</td>
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<td><strong>Second Stage (1994-95)</strong></td>
<td></td>
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<tr>
<td>Financial Market</td>
<td>- Introduce ceilings on aggregate rediscounts gradually.</td>
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<tr>
<td>Capital Market</td>
<td>- Diversity short-term financial products such as greater range of maturities of commercial paper</td>
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<tr>
<td>Foreign Exchange Market</td>
<td>- Relax requirements for opening branches by foreign securities firms</td>
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<td></td>
<td>- Raise direct stock investment ceilings for foreigners</td>
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<td></td>
<td>- Allow international organizations to issue won-denominated bonds in the domestic market</td>
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<td></td>
<td>- Permit establishment of domestic representative office of foreign credit-rating firms</td>
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<td></td>
<td>- Raise ceilings on equity participation by foreign investment trust and investment consulting firms</td>
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<td></td>
<td>- Completely lift restrictions on overseas portfolio investment by domestic institutional investors</td>
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<td></td>
<td>- Raise ceiling on settlement in won for visible transactions</td>
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<td></td>
<td>- Abolish ceiling on foreign currency deposits exempted from underlying documentation requirements</td>
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<tr>
<td><strong>Third Stage (1996-97)</strong></td>
<td></td>
</tr>
<tr>
<td>Financial Market</td>
<td>- Complete liberalization of interest rates excluding demand deposits</td>
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<tr>
<td>Capital Market</td>
<td>- Introduce financial products linked to market rates such as MMCs, MMFs</td>
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<tr>
<td>Foreign Exchange Market</td>
<td>- Lower reserve requirement ratios gradually</td>
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<td></td>
<td>- Permit foreign banks to establish subsidiaries</td>
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<td></td>
<td>- Lower capital requirements for branches of foreign securities companies</td>
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<td></td>
<td>- Continue to raise direct stock investment ceiling for foreigners</td>
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<td></td>
<td>- Progressively permit full settlement in Korean won for visible and also invisible transactions</td>
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<tr>
<td></td>
<td>- Completely exempt normal transactions from underlying documentation requirements</td>
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Note: BIS = Bank for International Settlement; MMC = money market certificates; MMF = money market funds.
22. Malaysia began deregulating slowly in the 1970s, and the pace increased in the 1980s after a major banking sector crisis. Freer capital movements were allowed, some public enterprises were privatized, and trade was liberalized. The economy grew rapidly and was the beneficiary of very large FDI flows, which led to the expansion of a number of export oriented industries. Exports boomed, followed by increased import demand, generating current account surpluses during 1987-89, followed by deficits in 1990-93. With substantial net capital inflows, reserves shot up. The combination of increased imports, repayment of external debt, reduction of the government consolidated deficit, and tight monetary policy helped maintain low inflation and actually resulted in a gradual depreciation of the currency through 1991, despite the substantial capital inflows. There has been some mild appreciation subsequently. The ringgit has emerged as a strong currency and attracted more interest of international portfolio investors and speculators as a monetary asset. Malaysia has the largest equity market in East Asia (and the 9th largest in the world) with capitalization over 3 times as large as its GDP in 1993.

23. In late 1993, the government sold ringgit to build its dollar balances at end of the year. This led to a temporary depreciation of the currency within its informal trading range. Speculators recognized that the ringgit’s fundamentals were very strong and that an appreciation was inevitable, both to recover from the temporary decline due to the government’s action and to reflect the increasing strength of the currency. They bought ringgit in large amounts, increasing short term deposits and forward transactions. The government wanted to avoid a sharp appreciation of the currency. Rather than selling ringgit into what it saw as speculative pressure, it imposed a number of restrictions on capital flows in January 1994. Ceilings were imposed on external liabilities of banks, sales of short term instruments to foreigners were banned, and ringgit deposits of foreign institutions were restricted to non-interest bearing accounts. These measures stopped the speculation in its tracks. The following month, non-trade related currency swaps were stopped, the sale of private debt of less than one year maturity to foreigners was banned, and maintenance charges were imposed on the non-interest bearing foreign deposits.\(^7\)

24. These actions appeared drastic and led to considerable speculation about capital flight from East Asia. In particular, there was a great deal of concern about future of foreign investment in Malaysia, as a number of investors suffered losses. The government made a point that it was not going to be pressured into allowing more appreciation of the currency than it thought appropriate. It was not willing to see speculators make a killing from an exchange rate fluctuation that resulted from government interventions in the market. Once the furore subsided and the exchange rate returned to the level of late 1993, the government gradually removed the controls and freed up capital flows, completely lifting all restrictions by August 1994.

25. In this incident, drastic short term measures did forestall speculative pressure on the ringgit when other government actions had left it exposed. While this decisive reaction restored an equilibrium the government had temporarily disturbed, it is important to note that the government could not buck the market to prevent more fundamental pressures from forcing an eventual appreciation of the currency where growth and long-term inflows remain high and domestic inflation low. The government also learned that its own actions prior to the initial pressure had consequences. However, over the medium term, upward pressures on the currency are signs of the success of its policies to maintain stability and growth. Authorities properly withdrew once the short-term pressure had passed, and long term investors retained their confidence in the government’s management of the economy.\(^8\)

\(^7\) These measures are not new. Some similar actions were taken by Germany and Switzerland in the 1960s to stem unwanted capital inflows.

\(^8\) In the wake of the Mexico crisis, some capital has flowed out of Malaysia, easing the pressure to appreciate the ringgit for the time being.
26. The Philippines was one of the earliest of the East Asian countries to begin to develop its financial markets, partly due to its long-standing association with the United States. Its money market has been active since the 1970s; its stock market was once the largest among developing countries in East Asia; and foreign banks were permitted to engage in a number of activities from an early date. After extensive interest rate liberalization, reform was stalled by the early 1980s by the debt crisis. The Philippines was unable to service its debt, in part due to the country’s difficulty in achieving the structural reforms put in place by many of its neighbors. The burdens of the debt crisis made further financial sector reform difficult. Net foreign capital flows from private sources essentially ceased for much of the 1980s, and the country had to rely on official assistance. By the end of the 1980s, some progress had been made on structural reforms, and in the early 1990s, the debt crisis was resolved, as were a number of structural problems, including measures to strengthen the financial sector and restructuring two of the dominant financial institutions and a large number of public enterprises.

27. Once the debt crisis was resolved in 1992 by means of a Brady package with the commercial banks, the country was able to move more quickly on its reform agenda. Growth turned positive and is moving toward a sustainable 5.1% per annum (in 1994), very satisfactory by Philippines standards, even if somewhat below other countries in the neighborhood. The financial sector was further liberalized, and market-based lending was substituted for a variety of subsidized credits. 4 of 13 universal banks are foreign owned, representing 9% of the assets of the banking system. Foreign banks are still limited to three branches, and foreign participation in domestic banks is limited to 40% of the voting stock, but this represents a substantial increase in openness compared to the 1980s. In 1995, ten additional foreign banks were permitted to open full service branches. Decontrol of the foreign exchange market was started in January 1992 with the abolition of all restrictions on capital repatriation and profit remittances. In June 1993, the financially distressed central bank was replaced by a more independent Central Monetary Authority which was then recapitalized. These reforms increased investor confidence in the financial system and the economy and led to a resurgence of private capital flows.

28. The domestic money market recovered and turnover surged to over 100% of GDP in 1991. Transactions in the stock market, which had slowed during the debt crisis, recovered to their former level of activity. Foreign investors returned to the Philippines, investing over US$3 billion in 1993. More than half of this is portfolio investment, a higher share than other countries in the region. In 1993, the Manila Composite Stock Index rose 154%, marking the best performance among East Asian stock markets for the year. The capital market has played a complementary role in privatization: 81 SOEs were sold by February 1994, and many attracted foreign investors.

29. This influx of portfolio investment, both equity and money market funds, has begun to pose a problem for the authorities. Part of the inflows are in the form of short-term capital responding to high domestic interest rates that have been necessary to maintain macro stability as the country completes its reform program. The government has had to sterilize these flows at some cost to the Monetary Authority. In a sense, the restoration of investor confidence in the foreign exchange regime has occurred faster than the real adjustments in the economy. Money is flowing in faster than the economy can absorb, as indicated by sharp increases in reserves and foreign liabilities of the banking sector, and a significant appreciation of

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*The common term for a commercial debt restructuring arrangement whereby earlier, defaulted debt is replaced by new instruments with reduced value but greater security (often through collateral). Some debt may also be retired at a discount. Conclusion of such a deal remedies outstanding performance deficiencies with creditors and allows normal financial relation to be reestablished.
the peso in 1993 and 1994. The government needs to build on its recent reform program to establish the confidence that will encourage investors to move toward longer term instruments and more FDI.

30. Another factor has been the improvements on physical and legal infrastructure: The Manila Stock Exchange automated its trading system in January 1993, while the Makati Stock Exchange did the same in June. The two stock exchanges have merged functionally through shared computer systems, which has eliminated arbitrage trading between the two. Clearinghouse and depository systems will be computerized, and are due to move to paperless trading in 1996. Tougher listing requirements and rules will be implemented to promote fairer allocation of new issues; options and bond trading will be introduced; and a fund to reimburse investors when brokers go bankrupt will be augmented. Assuming that the Philippines' economic recovery continues, the prospect of its capital market development and integration with the international market is good.

31. Thailand, along with Malaysia, has long and successful experience in the region in managing large external capital flows. A domestic financial sector crisis in 1983 encouraged the government to intensify its reform the domestic financial sector and increase its prudential regulations. The oil prices increases caused Thailand, unlike Malaysia, to experience large current account deficits. Thailand was able to borrow abroad from banks to ride out the crisis, and it took advantage of that period to institute wider policy reforms to promote exports and increase investment. The reforms worked, growth remained high, and the success proved very attractive to foreign investors. Thailand has seemed to thrive with substantial current account deficits recorded every year (except 1986) since 1978. Its financing of the deficits has shifted, with FDI accounting for the bulk of the capital inflows since the mid-1980s. FDI surged from less than 2% of GDP to more than 6% in 1988, and has remained high since. This contributed to a jump in investment of more than 10 percentage points (from 27% to 38% of GDP in 1990) and remained high. Equity market has been deepening (with capitalization over 130% of GDP in 1993) and foreign portfolio investment accounted for 27% of all capital inflows in 1990-94. The combination of policy reforms and foreign investment brought forth more domestic investment as well. Following a slight surplus in 1986, the current account deficit has since been as high as 8% of GDP. The deficit resulted from the large influx of autonomous direct foreign investment, as the flows were absorbed in higher net imports, relieving the pressure on the exchange rate and domestic demand.

32. The high private inflows have continued, as have high investment rates, growth, and current account deficits. Thailand's management of the flows had been sound. By liberalizing the trade account and allowing larger imports, the impacts of the demand from the capital flows were dissipated, but policies to encourage more investment also assured that growth and export potential rose. The government sterilized a substantial portion of the flows initially, helped by the stronger domestic financial sector and it instituted measures to reduce domestic liquidity, continued financial liberalization, and engaged in a certain amount of moral suasion. As part of the reforms begun in the early 1980s, the government had changed fiscal policies to reduce chronic government deficits (which had contributed to the external deficits of the earlier period). These reforms were successful in turning around the fiscal deficit and creating a large surplus. Revenues rose from 16 to 20% of GDP and expenditures fell. While much of the spending cuts fell on current expenditure, investment outlays also fell by about 1.5% of GDP, which has contributed to an infrastructure deficiency that the country is trying to make up, in part by appealing to more foreign investment. This fiscal turn-around helped the county absorb the capital inflows, but at some cost to the domestic economy.

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10Pressure has eased after the Mexico crisis and although there has been some concern that a similar fate could await the Philippines, the fundamental situation is stronger, and a major run on the peso unlikely.
33. The combination of expansion of investment, financial sector reforms, active involvement by the Bank of Thailand, and fiscal adjustment has enabled Thailand to avoid most of the negative impacts associated with large-scale capital inflows and to sustain high growth rates. Inflation has been kept under control, the nominal exchange rate has remained stable after a devaluation in the early 1980s, and domestic savings, as well as investment, has remained high. In this process, Thailand has relied on its domestic banks to raise funds abroad in addition to the FDI to supplement domestic savings. This has added some risk to that sector (exchange risk, potential short-term capital outflows, and possible conflicts with monetary policy), but these activities have been carefully monitored by the authorities, wary from earlier financial crises. Public investment and other public functions were perhaps cut more than needed, and have recently been revived to improve infrastructure and continue poverty programs. Poverty alleviation had been observed to stagnate around 1990 as modern sector growth had taken off, but there are now encouraging signs that poverty is again on the decline. Thailand continues to wrestle with large capital inflows, while maintaining overall stability. Consumption is now growing faster, but the economy remains attractive to foreign investment. This is perhaps the best demonstration that capital flows can be effectively managed, with hard work by the authorities.
Box 3-2 The Recent Currency Crisis in Mexico

Factors contributing to the crisis
Since 1990, Mexico had experienced:
- a steady and substantial real appreciation of its exchange rate;
- a large current account deficit of over US$23 billion per year (or 7% of GDP) since 1992;
- an even larger inflow of external capital of US$25 to US$30 billion per year since 1992;
- a decline of domestic private savings rate; and
- stagnant domestic investment as well as productivity growth.

As a part of a program to bring the inflation down, the Mexican government maintained its exchange rate within a narrow band as a "nominal anchor," and it relied on high rate of capital inflows to sustain the current account deficit. Inflation was brought down from 159% in 1987 to 8% in 1994. However, a large proportion of the flows ended up in increased consumption. Fixed investment remained at about 21-22% during 1987-93. This left the economy vulnerable to the pace of foreign capital inflows: When net capital inflows declined from US$31 billion in 1993 to about US$10 billion in 1994, reserves fell sharply from US$25.4 billion at the end of 1993 to US$6.5 billion as of December 21.

What happened?
Mexico tried to defend an overvalued exchange rate for too long. When the government devalued the New Peso by 15.3% on December 20, 1994, investors read this as a major break in policy, and confidence in the economy was severely shaken. Capital outflows became intense as foreign investors tried to protect their positions. The government lost an additional US$4 to $5 billion of reserves in just two days. On December 22, as the reserves were nearly depleted, the government announced that the Mexican peso would float. As the situation became clearly unsustainable, foreign investors fled the market and confidence in the Mexican economy was undermined.

The Mexican government has since begun implementing a stabilization program which focuses on restraining wages, reducing fiscal spending, tightening monetary policy, and accelerating structural reform. The US government has provided an emergency support package of over $20 billion, with further support from the IMF ($17.8 billion) and others.

Lessons to be learned
- Exchange rates should be flexible and combined with appropriate monetary and fiscal policy so that the current account deficit does not grow to unsustainable levels. Use of the exchange rate as a "nominal anchor" to restrain inflation cannot be pursued too long.
- Monetary policy was not adequate by itself in this case, as high interest rates contributed to attract short term capital. More restraint on quasi fiscal expenditure was needed. Foreign capital inflows could not support an overvalued currency for long.
- It is unsustainable to use foreign capital inflows to finance consumption. Capital inflows should be directed into investment, which would increase productivity and capacity for repayment.
- Foreign savings should not be allowed to substitute for domestic savings. In Mexico, domestic saving as a percentage of GDP has declined from 19% to less than 15% of GDP since 1990.
- Foreign portfolio flows are more volatile than foreign direct investment (FDI), and hence more likely to be pulled out when a country's macroeconomic condition deteriorates. In Mexico, portfolio flows dominated (47%) between 1990-94, compared to 8.7% for China, 16% for Indonesia, 23% for Malaysia, 27% for Thailand.
Chapter 4

Issues in Managing Capital Flows in East Asia

1. Managing large and perhaps variable capital inflows, or more aptly managing their economies in such a manner as to effectively and productively absorb these flows, is a major challenge for East Asian countries. They have embarked, each country in its own way, on a process of liberalization of capital accounts and financial markets to accompany their trade liberalization. Until recently, the bulk of capital inflows into East Asia has been FDI and project-related lending (both official and private). At the relatively lower levels of a decade ago, these flows could be readily accommodated. The overall impact of the foreign investment has been very positive on growth and exports; as the capital flows have increased, they have created macroeconomic pressures on exchange rates, domestic absorption, investment policies, and the capacities of domestic capital markets. The more recent expansion of portfolio investment implies much more integration into global capital markets, and a corresponding increase in exposure to international market discipline—referred to by some as “market conditionalism”—that will circumscribe policy options and limit the range of possible deviation from global norms on a number of variables.

2. The increased complexity of those flows poses serious policy challenges to authorities, whose primary objective is to promote real sector growth in economies whose industrial and financial sectors are still evolving rapidly. Achieving a sustainable, rapid growth path with open capital accounts and active capital markets may well be a more difficult proposition than it was with the more closed financial structures that have been the norm in East Asia heretofore. Indeed, it is the concern about loss of control of domestic policy that has contributed to some governments’ reluctance to liberalize their financial sectors and capital accounts in the past, and contributes to their willingness to stop the process if they see it getting out of hand. However, capital controls are becoming more porous, the pressures to liberalize stronger, and the benefits from more open financial sectors more compelling. Both government preferences and market forces are converging, and the trend is inevitably toward more liberalization. East Asian countries can only continue their rapid growth if they achieve the efficiency gains that result from further liberalization. Furthermore, less distorted markets provide fewer opportunities for rent seeking behavior and distortions due to misallocation of resources.

3. As capital markets become more open, it is easier for capital, domestic and foreign, to seek the highest rate of return in any market. Investment levels in countries which offer strong growth potential can be augmented by flows of foreign savings. At the same time, sophisticated investors have more opportunity to seek short term gain from exploiting imperfections in markets, implicit guarantees, and price fluctuations. These latter activities, and the extent to which they influence other portfolio investments, are more worrisome because of their volatility and potential impact on the long-term policy. They may or may not be responding to fundamentals. On theoretical grounds, speculation and arbitrage is believed to contribute to efficient markets and impose few net costs overall. Market forces, represented by these speculative flows, have generally, but not always, created pressures toward needed corrections, either of fundamental policy unbalances or of unwarranted implicit guarantees or distortions.

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1 Some recent research indicates the possibility of hysteresis effects, a large, short-term capital inflow and subsequent reversal may have lasting effects on an economy’s growth path. It may not return to the status quo ex ante, even if the capital movements are symmetrical.
4. However, short-term traders can exert a great deal of influence on specific markets at specific times, which can work against policy objectives of governments. It is argued that they would only do this if policies were wrongheaded; but in practice market forces make no judgments as to the inherent value of a policy, only whether a profit can be made from expected market movements. Market agents have been known to err and overshoot, although policy makers probably see errors more often than is likely the case. It is nevertheless not generally a wise policy to try to resist market pressures on the theory they may be wrong. They aren't often, and resistance can be expensive as private international markets can today mobilize vastly larger sums than governments, even OECD governments. When the market forces do err or overshoot, they correct themselves -- and usually quickly enough to avoid much lasting harm. In fact, it has been observed that quick policy reaction when the market is applying pressure in response to some perceived profit opportunity often sends a signal that large gains are unlikely and mitigates the flow, whereas digging in against market trends may set up an easy win for speculators at the government's expense. Moreover, where policy failures contribute to creating market pressures, resistance to adjustment can be very expensive. The burden is on governments to manage their economies so that easy arbitrage opportunities are not readily available and so that official policies or actions do not give rise to implicit guarantees or other distortions that markets can exploit to the detriment of public objectives.\(^2\) Consistent application of sound policy and clear direction go a long way to reducing the likelihood of overreaction by markets. In addition, policy makers can blunt short term flows that pose dangers to the economy through a variety of instruments that reduce speculative short-term gains.

5. Governments should exercise caution in opening financial markets to international flows. Liberalization\(^3\) needs to be predicated on developing an appropriate regulatory framework and supervisory system, assuring that the resulting incentives promote prudent behavior, and adapting a macroeconomic policy structure that is consistent with open financial flows. Policies need to be consistent with both domestic and international equilibrium, have appropriate flexibility to respond to disturbances from the capital markets, and have safety features to activate in periods of crisis. Even with such precautions, the world is a highly uncertain and unpredictable place, and there can be no assurances against unforeseen crises, even with the best of policies. This is part of the price of open market economies. The point is not to stifle an economy in order to avoid crises, but to assure that the economy is sufficiently flexible and robust to weather the crises and continue to develop and liberalize despite such interruptions.

6. In the next section, we will review some of the macroeconomic issues relating to the management of capital flows. Then we will look at some of the microeconomic effects of different kinds of instruments. And finally we will discuss some practical considerations that policy makers need to consider in dealing with these flows.

**Macro Economic Considerations**

7. The basic theoretical framework for analyzing the impacts of external capital flows derives from the pioneering work done by Flemming and Mundell on open economy stabilization policies.\(^4\) Their

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\(^2\) Even so, countries may feel they are the object of some kind of "play" and resort to direct actions as Malaysia did earlier this year.

\(^3\) Much of the discussion of financial liberalization has used the term "deregulation," since the process involved dismantling regulations directly fixing interest rates, allocating credit, etc. This leads to some confusion. Liberalized markets require indirect and prudential regulation establishing rules of behavior (capital ratios, portfolio lending limits, disclosure, etc.) to operate effectively. These regulations and the supporting supervisory institutions need to be installed in conjunction with the market liberalization.

\(^4\) The original papers were by J.M. Flemming (1962) and R.A. Mundell (1963). This section draws from a more recent extension of this body work by Richard C. Marston (1985).
relatively simple models have been revised over time as the issues addressed have become more complex. Policy guidelines have become less simple and much more dependent on a host of other factors that affect economic activity, including expectations, which can be hard to pin down. The theory provides a useful backdrop and guide to appropriate policy responses. But practical policy making requires a thorough understanding of the characteristics of the economy in question, the exact nature of the capital flows, and the range of policy options and tradeoffs available. East Asian policy makers have been adept at pursuing reform until difficulties arise, then slowing or even backtracking a bit to reassess and make corrections before moving ahead once more. This pragmatism has proved its worth as these countries have generally avoided major crises.

8. The basic theoretical models were initially developed to study the relative effects of monetary and fiscal policies in achieving domestic stabilization. Impacts on the external equilibrium were viewed as results and perhaps a constraint. Critical to the analysis is the exchange regime employed—fixed or floating—and the openness of the capital account (or the degree of substitutability between domestic and financial capital assets).\(^5\) Under most states of the world, the models indicate that under a fixed nominal exchange rate regime, fiscal policy is relatively more powerful than monetary policy in affecting domestic output. Expansionary fiscal policy increases demand for domestic goods, but also tends to raise interest rates as additional public borrowing is required. Higher interest rates will attract more foreign capital, increasing reserves. The increase in domestic demand will raise the price of nontradables and shift domestic resources to that sector. The current account balance will deteriorate, partly absorbing the increased capital flows. There will be a real appreciation of the currency as domestic prices rise, even though the nominal rate is fixed. Conversely, monetary policy has more effect on the external account. Raising domestic interest rates would attract foreign capital and build reserves; the amount depending on the substitutability of foreign and domestic assets. Attempts to stimulate domestic demand by lowering interest rates would be diluted as capital would flow overseas to seek higher rates there, reducing any effect on domestic demand. The more substitutable are foreign and domestic assets, the less interest rate change required for a given effect.\(^6\) Increased substitutability of assets leads to other problems. Where governments try to constrain domestic demand by raising interest rates, capital flows in, counteracting the restraint. If sterilization is attempted, i.e. governments sell bonds to absorb the increase in the money supply associated with the influx of foreign exchange revenues, the inflow of foreign assets could become very large, overwhelming the ability of the authorities to continue to issue bonds to purchase them.\(^7\) In such circumstances, it is hard to prevent real currency appreciation from ensuing. For an economy dependent on export growth, as most East Asian countries are, the dangers of expansionary fiscal policy combined with monetary constraint to keep inflation under control are evident. It is interesting to note their generally more conservative fiscal stances, in contrast to Latin America.

9. Under a floating rate regime, the additional exchange rate flexibility dampens some of these effects, but at the cost of losing control over the nominal exchange rate. Fiscal policy becomes relatively less effective in influencing domestic output. The increase in demand from an expansion leads to an appreciation of the nominal and hence the real exchange rate, increased imports and lower exports, and

\(^5\)The initial models fueled the debate over the relative merits of fixed or floating exchange rates as a way to pursue independent domestic policies among industrial countries in the 1960's, leading to the conclusion by many that floating rates allowed more independence. This was one critical factor in the general shift away from fixed rates in the early 1970's, though few countries have allowed a completely free float.

\(^6\)In a simple model, substitutability of assets is approximately equivalent to an open capital account. In the real world, this may not be the case. A variety of specific characteristics (e.g., liabilities) or restrictions on foreign ownership of domestic assets may reduce substitutability of assets, even when capital accounts are open.

\(^7\)It is interesting to note that when goods become perfect substitutes as well, then fiscal policy also has no effect on output. Increased integration does reduce the scope for policy independence.
lower the demand for money and bonds. Interest rates rise, but less than in the fixed rate case, and the floating rate keeps the external accounts in balance. The increase in capital inflows offsets the higher current account deficit. Under most reasonable assumptions, output will rise, but less than under a fixed exchange rate for a given increase in expenditures. By contrast, monetary policy can have a more compelling effect. An expansionary action, such as open market purchase of domestic bonds, will increase output through the effects of money supply on demand. It will also lead to a depreciation, which will shift resources to the tradable sector and decrease a current account deficit, offsetting the outflow of capital resulting from the lower interest rate. Reserves remain constant. This will hold even with more perfect substitutability of assets, though the interest rate change will be smaller.

10. These models can also be used in reverse, so to speak, to examine the effects of a change in external variables on the domestic economy. What are the implications when we turn the models about and look at the impact of increases in foreign capital inflows on domestic policy? For a fixed nominal exchange rate regime, an increase in foreign inflows will tend to reduce the domestic interest rate and increase domestic demand, leading to an increase in domestic prices, which will lead to a real appreciation through higher domestic inflation. Reserves will tend to accumulate, though by less than the capital inflow as the current account will also deteriorate. Monetary policy action to absorb the capital inflows through, say, open market sales of bonds (sterilized intervention) could offset the impact on demand. But such an action would tend to increase interest rates, which could well attract more capital inflow. This is not likely to be effective in the long-term if there are practical limits on how many bonds could be issued, and it could be costly (negative carry on the reserves accumulated). The more substitutability there is between domestic and foreign assets, the less variance is possible between domestic and foreign interest rates before domestic interest rate increases become self-defeating. A fiscal contraction would offset the increase in demand and perhaps allow a reduction in interest rates, which would reduce the attraction of domestic assets to foreign investors. Unlike a monetary response, a fiscal response would take longer to orchestrate, public budgets being hard to cut in the short run.

11. Under a floating rate regime, a foreign capital inflow leads to an appreciation of the nominal and real exchange rate directly. The impact on output depends on the relative strength of the increase in demand resulting from the capital inflow and the reduction in demand for domestic output due to the appreciation, but an increase in output is likely. By allowing the exchange rate to adjust, the real appreciation due to the capital inflow impacts the domestic economy less. Prices may rise and interest rates fall. However, for export oriented economies, a sustained appreciation may pose serious longer-term problems for the export sector. Many fear appreciation would cause significant loss of exports and eventually overall growth, as markets are lost to lower cost competitors. Depending on relative strengths of different effects, the expansion of domestic demand could be counteracted by either a tighter fiscal policy or a monetary contraction, thus offsetting some of the appreciation. The former still raises the same questions about possible speed of response, and the latter may raise interest rates enough to attract more foreign inflows, exacerbating the initial problem. Furthermore, the appreciation of the exchange rate induced by capital inflows will increase the yield to foreign investors as measured in their own currencies, and this may extend the capital inflow, particularly short-term, yield-sensitive flows. The ability of floating exchange rates to insulate an economy from external influences depends on the willingness of authorities to accept exchange rate movements determined, in part, by foreign investment demand. A floating rate regime also depends on the flexibility of domestic prices and wages and on adequate factor mobility to achieve its

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*In the long run, an appreciation and shift in industrial and export structure is inevitable as countries maintain high rates of growth (e.g. Japan, Korea, Taiwan). The issue is the timing. Premature appreciation may slow growth and shift FDI and its growth stimulus to other economies in the region or elsewhere.*
effectiveness. The prevailing fixed or managed exchange rate regimes in East Asia and most other
countries indicate a marked reluctance to accept the implications of fully floating exchange rates.

12. Even at this simple level, these models illustrate several important points. The degree of openness
of the capital account and the substitutability of foreign and domestic assets have an important bearing not
only on financial sector policies, but also real sector policies. Financial flows can have tremendous import
for the real economy — on interest rates and the exchange rate — and through those variables on levels of
output, employment, and trade. The more open an economy and the more integrated into world capital
markets, the harder it is for a country to maintain interest rates that deviate significantly from world rates,
or an exchange rate that is far out of line with what markets believe to be the proper rate. The market's
views on these rates are driven by many short and medium term considerations and, particularly for interest
rates, by forces in the major financial markets. Market pressures on a given country’s capital markets will
reflect a great deal more than just the fundamentals of a particular country. Countries cannot afford for
their key policy variables to be inconsistent with global trends. Thus, the openness of the capital account
exposes the economy to pressures that may complicate achieving a country's longer term real sector
objectives, and stabilization issues must be balanced against growth objectives more finely. Integration
into capital markets has its price.

13. To be more realistic in these models, one can admit leakages and other factors, such as unemployed
resources, market imperfections, and expectations, which may mitigate or enhance the basic impacts
described above. Introduction of more sophistication increases the complexity and the number of variables
that have to be considered in reaching any conclusion. But reaching a conclusion isn't any easier, in fact,
the results can be less deterministic. The amount of unemployment in the economy affects the extent to
which changes in aggregate demand move output or prices. In developing economies with limited factor
mobility among sectors, the question of unemployed resources may have to be considered on a sectoral as
well as aggregate level or by skill level. Including expectations variables, depending on the particular
model used, introduces an element of guesswork as to what kind of expectation function private investors
will apply to any government action — or non-action. In some cases, where governments have announced a
commitment to protect exchange rates or fix interest rates, guesswork is reduced for the market, but
possibly at the cost of offering private speculative investors a largely covered bet. In other cases, it is
much harder to predict whether a policy course outlined by a government will be seen as credible, and in
these matters, credibility is itself an important factor in a policy's effectiveness. The past history of
government commitment and the market's estimation of the government's resources available to defend a
position figure into this equation. While models provide useful general guidance and help frame the issues,
their implementation must be tempered with an analysis of the features of different instruments and a
number of practical considerations as well.

14. The basic dilemma stems from the fact that as both goods and capital markets become more open,
the exchange rate (nominal for shorter-term transactions and real for longer-term decisions) plays a critical
role in equilibrating both markets. Heretofore, developing countries in East Asia and elsewhere have been
able to use the level and movement of the exchange rate to affect the goods market almost exclusively.
Often East Asian countries have used nominal depreciations to maintain stable or slightly falling real
exchange rates to promote exports. As capital markets open, capital flows can create pressures to
appreciate the real or nominal exchange rate against objectives directed toward the goods market. Attempts
to maintain the goods market targets without adjusting other policy instruments can lead to disruptive

*In fact, investors' views about country (sovereign) risk and exchange risk are a major factor in reducing the degree of
substitutability between domestic and foreign assets. The larger these risks, the larger the potential for domestic and
international rates to vary.
capital flows. Either the exchange target has to be modified or other policy instruments adjusted. Use of the exchange rate as a "nominal anchor" to help combat inflation further adds to the burden and can only be effective where fiscal and monetary policy are closely coordinated toward that objective. In countries with less developed financial sectors, the choice and range of instruments is limited.

Microeconomic Considerations

15. Even as the structure of the theoretical models has become richer and more complex, so has the range and complexity of instruments available in the financial world. Most of the stabilization models deal with money and simple bonds as assets. They include little if any explicit analysis of risk, except in so far as less than perfect substitutability of domestic and foreign assets may be taken as a partial proxy for differing riskiness. They do not look at the differential impacts of different types of capital flows on specific markets. Chapter 2 described some of the variety of assets and instruments involved in the capital flows into East Asia. The range and variety of instruments is even larger in the financial world, and the impacts of different types of capital flow can be quite different. Policy makers need to look at the characteristics of the instruments involved in capital movements in both the short and medium term to help formulate policy. We will now turn to a brief summary of the relevant characteristics of the different categories of instruments.

16. Commercial bank borrowing provides resources that are essentially untied. Where they are directly linked to a specific project, the impact of the capital flow will be in the capital goods markets and will probably have a high import content, which will absorb a portion of the increase in demand from the capital inflow and ease pressure to appreciate the exchange rate or raise domestic prices. However, the flexibility of these flows mean they can readily be used to finance budget shortfalls of governments or other enterprises, perhaps delaying necessary fundamental adjustment (as often happened during the debt crisis). Then their impact is to increase aggregate demand, and this is more likely to lead to inflationary pressure and exchange rate appreciation. Because of its fixed term nature, this form of capital is not likely to be volatile in its stock, but flows can stop abruptly, leading to economic stresses, particularly where borrowers have come to rely on the foreign flows and allowed domestic savings to decline. Excessive dependence on these flows can be risky because there are few built-in hedges to protect the borrower against exchange and interest rate fluctuations.10 Furthermore, repayment schedules are fixed in foreign exchange, and provision must be made to service this debt on schedule, regardless of the state of the economy or the project financed.

17. Foreign Direct Investment will impact initially the market for real assets: buying new capital goods and construction services in plant construction and expansion, or buying existing plant and equipment in the case of privatizations and sales of firms to foreign investors. Direct investment may even attract incremental national savings and investment, either from local partners or from bank borrowing. FDI increases aggregate demand for investment goods and generally for imports, the latter easing the pressure of the capital inflow on the domestic economy, reducing reserve accumulation, and relieving pressure on the exchange rate.11 Most FDI in East Asia has been of this productive type, and its impact has been manageable. When the FDI is in a protected industry, as has occurred in some cases, the profits it earns may not be due to real (as opposed to accounting) value added. This form of FDI is least beneficial, as it

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10 It was, for example, the sharp rise in interest rates in 1981-82 that was a major contributing factor to the debt crisis. It is now possible to purchase some hedges, but they tend to be expensive for developing countries and are little used.

11 There need not be a one-to-one link between the amount of FDI and the resulting increase in imports. The total size of the investment is likely to be larger than the FDI, which would be supplemented by local funding. On the other hand, the import component of the investment project would be less than one. Thus, the ultimate ratio of DFI to resulting capital imports will vary from project to project. Whether it is large or small is of some interest to policy makers in the aggregate.
exploits local market imperfections to the advantage of the foreign investor and may not increase domestic value added or wealth measured in world prices. The eventual repatriation of capital and profits could reduce the real income and wealth of the host.

18. FDI attracted by privatization programs is not likely to result in much new investment. When an existing domestic asset is sold, there is no direct increase in the capital stock, though the productivity of the existing capital should increase. The FDI funds are “available” for whatever purpose the seller chooses to make of them, including reducing an external gap, lowering taxes, or sustaining other current expenditures. The impact depends on what the seller (government in the case of privatization or a private agent in the case of a private asset sale to foreign interests) does with the funds: reduce other debt (which might ease pressure in the banking system), invest in another project (which would have the effects of increasing investment as discussed above), or spend on other goods, primarily consumption (which would increase aggregate demand and perhaps imports with no eventual increase in output capacity). To the extent the flows support increased imports without a corresponding increase in investment, domestic savings are reduced.

19. FDI flows are as sustainable as the underlying attractions — stable policies and profitable opportunities. To the extent that an economy’s growth depends on a sustained inflow of FDI — for the level of investment, for technology and skill transfer, and/or for supporting an export strategy — the importance of maintaining those conditions is evident. While FDI is not readily reversible, sharp drops in new flows can have repercussions if countries depend on it for future export growth. Similarly, to the extent countries have increased consumption as a result of the increased resources derived from the foreign investment, a reduction in those flows will require perhaps difficult adjustments on the consumption front.

20. There are no contractual repayments associated with FDI. Investors expect a return on their investment, generally a higher rate of return than on loans and bonds because of the higher risks and opportunity costs involved. This compensates for the risk sharing element in FDI. Malaysia has been the beneficiary of substantial FDI and has grown rapidly. An estimated one-third if its current account receipts are now claimed by “service” payments on FDI. When FDI flows are sustained over a long period, it is inevitable that foreigners will own a substantial portion of the country’s capital stock in the sectors where FDI is attracted. This is not viewed with as much concern as it once was. FDI is not likely to be volatile. Once it is invested, the real asset is not going to move. But changes in ownership are possible. Eventually, a foreign investor may want to sell to a local partner or divest onto a local stock market, and the host country needs be prepared for a repatriation of capital. However, in times of stress, investors may well find ways to get their capital out quickly. Many investors target recouping their outlays through repatriated profits in two to three years.

21. Portfolio investment has a potentially much wider range of impacts depending on the type of instrument and how it is used. Many of these can be similar to the impacts of bank loans and FDI

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12 Depending on the terms of the sale, the new owner may be required to undertake a certain amount of new investment or renovation of existing equipment.

13 It is usually expected that privatizations will lead to more productive use of existing capital, which will contribute to growth.

14 In terms of actual penetration of ownership, assuming a country were able to attract 2% of GDP annually in DFI over 20 years, that the ICOR were 4, and the economy grows at 8% p.a. — a typical East Asian performance — foreign investors would end up owning less that 5% of the total capital stock of the economy at the end of the period. However, it is unlikely that the ownership would be spread evenly throughout the economy, and the concentration of foreign ownership may be much greater in some, probably export, sectors.

15 In balance of payments statistics, all earned profits on FDI are reported as an outflow. If they are reinvested, they are then counted as an inflow, though they may never have physically left the country. Thus estimating new flows as contrasted with reinvestment of profits is often difficult. The new flows are likely to fluctuate more than reinvestments.
discussed above, but portfolio investment can also have much greater impact on domestic capital markets and interest rates. Whereas direct investment raises issues of real sector investment regimes, portfolio flows raise more issues of financial market regimes and how they are managed. This kind of investment touches on issues of disclosure, accounting, and auditing more than does direct investment. Some of these latter issues will be addressed in the next chapter. Portfolio investment can occur either through securities placed in foreign markets or in domestic markets, which also includes short term funds and demand deposits. These latter may have limited relation to physical investment and be much more a function of financial variables.

22. When the portfolio investment occurs in the form of an external placement (bond or equity), and the funds are used to finance new investment, then the impacts are in the real sector, as in the FDI discussion above. If the funds are used for other purposes, the result depends on those purposes. Paying down debt might ease pressure in the banking sector or build reserves. If the inflow is subsequently invested in the domestic capital markets or deposited in banks, there would be an expansion of the money supply and domestic credit. Asset demand would probably increase (including real estate), with similar effects to foreign investment in local markets discussed below. If the funds are used for consumption, then there could be more pressure on domestic output, raising prices. These uses are likely to put more upward pressure on the exchange rate and downward pressure on interest rates as they bid up the prices of non-tradables and domestic assets. This is true whether the government or private sector does the initial borrowing. Offshore placements do not give rise to volatility concerns in the issuing country’s market, as any subsequent trading in the asset occurs in the foreign market and does not result in further capital movements into or out of the borrowing country, other than normal repayments. Sustained access to foreign markets is another matter. It depends on the market’s continued positive assessment of the borrower, the liquidity of the borrower’s paper, and its compliance with market rules. If circumstances lead to price volatility in foreign markets, new placements will be inhibited.

23. In some East Asian countries (China, Korea, Indonesia, Thailand), domestic banks have been major issuers of bonds into external markets. 40% of the placements since 1990 have been by financial institutions, of which banks account for 27%. Large banks obviously have better credit ratings than many of their clients and are thus able to raise funds less expensively. This is a legitimate intermediation function and has opened up financing opportunities to many domestic firms that would otherwise have had less access to funds. For the ultimate borrower, foreign exchange is not typically the critical factor, lower interest rates are. For the intermediating banks, the spreads and volumes are attractive, and the operations help establish their presence internationally. These actions, however, pose two risks. The first is a relative decrease in effectiveness of monetary policy as the financial system can mitigate or offset government attempts to expand or contract credit by modulating its foreign borrowing for domestic clients. When foreign interest rates are lower than domestic rates, borrowers will be tempted to seek more funds abroad, which may undermine domestic policies of monetary restraint. The second is that banks (especially public or quasi public banks) may be borrowing abroad with the implicit or explicit expectation of a government guarantee. They may not take full account of the exchange risk and may face interest risks as well. These risks are likely to be passed on the government should they adversely affect the banks. The recently reported case of BAPINDO, a troubled Indonesian bank, borrowing internationally implied an implicit guarantee, as that bank would not have been able to borrow on its own account. On the other hand, for some large borrowers, domestic markets may not yet be deep enough to absorb the size and other requirements of their financing needs, hence these enterprises must turn to the international markets.

24. Foreign portfolio investment into domestic markets is a different matter. The bulk of this has been in equities as investors have been seeking high yields, mostly through appreciation. These flows purchase existing portfolio assets and sometimes new issues. To the extent that the new issues fund new investment.
the effects would be quite similar to the impacts of FDI, though the physical asset would be owned by the domestic issuer rather than the foreign investor.\textsuperscript{16} New issues may also be used to recapitalize existing operations. Here, the impact would be through the banking system and the rest of the domestic financial market where debt would be retire by the new equity generated flows. While this could ease pressures on the banking system, it would tend to lower interest rates and increase domestic liquidity. That in turn would increase aggregate demand and create more pressure on the exchange rate than had the funds been invested in new equipment with a high import content.

25. The bulk of the equity investment has been into existing stocks in East Asian markets. This has the effect of driving up the prices of equity. The cost of capital falls for those floating new issues, but there are also strong wealth effects on existing asset holders. As their wealth increases, consumption is likely to go up as well. This will tend to raise domestic prices and appreciate the currency in real terms. Whether these foreign investments increase physical investment depends on the behavior of the other asset holders, those who sold to foreign investors and those whose assets appreciated. If they invest in new projects, then physical investment will also increase, otherwise not. It is more likely that domestic savings will fall when there are large portfolio investment flows than when the flows take the form of FDI. In Latin America, which has experienced more portfolio inflows than FDI, domestic savings has tended to fall rather than physical investment increase. East Asia has avoided this result in the past, partly because its overall policy regime has favored investment, partly because of the greater degree of sterilization it has been able to accomplish, and partly because the share of portfolio investment has been smaller.\textsuperscript{17} Furthermore until recently, the bulk of the investment has been in the form of FDI. Portfolio flows are a very recent phenomenon, and it is still too soon to tell what their impacts will be.

26. It is particularly worrisome when large private capital flows move into commercial real estate. Experience in many countries — both developed and developing — indicates the ease with which speculative bubbles can develop in real estate during an investment boom. It is possible to generate very high rates of return based on asset inflation in this sector over a period of very few years, much higher than available from investment in manufacturing. But such rates are not sustainable. When the bottom falls out, as it inevitably does, there are frequently severe repercussions in the banking sector as well, since domestic banks are usually major financiers of the real estate. Governments often end up bailing out the financial sector. Indonesia faced this problem in 1993, and Thailand has seen earlier bouts of these bubbles. They are not unknown in other countries as well, including developed countries, such as Japan.

27. The sustainability of flows into stock markets is a complex matter. To the extent that they depend on continued high gains, mostly appreciation, one could wonder whether the high rates of return of 1992-93 will resume after the correction in 1994. Even in the best of circumstances, one would expect some flow reversals, in addition to normal volatility. Unfortunately, the best of circumstances rarely occur, and the Mexico episode of December 1994 has precipitated outflows in many emerging markets as fund managers have “bailed out everywhere.” It is hard not to view this as herd behavior with a tinge of panic, but it has caused a 3% devaluation in Thailand and more than doubled short term interest rates, there, for example. Other East Asian markets have also suffered outflows as international investors have generally reduced their exposure in emerging markets. However, given both the long term growth potential of the East Asian economies and the indications of a longer term stock adjustment process causing the share of sound developing country equity to increase in global portfolios, there is reason to expect that such reactions will

\textsuperscript{16}Weak listing and disclosure rules may not prevent fraud in some instances, in which case the funds could be directed anywhere. However, this is not the fault of the foreign investment, but of the regulatory system.

\textsuperscript{17}Longer histories of price stability and low deficits made it easier for governments to issue bonds at reasonable interest rates in East Asia than in Latin America.
be temporary setbacks in a persistent trend towards a larger share of sound emerging market stocks in
global portfolios. The spectacular yields witnessed recently may not be sustainable, but the East Asian
countries should offer high rates of return over the longer term and continue to attract investment.

28. A number of countries in East Asia and elsewhere have begun attracting foreign portfolio investors
into their own markets, purchasing fixed income instruments in local currency. In this case, the foreign
bondholder takes the exchange risk, for which he will expect some added compensation. It is encouraging
that these economies are becoming attractive enough and their exchange management considered stable
enough to attract investment in local currency securities. For obvious reasons, interest tends to be in bank
deposits, shorter maturities, and in instruments of governments or their agencies, with a guarantee.

29. To the extent that short term capital flows exceed working balances, trade financing, or bridge
activities to long term investment, they are most likely the result of relatively high interest rates not offset
by an expected devaluation. For the most part, these flows are seeking high, short term rates of return and
reflect cash management or speculative decisions rather than long term investment decisions. But like the
longer term flows, they also tend to lower domestic interest rates and appreciate the exchange rate; and they
are as likely expand to banking reserves and lead to more credit expansion as longer term flows, though on
a potentially more volatile base. To the extent a government is trying to restrain domestic demand with
high interest rates, the inflow would undermine that policy. While these flows may not directly influence
savings and investment in the longer term, they may do so indirectly through their impacts on interest rates
and other variables. They are potentially the easiest to reverse and may have relatively greater impact on
policy making, particularly monetary policy in the short term.  

Other Factors

30. One key question is how much such portfolio investment the capital markets can absorb effectively
and convert into real capital expansion rather than asset inflation or simple reserve accumulation. There
are no firm cutoff points. Beyond some rate of inflow, effective utilization becomes difficult, as evidenced
by rapid reserve accumulation, high rates of sterilization, or undesirably rapid real exchange rate
appreciation. Under these circumstances, countries may want to modulate portfolio flows in order to
preserve stability. Furthermore, the potential volatility of external portfolio investment in domestic capital
markets poses a double concern. First, the potential short-term impact of substantial flows into and out of
the country on the exchange rate, interest rates, and uncertainty may have longer term negative effects on
the structure of investment. Expectations of fluctuating exchange rates may discourage export oriented
FDI in particular. Second, volatility in portfolio investment has a multiplier effect on domestic asset values
directly and through domestic credit levels. This may result in larger swings in domestic demand and
consumption through wealth effects.

31. If governments or the private sector come to depend on foreign portfolio investment, continued
access to foreign markets is essential. The confidence of international investors must be maintained. Both
at the level of the major borrowers and more importantly at the country level. Beyond the overall macro
indicators, investors must be assured that the obligor of debt or issuer of equity will be able to and be
allowed to purchase the foreign exchange required to make payments, which is a national, not firm specific
issue. Where firms borrow and attract investment from abroad, governments have an interest in

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18 It is interesting to note that some recent research has indicated that it is not possible to distinguish between various maturity
instruments in terms of their volatility. However, shorter term instruments have to be refinanced more frequently and expose
the issuer to market fluctuations more often. See Claessens, Dooley and Warner. (1995).
19 Credit ratings take this into account, and rarely is an enterprise in a country given a rating higher than the country’s rating,
and only then if it has independent access to foreign exchange earnings. One of the factors contributing to the debt crisis in the
monitoring the extent of such liabilities because the total foreign obligation of a country can have an impact on a country’s perceived creditworthiness. Traditional concerns about eventual repayment of obligations still apply, but the proliferation of instruments renders conventional indicators much less reliable for governments and independent analysts. Recent experiences of payment delays by local authorities in China have cooled investor interest in the country in general and are beginning to have negative repercussions on the government’s credit standing, even though it has tried to be clear the central government was not providing a guarantee.

32. Where the bulk of the private capital inflows are in the form of FDI or equity, there is no explicit contractual repayment obligation. Thus formal measures of external creditworthiness, such as the debt-service ratio, diminish in relevance as indicators of a country’s ability to meet its external obligations. They were developed when debt was the primary form of external obligation, and the ability to meet contractual obligations was considered of great importance, particularly to official creditors. Equity obligations were small and not considered essential for credit ratings.20 That has now changed, and the ability to repatriate capital is essential for maintaining access to the capital markets. There has not been a significant problem since World War II with private investors being able to withdraw their capital, even during the debt crisis, but we have relatively little experience with such large investment flows into developing countries.21 To the extent there has been high investor interest, overfinancing, and accumulation of reserves, potential problems are at least postponed. The record of performance of East Asian countries has been excellent so far. Nevertheless, it would be worthwhile to have an indicator of the extent to which a country is able to meet expected payments on its total external obligations, comparable to the debt-service ratio or the debt-to-exports ratio that have been traditionally used for debt.

33. Some initial work in this direction has been undertaken at the Bank, and a first-cut indicator has been developed.22 It is called the Asymptotic Liability to Export ratio (ALE), and it has been constructed in a manner analogous to the debt-to-exports ratio. Since repayments on equity are contingent, it would not be feasible to construct an “external-obligations-service-to-exports-ratio” comparable to the debt-service ratio. The ALE takes an estimate of the change in external liabilities of the country and compares that to the growth rate of exports. It would be preferable to base an indicator on total liabilities, but no estimate of that figure is readily available. This approach is based on estimating whether the trend in acquiring new obligations is sustainable. The ALE calculates a 5-year average of current account deficits as an indicator of the change in net external obligations and divides by the change in export earnings over the same period. In the absence of sufficient information on past periods of financial distress due to difficulties in meeting obligations on equity (separate from general capital control issues), it has not been possible to empirically determine satisfactory or worrisome levels of this ratio. By analogy with the debt-export ratio, a level of 2 or greater would be cause for concern. Table 4-1 shows recent estimates of the ALE for a number of countries receiving large capital inflows. At this time, East Asian countries do not seem to be in danger.

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1980's was the realization of the lenders that borrowing countries in total had a higher level of debt than believed when individual loans were made.

20 Mineral extraction investments were a partial exception to this generalization and were often important for a small number of countries. However, the repatriation of dividends or profits was usually through the exports of the mineral itself, and the more frequently raised issues was whether the country was getting a fair deal.

21 The pre war debt crisis did involve portfolio investment, mostly bonds.

East Asian countries do not face a problem from rising non-debt investment

<table>
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<tr>
<th>Countries</th>
<th>Asymptotic Liability</th>
<th>Export Ratio and its Components, Selected</th>
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<tbody>
<tr>
<td></td>
<td>Export Growth (% p.a.)</td>
<td>Current Account Deficit to Export Ratio (%)</td>
</tr>
<tr>
<td>China</td>
<td>14.1</td>
<td>-7.1</td>
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<td>Mexico</td>
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<td>28.5</td>
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<td>Korea</td>
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<td>Argentina</td>
<td>5.7</td>
<td>21.4</td>
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<td>Malaysia</td>
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<td>Brazil</td>
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<td>Thailand</td>
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<td>Turkey</td>
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<td>Venezuela</td>
<td>7.4</td>
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<td>India</td>
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<td>Indonesia</td>
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<td>Philippines</td>
<td>11.0</td>
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<td>Median</td>
<td>10.3</td>
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<tr>
<td>Median of all developing countries</td>
<td>7.3</td>
<td>15.3</td>
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34. It can be shown, for example, that if the rate of growth of exports (in normal terms) is less than the average rate of return on external liabilities, then any growth of external obligations is not sustainable indefinitely. This is a limiting condition, and assumptions about the time path of net exports would define tighter sustainability conditions. The reader will note that this is a generalization of the sustainability condition for debt. Continuing high export growth is clearly a necessary condition for sustaining capital inflows. What is important is to focus policy makers’ attention of the issue on how to estimate the potential impacts of the accumulating foreign liabilities on a country’s future repayment capacity and creditworthiness. Further work is needed to improve the available indicators and their interpretations for recipient countries and investors, as the ALE is still relatively untested.

35. So far we have discussed characteristics of different instruments and the impacts they have on various East Asian markets. Their sustainability has been a major focus. It might be interesting to see whether there is much that can be determined on this issue from the characteristics of the investors themselves. At the outset, one must admit there may not be much that can be said. Indeed, even their identities may not be known, and their nationality is less and less relevant. We might, however, derive some useful insights from the kinds of policies or states of the world which would increase the “stickiness” of an investor. What is the likelihood he would stick with a country in his investment portfolio?

36. Direct investors are likely to be naturally sticky once in place. There is a large psychological as well as physical investment that may be difficult to divest in the short run. However, once firms become listed in securities markets, the inherent stickiness is reduced. Profits from FDI are less sticky and can be repatriated as easily as reinvested. Portfolio investors are by their nature less sticky. Their involvement is more distant and their investments more liquid. Building a sustainable base of relatively more sticky

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25 A variety of techniques exist that allow firms to transfer funds covertly. And imaginative financing can permit a direct investor to withdraw his capital surprisingly quickly.
investors in foreign markets requires the same kind of macroeconomic stability and successful growth policy required for FDI. In addition, portfolio investors appreciate a liquid and stable market in a country’s obligations. Whether for government or private securities, sufficient depth and new issues into the market are necessary to maintain investor appetite and provide enough liquidity to permit individual investors to adjust their portfolios readily. As more institutional investors become interested in emerging markets, and as more funds are created specifically to invest in these markets, liquidity and depth will improve in aggregate and in particular markets. Country specific funds are likely to be relatively sticky in a country, though they may trade a lot of issues. Somewhat ironically, as markets in a country’s securities, both domestic and abroad, become more liquid, the country becomes more attractive for the less sticky investors, those who are concerned about the possibility of exit if their evaluations change. Experts in these markets also emphasize that a flourishing domestic capital market deep in domestic investors is reassuring to foreign portfolio investors.

37. For obvious reasons, local investors are likely to be the stickiest of all. Indeed, when local investors place their funds abroad in substantial amounts, in preference to domestic investment, this should be a warning that something may be amiss — based on informed local knowledge. This is not to argue for restrictions on investment overseas by nationals (which can be evaded in most cases anyway). In a well functioning market, there should be two way flows. Particularly in smaller markets, rational portfolio choice would argue that international diversification is advantageous. But when investing abroad appears to be more “capital flight” than portfolio balance, there may be serious problems that need to be addressed in the local market.24 For a variety of domestic institutional investors, such as pension funds, regulations about permissible investments may add to such stickiness, but such regulations are likely to distort investments of these institutions if they are too strongly binding, and they should be designed carefully.25

38. Short term deposits and bonds are probably the least sticky of the various forms of capital inflow. They are contractually the most liquid, and they can move quickly in case of alarm, real or perceived. Sound economic conditions are important, but they tend to be less affected by longer term fundamentals and more responsive to short term factors, like relative interest rates, the exchange rate, short term political uncertainty, or expectations about these variables. Movements or expected movements in these variables can trigger sharp movements in short-term capital flows. Even the threat of movements in short-term capital can restrict government action on other policy variables. It is these flows that pose the greatest dilemma for policy makers. They contribute least to a country’s long run investment and development, but they pose the greatest challenge to managing open capital markets. Governments are most likely to want to control these flows, particularly while their own markets are still maturing. Obviously any such actions risk introducing broader distortions and should be handled with care.

39. Individual portfolio investors, particularly those investing in international markets, tend to “vote with their feet” and exert little influence on government policies. The advent of large-scale institutional investors (mutual or pension funds) has changed that equation. These asset managers control large amounts of funds and can move substantial volumes quickly. Because of their size relative to many developing country markets and because of their sensitivity to returns in the short- as well as long-term, they tend to take a more active interest in factors affecting their securities values and may try to pressure governments to follow policies favorable to their investments, either directly or through “timely”

24 This was a tell-tale sign that was missed or ignored in the Latin American debt crisis of the past decade. Substantial amounts of bank lending simply fueled domestic capital flight, contributing to the later crisis.
25 In countries with limited capital markets, requiring provident funds to invest only locally can distort local markets and lead to illiquid markets. If the provident fund were to own most of the market’s securities, who would trade with whom? In some cases, these funds are directed to invest in government bonds, but this raises questions of adequate budget management and use of the provident fund to finance a government deficit, which in itself is not sustainable.
Countries may end up facing a kind of capital market conditionality as these funds become more important to their stability.

40. Two conclusions emerge from this analysis. First, capital flows are inherently neither good nor bad. They have a great potential to be either, depending on how productively they are used or how they are allowed to distort economic incentives and decisions. The contrast of East Asian growth and Latin American stagnation is instructive in this regard. Second, the manifold positive benefits from capital inflows depend on sound macroeconomic and sectoral policies in the recipient country. Capital flows are a complement to good policy, not a substitute for it.

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26 The Wall Street Journal recently reported (June 14, 1994) that managers of major US-based funds had made strong representations to the Mexican government concerning macro policy actions they considered essential in order to maintain their investment levels in Mexico, including in effect, asking for an exchange rate guarantee.

27 We hasten to add that there are significant exceptions to this generalization in both regions – Philippines, Chile, Colombia come to mind.
Chapter 5

Regulatory and Infrastructure Issues

1. Establishing an appropriate regulatory structure and infrastructure for financial markets and transactions is absolutely essential to managing the large capital inflows East Asian countries are experiencing, particularly portfolio flows. Equally important is assuring the regulatory, tax, and legal structure provide appropriate incentives for prudent behavior by agents in the financial sector. These are necessary concomitants to the liberalization taking place. Markets need a core set of regulations and infrastructure to maintain orderly behavior in order to attract long-term investors and protect them from various types of fraud. A review of all infrastructure and regulations for East Asian capital markets is beyond the scope of this chapter. It will focus on the underlying rationale for regulation and selected issues that will enable a country to integrate more effectively with international capital markets. Particular attention will be paid to measures that enhance the sustainability of foreign capital flows, that reduce the potential for market disruptions, and that eliminate impediments to efficiency in a global environment. In general, policy-makers need to restrain their interventions to those that are necessary to alleviate market failure, avoiding intervention that can become market supplanting (distorting) mechanisms.

Rationales for Regulation

2. Casual observation tells us that government interventions in financial markets have been extensive, but financial crises still have shaken many countries, including the United States, Mexico, Chile, Hong Kong, Malaysia among others. Fundamentally, financial markets are different from goods markets. In a goods market, a good or service is exchanged for another (or for money, a claim on current goods) at the same time. In financial markets, the basic transaction is an exchange of a good (or equivalently, money) now against a promise (by way of some contractual instrument) to return goods or money at some time in the future and perhaps contingent on some future events. Uncertainty and risk are inevitably part of the transaction. For any transaction across time, risk is related to the likelihood that the future end of the transaction will be completed. International transactions are also affected by uncertainties related to the differences in rules and procedures that occur across boarders and by possible exchange rate changes. These uncertainties flow in part from lack of information, which is essential to rational decision making, but is often costly to obtain, asymmetrically available (e.g. between borrower and lender), and always incomplete, necessarily so about the future. Financial markets are particularly sensitive to information, and partial or differential or access to it can result in significant market imperfections and inefficiency. Another critical factor for well functioning capital markets, including for direct investment, is defining ownership rights, transaction rules, and enforcement procedures. These can only be assured by the government. The rationales for governments intervening in markets, even after liberalization, have largely stemmed from the above considerations, plus a general concern that governments have a responsibility to prevent or mitigate systemic crises. Financial sectors are critical to a well functioning economy to an extent that they have a public good element. Government interventions, unfortunately, can also distort the behavior of market participants in undesirable ways, so a delicate balance must be achieved between interventions that alleviate market failures and the potential negative impacts of these interventions. In the following, we will examine the information, monitoring, and competitive features of financial markets and the role of
governments in assuring minimum levels of functionality.

3. **Information.** Markets can only function efficiently when information is readily and generally available to participants. When information is costly, markets are in general not fully competitive, and the market equilibrium is not optimal. In the financial sector, costly information can give rise to other market failures, in the form of externalities and absent or incomplete markets, a common situation in developing countries as well as in economies in transition.¹

4. In certain markets, information can be so costly (or transaction costs so high) as to limit trade or prevent the existence of some markets.² Information costs tend to be higher to foreign investors acting through international financial markets. They are likely to know much less about the default risk, interest rate risk, country risk, and exchange rate risk than the local agents/borrowers, which has accounted for their slow penetration into emerging markets until recently. Furthermore, in financial markets, borrowers and lenders have asymmetric access to information: the borrower knows much more about the nature and risks involved in a firm or an investment project than the lender. The lender may know more about the true costs of funds in external markets. Examples of information deficiencies leading to missing or incomplete market are:

- Equity issuance. The information asymmetry between firm insiders and outsiders can discourage the raising of capital through equity issuance. Outsiders may perceive that insiders would be willing to sell shares only if the price is higher than the “real” value. Or insiders are thought to possess other information or options that will allow them to profit at the expense of the outsider, especially where accounting practices are not formalized and enforced. Even in some industrial countries, equity markets are weak where information is not readily available.³

- The missing long-term bond market. Bond markets depend on both information and adequate contract enforcement procedures, which may be lacking in emerging markets. Furthermore, long-term bonds require confidence by investors that issuers will remain solvent over a long enough period. Few firms yet have much of a track record in emerging markets. These factors may have contributed to an "incomplete yield curve" problem in East Asia, where market rates for long-term interest are often undetermined. This encourages would-be borrowers to issue bonds abroad where possible.

5. **Monitoring.** One of the major functions of financial intermediaries is to select among alternative projects and to monitor firms’ use of funds. Monitoring of financial intermediaries themselves is also crucial for the soundness of financial system and the health of the whole economy. However, information is costly and monitoring has a large public good element. Thus, it is likely that there would be an undersupply of monitoring—be it monitoring of firms or financial intermediaries—by the private sector in the absence of government intervention. Indeed, banks may not seek adequate information if they are lending at government direction or to "friendly" firms, especially if they are not held responsible for losses.

¹This section draws from on Stiglitz (1993) and Levine (1994).
²See for example Akerlof’s model of "lemons". Akerlof (1970).
³Greenwald, Stiglitz and Weiss (1984)
number of financial sectors in East Asia share this characteristic, and have been weakened by a variety of policies that constrain interest rates or allocation of lending (financial repression) and poorly supervised lending. Indonesia, for example, has recently introduced a number of reforms to strengthen its banking sector after facing such problems.

6. **Insufficient monitoring** has serious social consequences. It can exacerbate the principal-agent problem\(^4\) of the firms and intermediaries, so that managers will not act in the best interest of the shareholders or creditors. This may in turn threaten the soundness of financial system and lead to insolvent financial institutions. Failures of financial intermediaries have large negative economic and social impacts beyond the creditors of the failed institution. Systemic failures with serious real sector consequences are the nightmare of many experts and policy makers. Inadequate monitoring adds to investor risk and is likely to discourage foreign investors, who are least able to undertake sufficient monitoring on their own.

7. **Imperfect competition**. In the financial sector, competition is often limited due to different information available to buyers and sellers and to high costs or explicit limits on entry. Reduced competition diminishes efficiency and may result in other welfare losses due to:

- **Credit rationing.** With imperfect information, lenders cannot make rational credit decisions or monitor borrowers behavior. Raising interest rates to try to clear the market may cause an adverse selection\(^5\) of firms in the loan market. Good firms drop out, firms with big default risks stay. Firms may then engage in highly risky activities, creating moral hazard.\(^6\) The borrower who is willing to pay the highest interest rate may not be the one with the highest risk adjusted expected rate of returns to the lenders, due to a higher probability of default. Thus, to maximize their expected profits, lenders often charge an interest rate lower than the market clearing level, while rationing credit to those they can evaluate. Overall credit constraints with interest controls have similar effects. When a project or enterprise is unknown, it may get rationed out of the credit market. Whereas, a customer with a long track record or with good collateral (say real estate), but a less promising project may get financed because lender's private return can be easily assessed and assured. This can often be taken as a rationale for directed financing, which may aggravate the moral hazard and weaken the balance sheets of financial intermediaries.

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\(^4\) Principal-agent problem is a type of moral hazard in equity contract. When managers own only a small fraction of the firm while majority of the equity is owned by shareholders, the ownership and control are separated. This leads to moral hazard in which the managers in control (agent) may act in their own interest rather than in the interest of shareholders (principal).

\(^5\) Adverse selection is the problem created by asymmetric information before the transaction occurs. Adverse selection in the financial market occurs when the potential borrowers who are most likely to produce an undesirable (adverse) outcome are the ones who most actively seek out a loan, are willing to pay higher rates, and are thus most likely to be selected.

\(^6\) Moral hazard is the problem caused by asymmetric information after the transaction occurs. Moral hazard occurs when the lender is subject to the hazard that the borrower has the incentives to engage in activities that are undesirable from the lender's point of view.
- Banks and creditors rely more heavily on long-term customer relations than they would with more perfect information. Since borrowers know more about the nature of their business and risks involved than lenders, banks and other lenders often specialize in certain sectors/regions, and they rely heavily on long-term customer relations in order to minimize their risks and cost of information. This is one of underlying factors in the development of the "main bank" system in Japan, and the "small hometown bank" approach in the US. Here again, the credit market may not be able to allocate the loanable fund where the social return is the highest. In dealing with international markets, these factors become all the more important.

8. While the above examples refer to largely domestic financial market issues, these are quite important to the foreign investors. Domestic imperfections shape the range and quality of investment choices available to the foreign investor and the confidence to be accorded any market information available. For FDI investors, some of these factors are less critical as the investor is a party to creating the project itself. However, if he is relying on domestic finance to support his project, then the efficacy of the domestic financial sector is important in attracting and maintaining FDI. Portfolio investment on a large scale is a much more recent phenomenon, and it depends even more on a well-functioning domestic capital market where the imperfections noted above are not excessive. The recent flows are testing East Asia's financial markets and accelerating reforms. How fast and securely the reforms can be implemented will have a large effect on how well portfolio flows can be sustained. It is noteworthy that the countries in East Asia that have been best able to manage large capital inflows, such as Thailand and Malaysia, have also gone the farthest in reforming and liberalizing their financial sectors.

9. **Roles of the government.** Even in liberalized markets, governments have a central role in mitigating the above problems. In particular, the government:

- has the power to compel the disclosure of information or to collect and disseminate information, thus reducing costs and alleviating asymmetries;
- can establish minimum financial viability requirements and enforcement mechanisms to assure the basis for trust and security in financial dealings;
- can monitor the behavior of market participants—firms or financial intermediaries—by the design, enactment, and enforcement of legislation and regulations;
- can set up basic institutions at the early stage of development when these are missing—such as development banks for long-term loans, credit rating agencies, insurance companies—and thus replicate the services of the missing market; and
- has the responsibility to maintain macroeconomic stability to reduce the risk of insolvencies, and thus reduce the externalities of failures.

Governments can exercise its authority in these areas through the various instrumentalities of the Ministry of Finance or the Central Bank, or other public bodies responsible for capital market activities. Experience has shown that greater independence accorded to central banks—where these responsibilities are clearly

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*One needs to be careful. This is necessary only at early stages of development and should not carried on longer than needed. Prolonged government may be interventions can inhibit development of real market institution and involve the government in costly financial operations.*
defined tends to foster more stable policies and less financial repression.

10. Government interventions, however, have their limitations. Governments may encourage information production, but they are not necessarily more efficient in using that information to assess risks and evaluate projects than the private sector. Governments may also provide missing insurance or other services when markets are not yet well developed, but they must be sure to avoid implicit or explicit subsidies, especially those where market agents rather than the government determine the extent and amounts of the resulting protection without fully bearing the costs. Decision-makers need to limit their interventions, however, to those that are necessary to mitigate the market failures. Interventions should not become a market supplanting mechanism, or distort market determined prices and allocations. They should be designed to support orderly development of markets and to correct for market failures.

Basic Market Infrastructure and Regulations

11. The key areas that are important for facilitating effective absorption, allocation, and management of foreign inflows concern the establishment of i) a legal structure that defines ownership, auditing, and disclosure rules; ii) prudential regulations and appropriate enforcement procedures; iii) effective operating infrastructure for completing transactions, transferring ownership, and settling balances; iv) appropriate incentives for financial agents and institutions; and v) adequate collection and dissemination of financial data. Realization of the underlying infrastructure facilitates the development of effective capital markets, which will make them more attractive to foreign investors; increase their ability to absorb capital flows; and give governments better tools to manage capital flows without (or with less) recourse to distorting direct interventions or expensive subsidies or guarantees (in whatever form).

12. **Legal Structure.** All countries in East Asia have imposed constraints on foreign ownership of assets (land, enterprises, equity, or other financial assets) as part of their financial sector and other development policies. These controls have ranged from outright prohibitions to requirements of joint ownership and eventual divestiture. Even where capital accounts have been open, capital inflows have been constrained and their allocation affected by these ownership restrictions. As East Asian economies have become more mature and developed substantial national wealth and entrepreneurs, they have progressively liberalized their ownership rules. That has been a major factor in the rapid expansion of FDI and portfolio investment into the region. Privatization programs depend in many instances on further opening of ownership regulation. For economies in transition in the region, the process of defining and expanding the scope for private ownership of assets and firms is in its early stages. The influx of large amounts of foreign investment in China is accelerating the pace of this process in that country. In VietNam, legal system reforms have been initiated very early in the transition process.

13. It is interesting to note that restrictions on foreign ownership have been slowest to ease in the financial sector itself, based on arguments ranging from protection of infant industry, to simply "national interests." These restrictions represent major obstacles to attracting foreign capital and to integrating into the global capital market. Openness to foreign banks and non-bank financial institutions (NBFIs) is an

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*For example, the Savings and Loan crisis in the US can be regarded as a government or regulatory failure. Stiglitz (1993) argued that this type of government failure can be avoided if the regulations were better designed.*

Chapter 5
important condition to attract FDI as well as portfolio investment. First, foreign investors usually feel more comfortable dealing with financial institutions that they are familiar with and can do business with elsewhere. Second, the presence of foreign firms in a domestic market contributes to its efficiency and its adaptation of international standards. Third, international money-center banks often provide a wide range of services to interface with world markets not available from domestic banks. These services are critically important to the development of local capital and money markets. This technology is usually spread rapidly from foreign to domestic financial institutions.

14. More and more governments have started permitting greater foreign competition into their financial sectors. It is not a coincidence that Singapore, which is among the most advanced financial centers in East Asia, also has the highest foreign penetration in its banking system. In 1992, foreign banks accounted for 73% of total trade-financing business and 64% of total banking profit. In the domestic market, the foreign banks account for almost half of all deposits from residents and more than half of all loans to residents. Furthermore, Singapore recently opened up membership on the Stock Exchange of Singapore (SES) to foreign firms, although it still limits foreign ownership to a fixed percentage in Singapore banks and certain companies it deems to be of strategic importance. Foreign banks also have a large presence in Malaysia, accounting for 16 of 38 licensed banks, one quarter of total bank loans, and a fifth of total bank deposits. China's first national law for foreign financial institutions, the Regulations on Financial Institutions with Foreign Investment, came into effect on April 1, 1994. It provides that five types of operations may be set up by foreign financial institutions, including foreign owned banks/finance companies, with head offices in China, Sino-foreign joint venture banks and financial companies as well as branches of foreign banks.

15. Liberalization of rules governing ownership must be founded in a secure and transparent legal structure and a broad market infrastructure that includes basic accounting rules, auditing institutions, and a body of corporate and securities laws. These assure stockholders and bond holders, who do not have direct control of the corporation, can have access to information with which to evaluate a firm's performance. One impendiment for developing countries to participate in the international capital market is that their accounting rules often do not conform to international standards. Accounting and auditing agencies are major information producers in capital markets. By measuring and reporting the operational condition of corporations issuing securities, they provide crucial information to the investors on the quality of the securities, the expected earning potentials, and the risks involved. If, however, accounting and auditing rules are incomplete or inconsistent across countries, investors cannot ascertain the true meaning of the reports provided, or doing so becomes costly, and evaluating investments is much more difficult. This would exacerbate information asymmetry, reduce investor confidence, and reduce the attraction of domestic issues to international investors.

16. For example, China used to have a completely different accounting and statistical system from market economics. This was confusing to foreign investors and hindered FDI and portfolio investment. It became a major obstacle to setting up joint ventures or to getting Chinese corporations listed on overseas exchanges. In July 1993, the enterprise accounting system was transformed in line with international standards. An Auditors' Law went into effect in September 1994. Although China still has a long way to go in fully implementing these laws and strengthening auditing institutions, this is an important step in the
right direction.\textsuperscript{10} Given the large portfolio flows moving into China, continued progress in this area is vital. Other countries in the region have also been upgrading their accounting regulation.

17. Any basic law on securities and exchanges must have clauses on \textit{information disclosure} of listing corporations. These clauses must specify the type, frequency, and amount of relevant information that must be honestly and publicly reported on the operational condition, assets and liabilities, profits and losses, main business activities and investments, major shareholders, as well as the shareholdings by managers of the corporation.

18. In addition to requiring market participants to supply financial information necessary for investors to make informed judgments, well functioning markets themselves provide vital information to assist in the efficient allocation of capital. Active stock markets offer a barometer of returns to investment and relative costs of raising capital. Bond markets help long term investors raise stable funds and also provide "price discovery" on interest rates. Nothing else in a market economy is able to replace the bond market for providing this crucial information for the allocation of capital — the price of long-term and short-term funds. It is the basis for decisions about the intertemporal transfer of resources. Market-driven yields on government bonds often serve as a risk-free, benchmark rate for the financial system to enable more accurate pricing of existing instruments. In developing countries, however, bond markets are often underdeveloped in that they do not have long term instruments and thus lack a "complete yield curve". Government bond markets are often neither open to regular trading or free from directed placement. Thus even where they exist, they may not provide valid interest rate information. East Asian governments often run small or no deficits and thereby generate little debt, so there is limited scope for treasury bonds to play a role in setting a benchmark rate. Without a market for "risk-free" assets, it is difficult to establish a reference rate, but other instruments can fulfill this reference function. In Thailand, high quality bonds of public utilities serve, central bank paper may also serve. The issue of developing a long-term fixed income market is important. However, the whole issue of bond market development is too complex a topic to be covered here. A separate study is underway for East Asia and will be available shortly.\textsuperscript{11}

19. \textit{Prudential Regulations and Enforcement.} Prudential regulation and supervision is crucial to maintaining the soundness of capital markets. Integration of East Asian capital markets into the global market gives rise to changing demand for financial regulations. As markets become more liberalized, the "rules of the game" have to be modified away from direct controls. They need to move toward indirect measures that facilitate market functioning while striking a delicate balance between stability and the flexibility markets require. Several criteria are available for evaluating financial regulations: stability, efficiency, fairness, and openness are among the most important. Well designed and implemented prudential regulations and supervision increase investor confidence and reduce risks. The primary regulations should cover the following elements for all financial institutions:

- minimum capital requirements, reserve requirements, bad loan reserve requirements;

\textsuperscript{10}China has been pursuing actively the listing of companies on overseas exchanges. The State Council has passed a \textit{Special Regulation on Corporations Issuing and Listing Shares Overseas} on August 4, 1994. And on the same day, Shandong Huancng Power, Inc. listed its stocks on NYSE successfully with stable share price. It has so far raised capital $333 million. One of the factors contributing to this success is the upgrading of accounting and audit rules.

\textsuperscript{11}See "Asian Bond Market Study," forthcoming, study Dallas, IBRD, 1995
• licensing provisions on ownership and branching;
• public disclosure of information;
• operating guideline on mergers and consolidation;
• early warning system, supervision and examinations; and
• enforcement of sanctions where rules have been violated on both firms and individuals.

20. Additional prudential regulations would be appropriate for enterprises that issue securities and non-banking institutions that deal in securities, including, securities dealers and brokerage firms, investment banks, finance companies, mutual funds and other institutional investors. The most important of these additional regulations would include:

• registration and capital requirements for issuers of securities;
• registration and requirements for corporations to be listed on exchanges;
• restrictions against trading based on insider information;
• rules for soliciting business by securities dealers and brokers and mutual funds; and
• regulations on margin requirements, trading of futures and options, etc.

21. Stability is of prime importance in the face of international capital flows, since an unstable financial system not only has an adverse impact on economic activities, but could also cause large capital outflows. Financial stability can be enhanced by increasing capital and reserve requirements, strengthening financial supervision, and enforcing sanctions. Assuring adequate supervision and examination in the field, as well as an early warning system are more important than simply setting up the requirements on paper.

22. Most East Asian countries have established the basic laws needed for capital markets, however, enforcement of these laws has been inconsistent. Poor law enforcement has serious consequences. It encourages mischievous behavior while appearing to oppose it. Investor's confidence falls when they do not believe their interests will be protected, and hence their willingness to invest in that particular market diminishes. International investors are most wary of fraud-prone markets. Their information disadvantage is aggravated and their risks and vulnerability to market manipulation are increased. The significance of various rules and their enforcement, however, might be differentiated: Some basic rules, such as disclosure of information by listing corporations and prevention of outright fraud, would have to be strictly enforced. Brokers and other dealers should be subject to similar rules to maintain confidence. Other rules, for example regulations on insider trading, lie in a gray area where more variation of market practice may be tolerated if returns remain high. But even here, attracting a wider range of investors will be easier with tighter rules affecting fairness.

23. Effective enforcement of regulations is beginning to occur in some East Asian emerging markets. Thailand Securities and Exchange Commission (SEC) has emphasized relatively high disclosure standards. It has prosecuted market manipulators quite vigorously since its establishment in 1992. The crack-down has apparently sent a clear signal to the market that investors' interests will be protected, and money

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12 One important consideration in this area is the extent to which countries ought to allow universal banking, with a merger of commercial banking and securities and investment banking activities, or require a separation of these functions. There are strong views on both sides. This debate is beyond the scope of this paper and best left to national authorities to decide.
continues to flow into the Thai market. China’s progress in this area is remarkable: In February 1994, the Shanghai branch of Xiangfan Credit & Investment, a securities broker owned by the state-run Agricultural Bank of China, was fined 2 million yuan ($230,000) and had 16 million yuan of profits confiscated for buying shares in another company on the basis of inside knowledge of a pending bid.\(^\text{13}\)

24. Speedy sanctions to prevent insolvent institutions from adversely affecting others is also crucial, as was shown by the experience of banking crises in Malaysia in the mid-1980s. The Malaysian economy suffered from deflation in 1985 and 1986, and its financial system also suffered big losses from steep falls in prices of commodity, securities, and real estate. The Malaysia authorities took decisive action to contain the losses, recapitalize banks, and/or restructure institutions that were unable to raise new capital. The central bank replaced the management of four commercial banks, assumed control of four finance companies, and made arrangement for injection of capital. As a second step, the authorities introduced major changes in banking laws to emphasize prudential regulations, such as minimum capital requirements, dispersion of ownership, limits on risk concentrations, guidelines on provisions for loan losses, and improved statistical reporting to the central bank.

25. Nevertheless, developing country capital markets are not fully developed, and governments are often called upon to fill gaps or make up for market failures. The main challenge here is how to devise measures that are effective without undermining competition, innovation, or the fiduciary responsibility of the financial system. For example, in developing countries, it is often necessary for governments to provide insurance or explicit guarantees for the safety of small savers’ funds in order to attract deposits. However, if deposit insurance is used to prevent bank runs on distressed or fragile institutions, it is likely to distort incentives. A poorly designed government insurance could lead to heavy fiscal burden on the government due to adverse selection and moral hazard problems. In particular, the combination of deposit insurance in any form and exchange rate guarantees is dangerous and can lead to destabilizing capital flows. By establishing well functioning financial markets with adequate prudential regulations, governments provide adequate assurances to both savers and investors, who should be prepared to accept normal risks. As markets improve, governments should withdraw from any insurance or guarantee programs.\(^\text{14}\)

26. \textit{Operating Infrastructure.} Beyond the broad issues of legal structure and market regulation lies the nitty gritty of just carrying out transactions in the market. Without a basic infrastructure to complete transactions reliably, capital flows very slowly. This is particularly true for portfolio investment, but onerous registration and approval procedures discourage FDI as well.

\(^{13}\)The Economist, 07/16/1994.

\(^{14}\)In the long run, direct public deposit insurance to small savers will probably be a desirable exception to this general approach. Such schemes should be transparent and funded through fees, probably, on banks.
Turnover rates are high in East Asia

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<tr>
<td>China</td>
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<td></td>
<td>159.8</td>
<td>164.0</td>
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<td>40.1</td>
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<td>Taiwan, China</td>
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<td>531.7</td>
<td>429.8</td>
<td>330.1</td>
<td>209.3</td>
<td>235.5</td>
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Memo items

| India   | 48.3 | 68.8 | 65.9 | 56.8 | 37.0 | 27.5 |
| Mexico  | 65.8 | 33.3 | 44.0 | 47.9 | 37.0 | 35.8 |


"Turnover ratio in the total value of shares traded as a percent of average market capitalization during the period.

27. One of the impediments to integrating into global capital market is the slow settlement and delivery in emerging markets. In countries where scriptless trading has not been introduced or a computer network is not well developed, it sometimes takes 3-7 days or longer for the trade to be settled and the securities delivered. This increases the transaction costs and risks since the market condition could change significantly in that period. Foreign investors are concerned about the case with which they can "cash in" their profits, and such delays add to their uncertainty. Singapore introduced scriptless trading in 1987, and as a result, turnover in the secondary bond market increased dramatically from nearly nothing to the equivalent of 76% of GDP in 1991 and 64.4% in 1992. Computerization and scriptless transaction in Taiwan (China), and in China has also led to high turnover, undoubtedly some for speculative purposes (see Table 5-1). China's new stock exchanges are highly computerized and scriptless trading is in practice. Although its market capitalization is small (3.5% of GDP in 1992, and 8% in 1993), the daily trading volume in Shanghai exchange had reportedly exceeded that of Hong Kong by August 1994.

East Asian markets are becoming more active as their capitalization rises.

<table>
<thead>
<tr>
<th>Table 5-2 Liquidity Indicators in Local Equity Markets</th>
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<td><strong>Country</strong></td>
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Memo Items

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<td>30.1</td>
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<td>58.4</td>
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<tr>
<td>80.1</td>
<td>33.0</td>
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<td>31.1</td>
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28. **Credit Rating Agencies** are an important part of market infrastructure as well as being a major source of market information. They complement the international rating agencies that evaluate sovereign risk and major borrowers. National credit rating agencies help monitor domestic securities by classifying corporate and other bonds into standardized ratings and implicitly evaluating corporations’ prospects. They provide an objective judgment on the quality of bonds, reduce information asymmetries, monitor issues, and help maintain investor confidence. At the same time, they contribute to the convergence of market prices and facilitate evaluation of assets. Credit rating agencies are also important for attracting foreign investment, as foreign investors are often not familiar with issuer country accounting rules and corporate laws. The existence of rating agencies reduces the need for independent credit analysis by investors and hence their transaction costs.

29. The government of Malaysia has placed strong emphasis on deepening the secondary market for private debt instruments and corporate bonds. This is facilitated by the rapidly growing ability of the credit rating agency, Rating Agency Malaysia (RAM).\(^{14}\) All debt securities issued in Malaysia must be rated by RAM. The issuance of corporate paper and bonds surged since RAM was created. RAM rated 21 issues worth M$2.92 billion in 1992 and 70 issues totaling M$8.44 billion in 1993. By mid-May 1994, RAM rated another 32 issues. To encourage the development of its corporate bond market, the government of Thailand established a rating agency, TRIS, in July 1993. It also sets a ceiling for the overseas borrowing by the State-owned enterprises at US$2.5 billion a year (for all SOEs) to help manage the exposure of Thai issues in international markets. State firms are urged by the government to get a full rating from the new national rating agency and to issue debt without government guarantees.

30. **Small market capitalization** is another impediment to smoothly functioning markets. When an

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\(^{14}\) RAM is a private company created in November 1990, with shareholders from 51 financial institutions: 33 commercial banks, 6 merchant banks, 10 finance companies, the Asian Development Bank and the International Finance Corp. See US-ASEAN Council (1994), p. 31 and 34.
asset market is "thin," liquidity is low and transaction costs are high, both of which reduce the attractiveness to foreign capital. Liquidity is an important feature that is desirable to foreign investors, since it reduces the risks and costs associated with their eventual withdrawal from a market. Transaction costs in a thin market are high—large bid-ask spreads—because dealers have to bear higher risks as compared to a "thick" market. In addition, a "thin" market is more vulnerable to price manipulation and high volatility, as one or a few big stockholders can relatively easily control the volume of certain stocks supplied to the market. Even markets with relatively large capitalization can act thin if most of the value is in a very few large issues.

31. Government interventions can help to increase market capitalization by, for instance, privatizing the State-Owned Enterprises (SOEs), encouraging healthy corporations to be listed on the stock market, allowing broader foreign ownership, and generally easing regulations and taxes on transactions, subject to prudential concerns. The Korean government restricted the debt-equity ratio of large firms, which substantially increased the magnitude of equity issues for domestic investors. This created a large domestic stock market, which has recently been opened to foreign investment. The pace of privatization affects the depth of equity market and foreign capital flows significantly. In the Philippines, about 81 government-owned and controlled corporations had been sold by February 1994, generating P28 billion in revenues and greatly increasing participation in the stock market. Equity sold includes 40 percent of Petron, the state oil company, 67 percent of Philippines Airlines, and 43 percent of Philippines National Bank. Malaysia has also undertaken an extensive privatization program covering more than 100 firms. A major objective was to diversify domestic ownership of assets rather than attract foreign investment. The experience in Latin America and in the transitional economies in East Europe also suggests the importance of privatization in deepening the equity market and in attracting of foreign investment.

32. When equity markets are thin, the pace and timing with which new listings are put on the market can have a significant impact on prices. Government policies on listing can influence markets substantially. On July 29, 1994, the China Securities Regulatory Commission (CSRC) announced a ban on new listings of A shares for the rest of the year, and it hinted foreigners would be allowed to invest. Shares rose over 100% in the following days. This action was believed to be in response to concern over depressed prices, but it does raise the question of how much governments should interfere to manipulate prices. The government recently allowed domestic pension plans to invest up to 10% of their assets in stocks, which will further increase demand.

33. Incentive Structure. Financial markets, international and domestic are populated by individuals and firms seeking to maximize their own incomes and profits. Their actions and strategies are derived from both the overall regulatory structure under which they operate and the structure of incentives that determine their own incomes. Thus a well designed incentive system can play an important role in the stability and smooth functioning of a market. To a certain extent, the overall regulatory structure will establish the basic do’s and don’ts: moreover, basic regulations—for example, what banks can do, what are entry requirements into banking, etc.—are important determinants of long run profits. The details of tax policy, remuneration practice, and enforcement will also have a large effect on how markets develop. Differential taxes on different kinds of income—capital gains vs income—different taxes on different kinds of transactions—stamp taxes on sales of securities—and possibilities for avoiding taxes on certain kinds of transactions will influence the kind and frequency of transactions that take place in financial markets. Where dividends are
taxed more heavily than interest, debt-equity ratios will tend to be higher; where there are high costs on financial asset transactions, markets will be less active; where off-market transactions can be structured to avoid taxes that apply to market transactions, formal markets will not be very busy. Impacts of these tax structures can be substantial in some instances.

34. Furthermore, incentive structures can have an effect on market efficiency and on encouraging prudent behavior. Where most transactions fees are fixed by law or convention, there is little incentive to improve service or compete. Indeed, there may be incentives to undertake unnecessary transactions to gain fees. When fees are based on the size of a transaction rather than the result, care must be taken that the parties understand where the interests lie. For example, when the major promoters of a project financing deal make their money as a percentage of the amount of the project and have no capital at risk, their incentives may not be to construct the best project, but the one which maximizes the basis for their fee. Incentives need to be designed to reward behavior that helps market efficiency and penalizes behavior that does not, including fines and other sanctions for misbehavior. If individual agents are not held responsible for their actions, it is hard to make markets function effectively.

35. If owners of financial institutions are improperly motivated, they will likely perform perversely. Banks are especially susceptible to these tendencies, as they often function with an implicit or explicit guarantee of their liabilities. Unless bank managers and owners are rewarded for taking only prudent risks, they will invest too little effort in monitoring their own institution or will explicitly “go for broke,” that is taking on excessive risks. Barings Bank stands out as an example of the former: managers and owners in London saw large profits coming in and were not motivated to investigate the risks. Similarly, Banco Latino of Venezuela and Credit Lyonnais (France) are excellent examples of the latter, with Banco Latino achieving the dubious distinction of incurring losses greater than total assets. High capital ratios, higher limits on the liability of bank owners, or limited entry (and therefore significant rents in banking) are alternatives for motivating bank owners to engage in behavior more consonant with safe and sound banking. Although these considerations are most crucial in banking, due to the presence of implicit or explicit government guarantees, they matter as well in non-bank financial intermediaries, especially when their large size leads to some expectation of government support.

36. Data Collection. As capital markets are liberalized and governments increase their prudential regulations and monitoring functions in lieu of direct interventions, information requirements increase radically. A large part of the information should be collected directly by the monitoring agencies from the institutions they supervise. In addition, more information is needed from the markets themselves to measure flows, interest rates, etc. Traditionally, data collection has been geared toward the preparation of balance of payment estimates, or it has been a by-product of registration and control procedures. The former estimates strive for accuracy rather than timeliness, and are often produced after a substantial lag. Registration data on private capital flows are scarce and often of poor quality. And liberalization programs have reduced the availability of data from those sources. These systems cannot meet the needs for monitoring international capital flows or domestic market activities, either in terms of timeliness of information or scope. In order to monitor and ultimately manage capital flows, data collection must be upgraded. Information needs to be collected weekly or even daily on both long-term and short-term flows in the form of bank deposits, CDs and other money market instruments, government securities, as well as daily volumes in bond and equity markets.
37. A first priority is to identify and evaluate the information available on capital flows, to identify those series which could be compiled in a timely fashion, and to select those which would be useful for policy analysis. Special attention should be paid on improving data collection on private short-term and medium-term capital flows, since these are poorly documented, quickly disbursed, and in many cases linked to corresponding outflows, such as dividends, profits, royalties, rents. Many types of private flows react quickly to the current factors, such as short-term interest rate differentials, new capital market public offerings, and foreign mutual funds' investment policies. Daily monitoring may be essential for some data series.

38. To improve data collection, it is necessary to have close cooperation among key public financial institutions, regulatory agencies, and various securities markets. When information-sharing is difficult due to inter-agency rivalry and power struggle, an alternative way is to establish a new monetary policy body which has an effective and well-trained expert staff. An "early warning system" could be developed to expedite analysis and utilization of the available data. This would include tracking of key data and calculating ratios that would quickly identify trends in movements in or out of a country of certain categories of funds. Automatic reporting of certain accounts could be built into bank, non-bank, and stock exchange reporting. Eventually some statistical and econometric testing of various data series might shed light on critical factors influencing foreign capital flows. Data series that might be monitored for the purpose of managing capital flows are listed in Appendix I. Different countries may find that different data series are more likely to reflect significant shifts in short-term capital movements. Some investigation and experimentation might lead to a reduced set of data series that will be most readily available and useful to the monetary authorities and to the market at large.
Chapter 6

Towards a Framework for Managing Capital Flows

1. Managing capital flows is a complex matter that is closely related to a country’s development strategy, market structure, and institutional arrangements. Both theory and practical considerations provide general guidance on the important issues to be addressed and real world constraints. Neither offers simple rules or “silver bullets” that lead to easy solutions for policy makers. Policy actions have to be country and situation specific. Nevertheless, a useful framework can be derived to help guide authorities. It would take into account overall policy objectives, the persistence of capital flows, constraints faced by policymakers, and the potential fragility of the financial sector.

2. The key development objectives pursued by East Asian governments that are relevant to managing capital inflows can be summarized as follows:

- to encourage high levels of domestic savings and investment in order to achieve broad based growth;
- to promote exports, which are key to sustaining high growth;
- to maintain macroeconomic stability and control inflation;
- to attract and absorb foreign investment to help growth;
- to strengthen financial sectors and develop a domestic capital market;
- to continue liberalization of current and capital accounts; and
- to reduce or manage the risks encountered by their economies in the face of external disturbances and shocks.

And that is about the order of priority that would normally be assigned to these objectives, recognizing, of course, that they are all ultimately interconnected.

Overview of Development Issues

3. Developments in the capital markets are intimately linked to the broader programs of liberalization of both goods markets and financial sectors and to the encouragement of private sector activities occurring in East Asia. Across the board, countries are reducing and/or eliminating direct controls on their economies in favor of more indirect and market based management, with rewarding results. The choices in this transition are not easy, and they add to the complexity of policy making. Greater openness of capital accounts and the threat of large capital movements reduce the scope of some traditional policies, such as interest rate management. Governments, understandably, are reluctant to lose their ability to use direct policy intervention tools as easily as they have in the past. Domestic capital markets are not yet fully developed; new tools are not yet fully in place; and the transition takes many countries into new territory, which is seen as risky. But the momentum for change is strong. How can these challenges be accommodated in the liberalizing and rapidly growing environment of East Asia?
4. The specific mix of development policies that has been followed by individual countries has varied. In general, countries in East Asia have tended to manage exchange rates to promote exports. Domestic financial markets have been controlled to encourage investment in industry and export-oriented activities. Governments have been willing to intervene with industrial policy to promote development, although the record in this area is mixed. In most countries, fiscal policy has been kept balanced and inflation rates have been moderate or low. Financial sector development has been less robust than in the goods sectors, in part due to official involvement — use of mild repression, interest rate controls, directed credit, ownership of financial institutions, etc.

5. Approaches to financial sector liberalization and opening to external capital flows have varied as widely as other aspects of development policy. Korea and Taiwan (China) are only now cautiously in loosening controls on FDI and portfolio investment after imposing severe constraints on foreign investment during most of their early development period. Thailand, Malaysia, Philippines, and Indonesia adopted more open postures and welcomed FDI earlier in their development process, and they are continuing to liberalize their foreign investment and capital market regimes. Thailand has been opening its financial sector to more foreign participation while absorbing large FDI flows. Malaysia has completed a major strengthening of its financial sector economy. Indonesia has significantly expanded the range of domestic assets that are open to foreign ownership. Philippines has recently emerged from the shadow of its commercial bank debt crisis. Direct investment is increasing, and it is attracting more portfolio investment as its market reforms gather momentum. China and the countries of Indochina are just beginning to rely on markets and are moving rapidly to encourage foreign capital flows. China has begun dismantling a web of restrictions on foreign ownership of enterprises and on access of foreign investors to domestic capital markets. VietNam has just completed set of basic transition reforms and is viewed as very attractive by a growing number of investors.

6. While the strength of FDI flows has been based largely on attractive production conditions in the recipient countries, the surge in portfolio investment is to a greater extent due to developments in source country markets, primarily low interest rates and aggressive mutual fund managers in the US. This has been less an objective of country strategies and has in consequence posed more of a management challenge to the recipient countries. The decline in these flows after US interest rates rose and the Mexico crisis unfolded led to a revision in views of emerging markets and slowing of portfolio flows. This has no doubt been a relief to many East Asian countries, though they have had to grapple with sharp short term outflows in some cases.

7. The general trend toward use of indirect controls has on occasion been interrupted in periods of short term stress, as countries retained the option of selective use of these policies where necessary. Indonesia has restricted foreign borrowing when it appeared that it would overheat the economy. Malaysia recently felt compelled to use direct controls on foreign transactions. These caused strong reactions in the market, and controls were dismantled after the threat had passed. East Asian countries used both direct and indirect policies in the aftermath of Mexico, and have so far been successful in avoiding contagion. It is important to assure that application of such policies indeed be temporary. Both quick action and caution are required. Surges in capital inflows can lead to overheating of the real economy; can disrupt the financial sector, leading to asset inflation and speculative bubbles; and can lead to currency appreciation, which would slow the export drive that is the overall engine of growth for these countries. There is always a danger that some sectors of the economy will see advantage in continuation of restrictive policies, to the detriment of longer term efficiency. On the other hand, inept interventions can also lead to distortions that

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1. See The East Asian Miracle (World Bank, 1993) for a more complete discussion of country strategies.
have negative long term consequences for growth. So far, disturbances have been contained in East Asian countries. The challenge is to continue to absorb the flows productivity while pursuing growth objectives.

8. **Deficiencies in domestic financial markets, which still plague most East Asian economies, have been partially compensated by the availability and ease of using offshore financial channels to carry out some intermediation.** Both the regional centers of Hong Kong and Singapore and the international markets have been used, and they continue to play an important role. This has been an important safety value for the current influx of capital into the region, easing the pressure on domestic markets and increasing investor confidence. Intermediation through regional centers improves the allocation of capital among countries in the region and provides important economies of information gathering and dissemination.

**Instruments to Manage Capital Flows**

9. **Policy makers have a number of instruments for managing capital flows.** Some of the more direct measures such as setting interest rates, direct credit, limiting foreign ownership of assets, requiring investment registration and approval, and segmenting capital markets fall under the rubric of controlling capital flows rather than managing them. The on-going process of liberalization is dismantling these controls. They tend to be inefficient, create costly distortions, and are generally contrary to the trends toward more open and integrated markets. Nevertheless, some controls remains in place in East Asian countries, and authorities may regard them as the ultimate recourse in times of crisis, as they are regarded in developed countries.

10. **Governments are turning to more indirect instruments to advance their policy aims and to assure markets are stable and well functioning.** While perhaps less precise in their immediate impact, they are much less disruptive of economic efficiency than the direct controls they are replacing. An important part of the transition is learning to use the new policies effectively and being willing to accept the apparently lower precision that results. In fact, the actual results of direct controls are often less precise than they initially appear. The shift to indirect policies is an essential element of developing more market oriented economies in order to realize the benefits of greater efficiency and access to world capital markets. Greater integration into world markets does mean that outcomes will be more affected by factors beyond the control of the authorities, but governments in East Asia can still exercise a great deal of influence if they take a consistent and positive policy stance and if they make their policies clear to the markets. Effective use of indirect measures also requires the development of deep, stable, and well regulated domestic capital markets. Authorities do have at their disposal a number of market-based tools that can have an impact on managing capital flows. The selection of specific tools and extent of their application will depend on individual country circumstances. See Box 6-2 for a brief summary of the policy options.

11. **The Basics.** Obvious, but still important to underline, is not to falter or backslide on the basics—not to let inflation get out of hand, not to allow budget deficits to grow, not to let savings decline, not to distort markets or allow large divergences between domestic and foreign rates, and not to try to impose direct controls on capital flows (save clear emergencies). East Asian countries have done well in these areas, but they cannot relax, and there is scope for further reform in most areas. Nostalgia about past practices of intervention and isolation from global markets, however simple and attractive, should be avoided. Capital flows have already changed the outlook and policies of countries that have been the largest recipients. In addition, recipients of foreign investment need to make provision for return flows when foreign investors eventually decide to repatriate profits and capital.

12. **Short-Term Policies: Sterilization and Monetary Policy.** Countries in East Asia have initially resorted to sterilized intervention in the first instance to counteract the impacts of recent capital flows.
Purchasing foreign exchange and issuing domestic bonds (or any equivalent series of transactions) to absorb the liquidity thereby created helps to prevent a rapid expansion of the money supply and to protect the exchange rate from appreciation. This buys the government time to consider other options, but may also be expensive. Governments usually earn less on the reserves they acquire by this method than they pay on the bonds they issue. Furthermore, sterilization under a fixed exchange rate regime tends to keep interest rates high, which is likely to be counterproductive. Sterilization is not a sustainable policy when capital inflows are persistent, and countries have eventually backed away from it. A recent IMF study of recipients of sharp increases of capital flows in Latin America and East Asia indicates that in the first year after an upsurge in capital inflows, about half of the flow is sterilized, but the degree of sterilization declines sharply thereafter as other measures are put in place and as the country adjusts to accommodate the sustained higher level of inflows. Sterilization has also been shown to be more effective in East Asia than in Latin America, in part because asset holders have greater confidence in government policy and are more willing to hold bonds. Where current account deficits were allowed to increase to help absorb the capital inflow, there is less of a capital account surplus for sterilization operation to absorb, caging the pressures on reserves and the exchange rate. Thailand and Malaysia have allowed current account deficits to increase substantially to help absorb large capital flows.

13. With open capital accounts and fixed exchange rates, the scope of monetary policy in general is limited. It is harder to sustain interest rate differentials in relation to international markets (give or take any country and exchange risk premia). This limits the range of independent monetary policy actions a country can effectively use. Reducing interest rates may reduce the attractiveness of interest-sensitive portfolio flows, but that is likely to lead to domestic credit expansion which could lead to a real appreciation, an investment boom and asset appreciation, including real estate. If this leads to overheating, monetary contraction would be in order, reducing investment, but possibly attracting portfolio flows by high interest rates rise and investors may see implicit exchange guarantees. Furthermore, when firms are increasingly able to borrow abroad, directly or through local banks, they can also skirt domestic credit restraint and may further complicate the government’s policy agenda. This can be particularly worrisome if firms are financing abroad to meet working capital needs or finance more speculative real estate investments. It should be clear from this that monetary policy actions must be carefully balanced with other policy measures to be effective. To a certain extent, the discipline imposed by external capital markets should be a relief to authorities: it can counter pressure from special interests for interventions in their favor.

14. Reserve Requirements and Other Tactical Responses. An alternative to sterilizing increases in liquidity resulting from capital inflows is to increase reserve requirements for commercial banks. This reduces the expansionary effects of the inflow and reduces the direct cost to the government, but it adds to bank intermediation costs, which will be passed on to the public. Lower deposit rates may lower returns to portfolio investors, discouraging further inflows. However, if domestic borrowing costs rise, borrowers may seek funding overseas, especially in the regional capital markets. Various taxes can also be imposed on foreign inflows based on their source or type of instrument or maturity. Short term borrowing may be subject to a tax whose level declines with maturity – increasing the cost to the borrower and lowering the return to the lender. Transactions in capital markets may be taxed where foreign flows are involved. Returns may be taxed differentially for foreign and domestic-held instruments. Or some transactions may be controlled.

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2It has been estimated that it cost Indonesia’s central bank in excess of $1 billion in 1992-3 to sterilize short term inflows.
2Short-term flows are most sensitive to interest differentials. And these are least productive for the recipient economy.
4If domestic deposit rates are not particularly high, or if there is uncertainty about domestic policy, foreign short-term money might not flow in due to the interest rate differential, but domestic firms might try to finance themselves abroad where borrowing rates are or appear to be lower.

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15. These measures reduce the real return on the investment and are usually intended to deter short-term flows. These and other regulatory and administrative procedures inconvenience and intimidate would-be investors as well as imposing economic costs on the investor and on the economy. They may slow flows without basically changing the basic structure of the market or incentives for investors. Discriminatory policies of this type are likely to be hard to apply because of difficulties in identifying the nature of the flows and the many possibilities of disguise. They also require extensive information about individual transactions, which is often not available in East Asian or other emerging markets. These policies tend to be most useful in the short run in response to sudden changes in normal flows which appear to be driven by speculative bursts and when they do not introduce large-rent creating distortions, but they cannot be the basis of sound, long-term strategy. If they are not evaded (as they will be if there are high potential returns), they are likely to disrupt financial sector reforms. Where short term flows are responding to unsustainable distortions in prices or other variables, the capital movements should be read as a signal to the government to get its policies back in line and not stifled because they are inconvenient. One possible guideline would be that any emergency measure to counteract undesirable short-term flows should be reversed in a short period of time, say 3 to 6 months. If the measure cannot be removed in that time frame, then there are fundamental problems in the policy regime that need to be corrected.

16. Exchange Rate Policy. Increasing the range of permitted exchange rate movements adds to risks faced by international investors and tends to reduce incentives for capital flows, particularly short-term speculative flows. East Asian countries have tended to manage their exchange rates to be either stable or declining at a fairly predictable rate. Coupled with relative domestic price stability, this policy has been effective in encouraging FDI and promoting exports by assuring investors of a stable exchange regime on which to base their decisions. But it has also offered foreign investors — long-term and short-term alike — an implicit guarantee on part of the exchange risk. A reasonable amount of monetary policy flexibility can be maintained by broadening the intervention bands on the exchange rate and forcing short-term investors to face more uncertainty.8 If exchange rate fluctuations are relatively short-term and have the property of mean reversion to a central rate or trend7, then a surprising amount of short-term elbowroom for monetary policy can be attained by widening the intervention bands. It is likely that short-term exchange rate fluctuations will tend to discourage speculative flows, but will not be a significant deterrent to FDI or long-term portfolio investment, so long as the fundamentals remain in place. Wider bands also provide the government more market based information on the exchange rate and the effects of policy. There is more variation in the market rate to analyze.

17. Long-Term Policies: Trade and Investment Policies. In the longer term, a more broadly based policy response is required than the measures outlined above. Absorbing the additional flows and directing them into productive additional investment is critical. Protectionist measures that have been used in the past to "develop" certain sectors and promote industrialization are less likely to be as effective and more likely to create distortions that speculators can take advantage of. On the other hand, trade liberalization, domestic market reforms, and liberalized investment policies, which are desirable for a variety of reasons and are being pursued throughout East Asia, also facilitate the absorption of capital flows by allowing the real transfer of the inflow and reducing pressure on the real exchange rate. Sustained capital inflows should facilitate continuation or even acceleration of these reforms: as the balance of payments constraint usually encountered by such reforms is eased. As Thailand and Malaysia have demonstrated, large current account deficits can be maintained with rapid export growth and high levels of foreign investment. However, unless the increase in net imports contributes to increased productive capacity and future net

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8 See for example Lars Sassen (1992).
7 This is a reasonable expectation in East Asian economies, which have long term records of stability.
exports, the country may face problems in meeting its external liabilities down the road. Thus trade liberalization needs to be accompanied by appropriate investment policies that encourages efficient investment in productive sectors.

18. **Capital Market Reform.** Deeper and better functioning capital markets will facilitate the absorption and management of the large inflows, and liberalization of domestic capital markets will also help sustain capital flows, especially portfolio flows. Development of these markets is vital to the government’s own ability to manage and absorb the capital flows, and more broadly their own economics, through more indirect measures. Key to developing domestic capital markets is improving the regulatory systems, assuring that incentives promote prudent behavior, and modernizing the basic infrastructure for transactions. International markets are already far advanced in this regard, and East Asian markets will have to catch up in order to remain attractive, particularly to longer-term investors, who are the most valuable. Capital market reforms will increase the attractiveness of the recipient country to productive foreign investment and improve the allocation of resources to enhance growth. Tax and regulatory policies should be supportive of these changes.

19. **Fiscal Policy.** Countries can also counteract the unwanted impacts of large capital inflows — excess demand, real exchange rate appreciation — by contracting fiscal policy: running a smaller public deficit or shifting to a surplus on the government’s consolidated budget. Such actions would have a relatively stronger effect under a fixed exchange rate regime, which most East Asian economies have maintained (either real or nominal). Thailand and Malaysia have managed tight fiscal responses over a several year period as part of major reforms. These programs were not specifically designed to offset the impacts of capital flows, but they did help in that regard. Sound fiscal policy and sustainable deficits — however defined — are to be heartily recommended in general, but that is a different proposition from using fiscal adjustment to counteract capital inflows, which may be problematic. One concern is the speed of response possible with a change in the budget stance. It is relatively easier to move monetary policy in the short term than to change fiscal stance. Central banks can intervene in markets to raise or lower interests or the money supply in a matter of days or less. Even announcements of policy intentions can have an effect in the more developed (sensitive) markets. This is perhaps one of the reasons for the initial preference for sterilized intervention. Changing the fiscal balance takes longer.

20. Middle-income East Asian countries generally do not have a large public sector, so there may be limited scope for easy reforms to reduce the net deficit. Budgets are usually established on an annual basis and carry considerable political baggage. Actual implementation of budgets is under the control of a variety of agencies that cannot fine tune their revenue or expenditure patterns very quickly. Indeed, even in times of severe budgetary crisis, reducing the net deficit has proven quite difficult. The economies in transition do have large public sectors, and are working to reduce them. This involves not only efforts to reduce expenditures on a wide variety of categories, including transfers to state owned enterprises, but also efforts to privatize many of those enterprises to reduce the overall scope of the government in their economies. The privatization program will help reduce pressure on public budgets and deepen capital markets. The more restrained the public sector deficit, the easier it will be for the country to absorb external capital as well, with less inflationary pressure.

21. On the expenditure side, these countries face growing demands for infrastructure investment as well as continued expenditures on human resources, and it is not easy to argue that major cuts would be desirable. Unfortunately, budget reductions usually fall on investment, which is the key to sustained growth. In Thailand, some of their fiscal contraction included reductions in infrastructure spending, which contributed to deficiencies in that sector. In fact, East Asian countries are becoming more active in trying to attract private and foreign investment into infrastructure, not so much to replace public investment as to
supplement it. On the revenue side, to the extent that a stable and supportive fiscal environment contributes to attracting foreign investment, efforts to raise taxes would tend to reduce that flow, depending on the kinds of taxes imposed. Obviously, consumption taxes would be preferable to income or capital taxes for maintaining an environment conducive to investment. Much of Thailand's revenue gains, for example, came from an increase in revenues from the value added tax.

22. Put simply, tightening fiscal policy as a response to private capital inflows involves substituting foreign private demand for domestic public demand (consumption or investment) when public expenditures are cut, or substituting that demand for domestic private demand when revenues are raised. These considerations suggest that any fiscal response would have to be implemented over a relatively longer term as part of a widely accepted evolution of public policy, something that would make sense if the capital flows were expected to be persistent and relatively nonvolatile around a given level or trend.

23. That said, it is clear from the foregoing analysis that a macro policy mix comprised of relatively tighter fiscal policy and looser monetary policy is more likely to be sustainable in the face of open capital accounts and potential capital inflows than the opposite weighting. Fiscal constraint tends to increase national savings and create space for the demand resulting from the foreign capital inflows. It also gives the government more room for maneuver in the event of capital outflows. Monetary relaxation encourages domestic investment and growth, and it offers less inducement for short-term capital inflows. Conversely, looser fiscal policy is likely to increase domestic consumption, and tight monetary policy (higher interest rates) will tend to reduce investment and encourage interest-sensitive capital inflows. This combination may not be sustainable. The scope for monetary actions will be constrained by the openness of capital accounts and substitutability of assets in either case.

24. **Investment Abroad.** Attention has been primarily focused on how to manage and absorb capital inflows. Given the recent influx, this is not surprising. But as East Asian countries become more integrated into global markets, a broader perspective on managing flows in both directions should be adopted. Concerns over "capital flight" and rapid reversal of flows are legitimate. Such large flows can reduce domestic saving and impair development, as the experience of Latin America has demonstrated. The situation in East Asia, however, is different. Savings and investment rates are high. Their trade and production structure is bringing them into an increasingly complex network of international transactions. The volume of capital flowing in on a long-term basis is more than even these fast growing countries can absorb efficiently. It would be normal in these circumstances to expect some private capital to flow abroad, and that is beginning to happen.
Box 6-1  Chile's Private Pension Funds and their Roles

The Pension Reform

Starting in May 1981, Chile conducted a revolutionary reform of its bankrupt public social security system and replaced it with a private pension fund system. The original "Pay-as-you-go (PAYG)" public pension system was in deep financial trouble with deficits amounted to 5% of GDP in the early 1980s. It was replaced by a fully funded pension system based on individual capitalization accounts, which are government mandated and regulated but privately managed by specialized companies known as Administradoras de Fondos de Pensiones (AFPs). Participation in the new system is compulsory for all dependent employed workers including civil servants, but optional for self-employed people. At the beginning of the reform, participation was optional for members of the old system, thus the AFP system coexists with the old system for retirees and those workers who did not switch.

The Complementarity between Pension Funds and Capital Market

The pension fund system has since grown steadily and its success is multidimensional. Here we focus on its contribution to capital market development.

- It has become a major source of private sector savings, accounting for 18.8% of national savings in 1990, and 35% in 1994. Contributions are increasing at a fast pace, with annual contributions reaching 8.2% of GDP in 1993 and 10% in 1994 (estimated), up from 1.9% in 1982. Total funds accumulated in the personal pension plans grew at a real rate of around 40% per year, reaching a stock of US$19.1 billion by July 1994, the equivalent of 38.8% of GDP.

- Pension funds play an important part in the financial markets. At the end of 1990, the system held 96% of Treasury's debt instruments, 38% of the Central Bank's debt instrument, 9% of equities, 56% of corporate bonds, 56% of the mortgage instruments, and 20% of deposits in local currency.

- Since 1990, pension funds have been allowed to own foreign assets and have begun to diversify actively into international capital markets. By July 1994, about 1% of the total assets had been invested outside of Chile, and the amount is growing.

Lessons of the Chilean Experience

Chile's success in pension reform shows the important role domestic institutional savings institutions can play in aggregating small private savings, supporting the development of a domestic capital market, and raising the aggregate savings. Furthermore, as these savings pools have expanded and come to own a large share of domestic assets, they have been allowed to diversify abroad. This reduced their risk and offset other capital inflows into Chile. This has represented an important expansion and deepening of Chile's capital markets and further integration into global markets.

25. Successful, world class firms (as indicated by very competitive exports) would have many reasons for expanding production abroad. The high and expanding level of FDI among East Asian developing countries is already witness to this trend. Indeed, there is evidence that entrepreneurs from most countries in the region are investing more widely, in both developed and developed countries. Even for investment portfolios, there are good reasons to expect some foreign asset holding. Domestic markets are often relatively small, and domestic investors can improve their risk; return profiles by investing abroad, just as the investors in the US and elsewhere are gaining from diversifying their portfolios into emerging markets. Growth of pension funds in most of these countries will also provide some additional demand for international portfolio diversification. Taiwan (China) is currently the source of over US$1 billion a year
of portfolio investment abroad. China is already investing US$300 million, and that is growing rapidly. Malaysian entrepreneurs are actively investing abroad, and Hong Kong capitalists are investing in US real estate. From a national point of view, it makes sense to encourage these flows to improve a country's overall risk exposure, as well as to reduce the pressure of capital inflows on exchange rates and domestic capital markets.

26. **International Financial Centers.** As capital markets become more open and versatile, countries will be faced with the decision of whether or not to structure their financial regulations to encourage establishment of international financial centers. Singapore and Hong Kong already have decided to become major financial centers as part of their longer-term development strategies. Other countries may not want to become banking centers. Whatever the approach, the supporting policies need to be transparent and developed in the context of a longer-term strategy of liberalization, or they risk introducing distortions that could be costly to the economy and its reputation as a good place to invest.

27. Authorities need to treat capital accounts like current accounts and adjust policies to encourage efficient flows in both directions so as to achieve overall balance consistent with long-term development objectives. No single component should be treated in isolation. Distortions in any market will affect others, and the object of policy should be to reduce distortions in both capital and goods markets in a coordinated manner while preserving stability.

**The Challenge Ahead**

28. Looking into the future is risky business. But some things are likely to be good bets. Rapid growth will continue in East Asia, and the pace of change experienced by these economies will continue to be very impressive. They are committed to an open and cooperative approach in the evolution of their economic relations among themselves and with the rest of the world, but will use market based and competitive means of achieving their goals. With regard to the topics of this paper, capital flows, there are several observations to be made.

29. **Sustainability:** Substantial capital flows into East Asian countries are going to be persistent, absent major international crises or domestic policy reversals. The dynamism and success of the East Asian economies will assure that they will remain attractive for investment. It is estimated that nearly one-third of world growth will occur in all of East Asia over the next decade, and global investors will not want to miss out on such opportunities. East Asian countries are gaining greater access to major capital markets, and investors in capital-rich countries are expanding their horizons and including more emerging market issues in their portfolios. The demand for investment opportunities in East Asia has tended to exceed the absorption capacity of some of the countries, leading to sharp increases in reserves. This may not always be the case, but assuming that these countries sustain high growth and maintain open markets, they will be able to attract funds.

30. **Greater integration** of East Asian economies into world markets will occur. The integration of national capital markets into global markets offers a number of economic benefits to East Asian countries, most important is access to vastly larger amounts of capital to further their development. Foreign capital inflows also provide technology, assistance in developing local capital markets, and access to foreign markets for exports. On the other hand, greater integration into global markets reduces the degree of domestic policy independence East Asian economies can exercise. Authorities will have to rely on different

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and more indirect policy tools, continue liberalizing, strengthen domestic capital market structures, and exercise greater supervision of capital markets.

31. **Risk Management.** Exposure in external markets -- whether public or private obligations -- brings with it a variety of risks that need to be recognized and properly provisioned for. Risks -- exchange risk, interest risk, credit risk -- vary among assets, and it has often occurred that individual borrowers do not take into account the exchange risk or leave it implicitly to the government. Furthermore, where risk hedging instruments exist, they also have the potential to allow agents to increase as well as reduce risk (e.g. the Barings Bank episode demonstrates how risks can be magnified). Investors need to understand the nature of these risks and that they are exposed without public guarantee. One of the disciplines of market liberalization is allowing agents to take losses or fail. Unless governments allow for this, it is hard to make their reforms credible. Furthermore, the aggregation of individual actions by many actors in smaller markets may create systemic risks, though each action is "reasonable." When domestic banks borrow heavily abroad to lend locally, they are acting as brokers and assuming all the exchange and intermediation risks in a single direction. The country as well as the banks may be exposed if domestic performance or external conditions change. Or if many individual agents undertake foreign obligations independently, their joint actions may create a risky situation for the country -- too much exposure in a single currency or market, for example.

32. Countries and individual investors will have to learn to manage market risks in a much broader sense as they become more integrated into global capital. On the positive side, access to foreign markets gives governments and agents within a country a wider range of instruments for investment. This allows diversification of balance sheets beyond a country's initial endowment set, both through bringing in investment in other kinds of capital and through allowing the country and its nationals to own assets abroad. For example, recent yen appreciations have increased debt service substantially for both public and private borrowers in many East Asian countries, and some are considering shifting the mix of their assets to include more yen. Access to international markets also allows a country to reduce the adverse impacts of external shocks by giving it a resource cushion in addition to diversification. While international asset-liability diversification would allow a country to increase its growth potential and manage or reduce traditional risks, but such benefits can only be achieved if countries and agents within the country act prudently. International markets also expose a country to new and potentially larger risks and offer investors some tempting, but risky gambles.

33. Where markets are maturing and integration is still incomplete, governments do have a responsibility to oversee capital flows and forestall systemic risk factors. Financial markets have special properties that make it easy to argue for government intervention to avert or mitigate systemic crises. Appeals for special treatment, however, should be resisted and in particular, unpriced guarantees (implicit as well as explicit), should be avoided. In large part, appropriate education, information dissemination, positive incentives, and prudential regulations should help avoid systemic problems. Incentives and

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4 Foreign lenders are not above insisting the government ultimately guarantee the exchange risk on private transactions. It is widely believed that the Chinese government will do so for non-guaranteed Chinese borrowing abroad, even though the government has asserted strongly that it will not. In the last analysis, it may be hard for governments to resist when their international credit standing as well as that of the private borrower is threatened, as happened to some Latin American countries during the debt crisis.

10 Think of Indonesia as naturally long in oil, Singapore and Hong Kong as long in humm capital, Thailand as long in rice production capacity and facing the associated risk exposure of those positions. Investment in other assets, manufacturing at home or other assets abroad, can diversify these risks.

11 There has been ample recent experiences with both borrowers and investors who have been caught failing to manage risks, or mismanaging them due to incomplete understanding of the market and its instruments. Malaysia's 1992 loss in currency transactions is one example. Orange County, USA, is another.
prudential regulations can be structured to discourage particularly risky behavior or excessive borrowing. Governments may also encourage markets to develop their own risk management instruments with private agents absorbing more of the risk. Allowing national investors, including national pension funds, to invest more abroad also helps reduce overall country risk as well as the risks faced by individual investors. Ultimately, authorities do have some responsibility to help manage the exposure of a country in external markets, and this has to be taken account of in their planning.

34. Information. Unfortunately, as capital markets and flows are liberalized, the traditional sources of data about capital flows — permits and registrations with authorities for example — have diminished. Reducing direct intervention and controls does not reduce the need for information, however, but rather increases it. Individual agents have a greater range of choices and therefore need more and more reliable information to make efficient choices.\footnote{A number of foreign investors in Mexico have subsequently complained about the lack of data from the government and from international sources as contradicting to the crisis of December 1994.} This is particularly true of foreign investors. Use of indirect policies must be based on detailed information about what is going on in the markets and what reactions to policy actions are likely to be. Good policy making requires a great deal of empirical research to understand the functioning of individual markets and the impacts of specific policies. This is one reason why good central banks tend to have the best economic research staffs, and so they should. Procedures should be put in place to record and make available in a timely fashion relevant information about capital flows and their impacts on the financial sector, including the banking system. An indicative list of such information is supplied in Annex 1. In most countries, enough information exists to shed some light on the types and volumes of capital moving in and out and on the primary motivating factors, but it may not be readily available to policy makers or private decision makers. More efforts to compile this data will be vital to the continued liberalization of capital markets and effective management of capital flows. It would also make life easier for analysts trying to better understand the impacts of such flows. Although seemingly secondary, it is hard to emphasize enough the importance of timely and relevant information to managing capital flows and averting systemic crises. Often small reactions early in a sensitive situation can be much cheaper and more effective and a more massive intervention later. The former is only possible if authorities have the right information on time.
Box 6-2   Tools to manage capital flows.

Within a sound macro policy framework that keeps inflation under control, encourages productive investment, and minimizes distortions in both internal and external transactions, a wide variety of tools are available to authorities to help manage capital flows. In general, and consistent with overall liberalization programs, indirect instruments are more effective than direct interventions.

**Longer term policies:**

- Macro policy balance favoring relatively tighter fiscal and less tight monetary policy
- Liberalization of external and domestic trade
- Positive investment climate with minimal restrictions on foreign ownership of assets
- Policies that encourage high domestic savings
- Relatively wide intervention bands on the exchange rate with revisions periodically
- Support for a strong financial sector with foreign participation
- Sound prudential regulation and enforcement in financial and capital markets
- Free capital movement in both directions
- Promotion of information collection and dissemination, including rating agencies
- Reduction or elimination of financial guarantees by the government
- Encouraging private hedging markets to develop with adequate prudential regulation

**Shorter term policies to deal with precipitous flows:**

- Sterilization of "excess" inflows
- Raising reserve requirements for banks (on all or foreign transactions)
- Limitations on open foreign exchange positions of financial institutions
- Informal pressure by authorities on the financial markets
- Foreign borrowing limits: on classes of liabilities or public borrowers
- Taxes on shorter-term foreign borrowing
- Restrictions on foreign ownership of certain short-term assets
- Restrictions on certain speculative transactions

The shorter-term policies tend to impose costs on the financial system and, if maintained for too long, may lead to distortions as bad as the ills they are designed to cure. They are primarily designed to help governments react to sharp changes in capital flows and buy time to assess the more fundamental causes and cures. The farther down the list, the less desirable the policy, and the sooner it should be reversed. If such policies cannot be reversed in a reasonable time, then more fundamental changes are needed in other policies. As countries develop, maintain high rates of growth, and continue to attract capital, a gradual appreciation of the exchange rate should be expected.
Conclusions

35. Effective management of capital flows by East Asian countries requires coordination of policy in a number of areas. The sustainability of capital flows depends on maintaining good macroeconomic and sectoral policies and continuing rapid growth. That in turn depends on continuing liberalization and integration into international markets. Domestic reforms, especially in capital markets, will increase both that integration and the ability of countries to deal with large capital flows. At the same time, these reforms will limit the policy independence of the authorities and constrain them to maintain key macroeconomic variables close to world levels. Furthermore, the domain of viable policies will shift to more indirect instruments. Greater exposure to world markets increases the variety of risks a country's "portfolio" position may be exposed to, but these markets also offer more ways of managing and reducing that risk. Authorities need to be aware of the risks involved and how to manage them. All of this comes at a higher cost in terms of information about transactions and market trends. Indirect policies are based on managing markets through a variety of incentives, and they can only be set properly if the government has adequate information.

36. The critical factors to keep in mind within a potentially large capital inflow are how much of the flow can be absorbed and is therefore likely to be sustainable, and how much is responding to short-term factors that are not sustainable and thus may turn out to be volatile or reversible. An understanding of the relation of domestic to international market factors helps in making this determination, as does knowledge of the type and characteristic of the flow. There is no way to know accurately what are the intentions or expectations of investors. Authorities will have to make their best guesses and be prepared to revise them in light of new information. Depending on the analysis of the flows, authorities should try to determine how much of the capital flow is supporting policy objectives, whether the implications for domestic savings and investment are acceptable, whether there are sectoral constraints that need to be addressed, and whether the capital flow is a result of a mismatch between domestic and international policies on interest rates or other variables. From this analysis, the government should derive their policy responses: to align domestic and international interest rates more closely, to change incentives to reduce short-term inflows or outflows; to alleviate sectoral bottlenecks in trade or finance; to sterilize for a period to protect the exchange rate; to allow more exchange rate movement; or to allow longer-term adjustments in public and/or private savings behavior. And if markets fail to respond as desired to initial policy response, authorities should be ready to change course quickly.

37. The experience so far indicates that East Asian governments are responding well to the challenge, but they will have to continue their policy reforms and adjustments. Once embarked on this road, there is no turning back—if countries still want to maintain the growth rates they have become accustomed to. East Asia is rapidly becoming a part of the industrialized, and highly interconnected, world. Indeed, it is becoming one of the engines of global growth. And that implies these countries will also have to shoulder more responsibilities in relation to the rest of the world.


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Appendix I

Table I-1 Capital Flows to be Monitored

- Non-resident bank deposits
- Portfolio investment (on exchanges and private placements)
  a. Institutional
  b. Individual Direct private investment
- Purchases of local currency money market securities
- Purchases of land and buildings
- Funds from domestic companies listing abroad
- Funds from official aid from abroad
- Commercial borrowing abroad by domestic entities (both state and private entities)

Table I-2 Types of Information Useful to Determine Nature of Flows

A. Information Mainly From The Central Bank

- Purchases and sales of spot foreign exchange by the central bank, including line items for passive transactions and active intervention and other activities. (Foreign Exchange Department)
- Swap and forward transactions of central bank, values and rates. (Foreign Exchange Department)
- Purchases and sales of foreign exchange by banks from the central bank. (Foreign Exchange Department)
- Comparative tables of domestic interest rates and selected foreign interest rates, including US rates, European rates, Singapore and Tokyo rates. Distinguish short term from long term. (Research Department)
- Relative inflation rates for selected countries.
- Real exchange rate appreciation and volatility. (Research Department)
- Information on major banking and capital market regulatory changes that may allow access to US or Japan or other markets. (Bank Supervision Department and Securities Regulatory Agency)

B. Information Mainly From Banks

- Short term foreign exchange deposits of non-residents in banks.
- Short term local currency bank deposits of non-residents in banks.
- Short term foreign exchange and short term local currency deposits deposited in authorized capital market sub-custodian banks.
- Forward and swap transactions of banks, values and rates.
- Interbank foreign exchange transactions, including type, rates, values.
- Off-balance sheet foreign exchange assets and liabilities of banks, including guarantees.
- Value of foreign exchange denominated assets and liabilities of banks.
- Loans by banks for equity purchase and to securities companies.
- Bank loans for land and building purchases.
• Borrowings by banks abroad, by source, value, maturity, currency, interest rate and type of loan.
• Lending interest rate spreads among selected countries.
• Deposit interest rate spreads among selected countries.

C. Capital Market Data from Securities Regulatory Agency and Stock Exchanges

• Purchases and sales of equity and debt on securities exchanges by foreign investors, distinguished by institutional and individual.
• Information (in advance) of timing, value, allocation method and subscription dates of specific public equity offerings.
• Information (in advance) of timing, value, allocation method and subscription dates for specific bond offerings.
• Information on derivatives.
• Price and earning (P/E) ratios on stock markets.
• Securities market total new issues, market capitalization, trading volume and value.

D. Other Capital Market Data

• Equity and debt public listings abroad, by name of exchange, currency, time and type (with relevant details) (need to require reporting by listing companies).
• Large scale private placement abroad (need to require reporting).

E. Information from non-bank financial institutions

• Non-bank financial institutions foreign assets and liabilities, including leasing, factoring, insurance, and pension funds, as relevant.
• Non-bank financial institutions sources of funds and uses of funds (obtained from regulatory bodies).

F. Data on Foreign Direct Investment

• Foreign direct investment flows, including approvals and actual flows, by project type and currency (obtained from regulatory bodies).
• Foreign direct investment flows into financial sector companies, by type of company.

G. Other data

• Term of trade for major commodities.
### UNDERLYING DATA FOR CHARTS

#### Chart 1-1: Net Capital Flows to Developing Regions

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#### Chart 2-1: Net Private Capital Flows to Developing Regions

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Note: Chart 2-1 is calculated based on the table and the table for Chart 1-1.

#### Chart 2-2: Net Commercial Bank Lending to Developing Regions

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<td>16.6</td>
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<td>-1.3</td>
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<td>-0.7</td>
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#### Chart 2-3: Foreign Direct Investment in Developing Regions

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<td>Sub-Saharan Africa</td>
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<td>0.9</td>
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<td>0.8</td>
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<td>1.8</td>
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<td>6.1</td>
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Note: Chart 2-3 is calculated based on this table.

Source: All based on World Bank (1994b).

#### Chart 2-4: Distribution of Foreign Direct Investment to Developing Countries

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Note: Calculated based on Table for Chart 2-3.
### Chart 2.5. Net Total Portfolio Investment in Developing Regions

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Note: Includes both bond placement and portfolio equity investment.

### Chart 2.6. Bond Placement by Region

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### Chart 2.7. Net Portfolio Equity Investment by Region

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