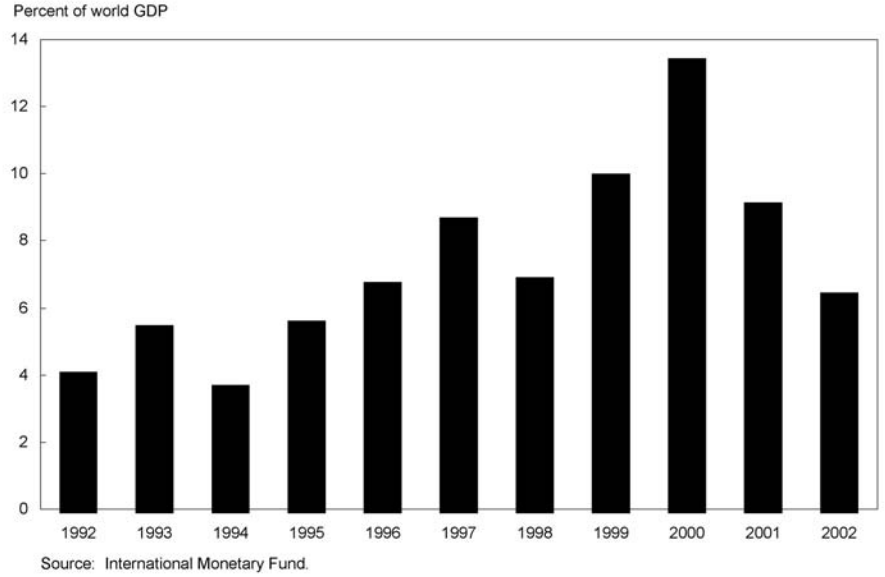
CHAPTER 13

International Capital Flows

International capital flows are the transfer of financial assets, such as cash, stocks, or bonds, across international borders. They have become an increasingly significant part of the world economy over the past decade and an important source of funds to support investment in the United States. In 2002, around $700 billion flowed into the United States. Inflows of international capital help to finance U.S. factories, support U.S. medical research, and fund U.S. companies. At the same time, U.S. investors provided nearly $200 billion in capital to other countries for a wide range of purposes.

Around $2 trillion flowed into countries around the world in 2002, equivalent to roughly 6 percent of global GDP (Chart 13-1). Although these world capital flows have dropped from a peak of over 13 percent of GDP in 2000, largely reflecting a global economic slowdown, they remain above the level of the early 1990s.

Chart 13-1 **Global Capital Flows as a Percent of World GDP**
The 1990s saw a surge in global capital inflows. Flows have since declined, but remain above their level in 1992.



Source: International Monetary Fund.

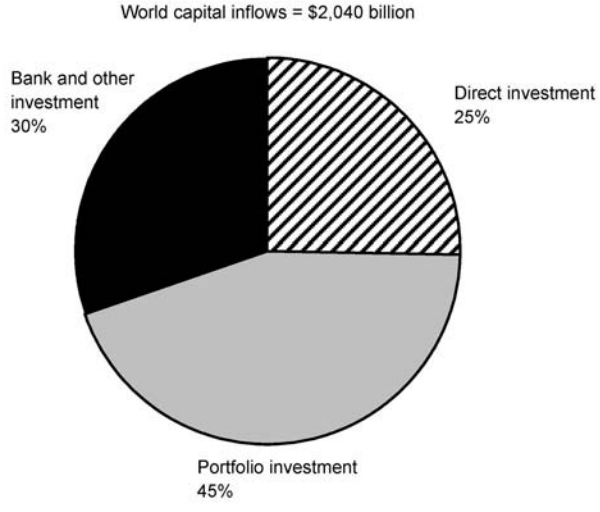
This chapter describes the various types of international capital flows and discusses their benefits, as well as their risks. The key points in this chapter are:

- Capital flows have significant potential benefits for economies around the world.
- Countries with sound macroeconomic policies and well-functioning institutions are in the best position to reap the benefits of capital flows and minimize the risks.
- Countries that permit free capital flows must choose between the stability provided by fixed exchange rates and the flexibility afforded by an independent monetary policy.

Types of International Capital Flows

Not all capital flows are alike, and there is evidence that the motivation for capital flows and their impact vary by the type of investment. Capital flows can be grouped into three broad categories: foreign direct investment, portfolio investment, and bank and other investment (Chart 13-2).

Chart 13-2 **World Capital Inflows in 2002**
World capital inflows, which include direct investment, portfolio investment, and bank and other investment, totaled $2 trillion in 2002.



Source: International Monetary Fund.

Foreign Direct Investment

Foreign direct investment occurs when an investor, in many cases a firm rather than an individual, gains some control over the functioning of an enterprise in another country. This typically takes place through a direct purchase of a business enterprise or when the purchaser acquires more than 10 percent of the shares of the target asset.

A number of factors affect the flow of foreign direct investment. Trade links between investor and recipient countries tend to increase foreign direct investment, as demonstrated by the establishment of Japanese auto plants in the United States starting in the 1980s. Proximity to foreign markets also plays a role, as shown by the investment of U.S. companies in China to service Chinese consumers and firms. The political, economic, and legal stability of the recipient country also matters. Investors are reluctant to establish ownership of foreign companies or set up businesses abroad if corruption or political or social instability are likely to jeopardize operations.

In 2002, foreign direct investment made up roughly one quarter of world capital inflows. About 40 percent of these flows went to the major industrial countries—the United States, Canada, the United Kingdom, Japan, and countries in the euro zone. During much of the 1990s, the United States was the largest single recipient of foreign direct investment. Foreign direct investment flows to industrialized countries are driven largely by the desire for better distribution networks and market access. Another 30 percent of total foreign direct investment went to emerging markets. Relative to flows to industrial countries, these investments were driven more by the low production costs and growing markets of Asia, as well as the privatization of state-owned enterprises in many countries in Latin America and Eastern Europe.

Portfolio Investment

Portfolio investment occurs when investors purchase noncontrolling interests in foreign companies or buy foreign corporate or government bonds, short-term securities, or notes. This type of investment accounted for almost half of world capital inflows in 2002.

Economic and financial conditions in the recipient and investor countries are important influences on portfolio investment flows. The market for these assets is typically more liquid than that for direct investments; it is usually easier to sell a stock or bond than a factory. As a result, investors can quickly reshuffle portfolio investments if they lose confidence in their purchases. Not surprisingly, portfolio investment is far more volatile than foreign direct investment. Countries that receive large capital inflows in one year can see a quick reversal of these inflows if economic or political developments cause investors to reevaluate the expected return on their assets.

Sudden and destabilizing reversals of portfolio investment took place in countries such as Korea, Mexico, Russia, Brazil, and Argentina during the second half of the 1990s and early 2000s. These reversals partly reflected the concern that private-sector and government borrowers in emerging market economies might be unable to meet their financial obligations.

In the United States, portfolio investment in U.S. government securities has played an increasingly important role since 2001. Foreign purchases of U.S. government securities rose from 3 percent of total capital inflows in 2001 to 33 percent in the first three quarters of 2003. One of the most important factors explaining this change is a shift in the share of U.S. security purchases by foreign investors from equities into lower-risk assets, such as U.S. government obligations. Another important factor is increased purchases of U.S. government securities by foreign central banks. A decline in the number of mergers and acquisitions in the United States has also led to lower foreign purchases of private assets.

Bank Investment

Bank investment is the third major type of capital flow. Bank-related international investment includes deposit holdings by foreigners and loans to foreign individuals, businesses, and governments. These investments, grouped with a few other miscellaneous types of investments, accounted for over one quarter of total international capital inflows in 2002. For emerging markets, the importance of these bank-related and other investment flows has declined dramatically in the past decade. While these flows represented an average of 28 percent of capital inflows to emerging economies from 1992 to 1996, they represented an average of only 3 percent of inflows from 1997 to 2002. Economic crises in a number of Asian and Latin American countries since the mid-1990s have contributed to reduced bank lending to these regions since 1997, notably from banks in Japan and Europe.

Benefits of International Capital Flows

Capital flows can have a number of important benefits:

- International capital allows countries to finance more investment than can be supported by domestic saving, thereby increasing output and employment.
- Greater access to foreign markets can provide new opportunities for foreign and domestic investors to increase the return and reduce the risk of their portfolios.

- Foreign direct investment can facilitate the transfer of technology and managerial expertise to developing countries, thus improving productivity.
- Better risk management and other management techniques associated with foreign direct investment can help recipients modify their production processes to lower costs and raise productivity.
- Exposure to international capital markets and the resulting increased competition may induce governments and firms issuing assets to improve macroeconomic policy, management, and profitability. These improvements may, in turn, encourage additional foreign investment.
- Improved international access to investment opportunities in the country receiving capital inflows expands the number of potential investors in any domestic project. This will tend to reduce the cost of raising capital.
- Increased capital inflows can spur the development of domestic financial sectors. A well-developed financial sector can lead to greater investment and reduced financial-sector vulnerability.

Empirical evidence suggests that countries that are open to capital flows can enjoy many of these benefits. In the case of foreign direct investment, studies indicate that industries and some developing countries with more foreign direct investment grow faster than those with less foreign direct investment. In addition, extensive research has found that foreign-owned firms tend to have higher productivity and wages than do their domestic counterparts. Finally, for some developing countries, foreign direct investment can help catalyze the adoption of more-advanced technologies and management practices.

Foreign portfolio investment has played a key role in furthering the development of domestic equity and bond markets. In the case of equity markets, one report estimates that opening up to foreign shareholders leads to an almost 40 percent increase in the real dollar value of the stock market. This lowers the cost of equity capital for domestic firms, as a higher stock price means that a smaller portion of a company needs to be sold to raise a given amount of capital. Developing equity markets can help restrain the ability of corporate managers to pursue their own goals and can help align managerial incentives with earnings growth. In the case of debt markets, evidence indicates that foreign investment can widen the investor base and help businesses raise capital. Moreover, developing countries that lack debt markets may rely excessively on bank lending. Studies suggest that this may leave economies more vulnerable to financial crises because banks are less likely to hold well-diversified portfolios than are participants in developed bond markets.

For all of these reasons, financial market liberalization has been linked to greater investment and higher output growth. One study found that equity market liberalization raised annual economic growth by about 1 percentage point per year in the five years following liberalization. In a related study, the same researchers showed that 17 out of a set of 21 countries that opened their equity markets to foreign participation experienced faster average-growth rates than before liberalization.

A foreign banking presence can also have substantial benefits for the host economy. Foreign-owned financial institutions have been shown to improve the standards and efficiency of the domestic banking sector. This can raise the net yield on saving and enhance capital accumulation and growth. In Latin America, studies have shown that foreign banks in the latter half of the 1990s had higher and less-volatile loan growth than the average domestic bank. Foreign banks may also be a stabilizing force during periods of financial stress. This is partly because foreign banks are often better capitalized and have access to financing through their parent companies at times when domestic banks might be unable to raise capital. Because foreign banks are often better managed and less exposed to domestic downturns, they can also provide citizens some insurance against a collapse of the domestic banking sector. Drawing on the experiences of the Asian crises, academic work suggests that the greater the foreign bank presence in a developing country, the less likely the country was to experience a banking crisis. The ability to hold bank accounts in other countries and borrow from overseas financial institutions can also facilitate trade.

Risks of International Capital Flows

Many countries that reduced barriers to capital flows in the 1990s experienced large capital inflows, increased investment, and strong growth. Several of these countries, however, subsequently experienced economic crises. In the majority of these crises, capital outflows were associated with currency depreciations. The governments, firms, and citizens of many of these emerging markets had significant amounts of debt denominated in foreign currency but received income denominated in domestic currency. The currency depreciations therefore greatly impaired the capacity of these borrowers to service their debts. The resulting increase in bankruptcies and, in some cases, government defaults, weakened the banking sectors and other financial institutions in these countries. All of these factors contributed to sharp contractions in output and high unemployment rates. Such "currency crises" occurred in Mexico, Thailand, Korea, Russia, and Argentina from the mid-1990s through 2001. These experiences have led to a more guarded view of the advantages of capital flows.

One lesson learned from these crises is that a strong institutional framework is important if a country is to benefit fully from openness to capital flows. In other words, capital flows are more likely to yield substantial benefits and carry fewer risks in countries where the financial system is strong and well developed; laws and regulations are clear, reasonable, and enforced by the courts and public institutions; and the reporting of financial information is timely and accurate so that investors have a clear understanding of the conditions and strength of the assets in which they are investing. Corruption is also associated with lower foreign investment and weaker growth.

In countries with weak institutions or high levels of corruption, capital inflows may not be channeled to their most-productive uses, dissipating their potential benefits. In these cases, improved access to capital can allow firms and sovereigns to accumulate high levels of debt through purchases of unproductive assets. This can ultimately leave firms and countries vulnerable to changes in investor sentiment, possibly contributing to economic crises.

One approach to limiting these risks when legal and financial institutions are poorly developed is to restrict foreign capital flows. Experience, however, suggests that capital controls impose substantial costs. Controls on the movement of capital can distort firms' investment decisions, increase opportunities for corruption, and discourage foreign direct investment. All of these effects can depress growth (Box 13-1).

Box 13-1: Capital Controls in Emerging Markets

Recent economic crises in several emerging economies that opened their markets to capital flows have renewed debate on the desirability of capital controls. Any benefits of restrictions on capital flows, however, must be weighed against the costs and distortions they impose.

Capital controls can take various forms and can target either capital inflows or capital outflows. Countries may adopt *controls on capital inflows* in an attempt to prevent an appreciation of their currency or to direct foreign investments to longer-term ventures. Experience shows that these controls, regardless of whether they achieve their objective, can create problems, including economic distortions and large administrative fees. For example, in the 1990s, the Chilean government required that a portion of capital inflows be temporarily deposited in a non-interest-bearing central bank account. These restrictions lowered the risk of rapid capital flight, and some analyses show that they lengthened the average period of time that capital inflows remained in Chile. These restrictions, however, also increased administrative costs, especially because the government had to

Box 13-1 — *continued*

modify them frequently to close numerous loopholes. Research also shows that these controls on capital inflows caused smaller, public firms to face greater financing constraints than they did before the restrictions. These higher financing costs may have stifled an important source of growth and innovation in Chile.

Countries' experiences with *controls on capital outflows* reinforce the view that controls are difficult to implement and often carry unexpected costs. Controls on capital outflows also take a variety of forms, such as limitations on the amount of domestic holdings of foreign currency and restrictions on the ability of foreign investors to repatriate their earnings. The potential to avert financial crises triggered by capital outflows can make controls appealing in theory. In practice, however, any such benefits tend to be eroded over time as firms and individuals find ways to circumvent the restrictions. Such evasive activity can create additional problems, such as reduced financial transparency and tax compliance, distortions from the unequal impact of the controls (as not all sectors have equal access to the evasive measures), and a general reduction in respect for the law. For example, studies indicate that controls on capital outflows in Russia in the mid-1990s were evaded by exporters, particularly in the energy sector, through the underreporting of earnings.

Finally, capital controls can also distort the behavior of foreign investors. For example, research indicates that American multinational firms invest less in their local affiliates in countries with capital controls. In addition, multinationals tend to alter their investment and payment structure in order to minimize the effect of the restrictions. This distortion is yet another way capital controls can reduce the productivity of the world's stock of capital.

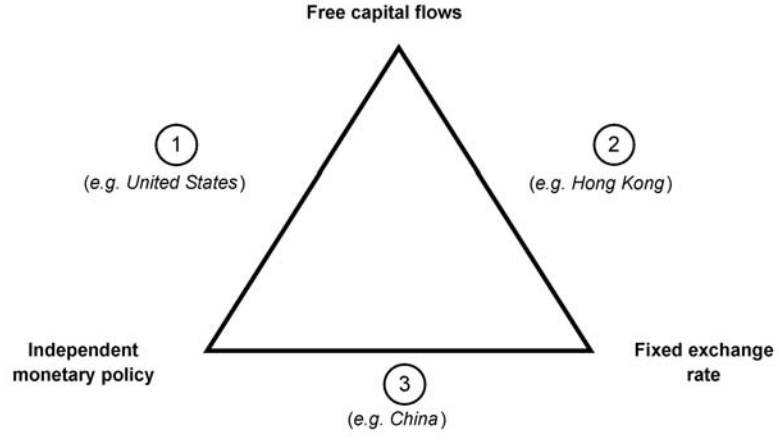
Another approach for developing countries to minimize the risks from opening up to capital movements involves the careful timing, or sequencing, of policies designed to "liberalize" financial markets. One variant of this approach suggests that countries should first achieve macroeconomic stability, in part by implementing sound fiscal and monetary policies. Countries should next strengthen financial market institutions, and only then allow for free capital flows. While this approach may work for some countries under specific economic conditions, the pace and timing of reforms appear to be less important than the consistency of the reforms and the government's commitment to them.

Policy makers increasingly realize that there is no simple rule to best achieve free capital flows, and that country characteristics should be considered. There is some consensus, however, that the benefits of international capital mobility can be substantial and that to best achieve these benefits, countries should implement reforms of domestic financial and legal institutions.

Constraints Imposed by Free Capital Flows

One consequence of allowing capital to flow freely in and out of a country is that this constrains a nation's choice of monetary policy and exchange-rate regime. For important but subtle reasons related to the tendency for capital to flow to where returns are the highest, countries can maintain only two of the following three policies—free capital flows, a fixed exchange rate, and an independent monetary policy. Economists refer to this restriction as *the impossible trinity*. As illustrated by Chart 13-3, countries must choose to be on one side of the triangle, adopting the policies at each end, but forgoing the policy on the opposite corner.

Chart 13-3 "**The Impossible Trinity**"
Countries can adopt only two of the following three policies -- free capital flows, a fixed exchange rate, and independent monetary policy.



Source: Council of Economic Advisers.

The easiest way to understand this restriction is through specific examples. The United States allows free capital flows and has an independent monetary policy, but it has a flexible exchange rate. (The U.S. government does not attempt to fix, or "peg," the exchange value of the dollar at any particular level against other currencies.) As a simplified example, if the Federal Reserve Board raised its target interest rate relative to foreign interest rates, capital would flow into the United States. By increasing the demand for U.S. dollars relative to other currencies, these capital inflows would increase the price of the dollar against other currencies. This would cause the exchange rate to adjust and the U.S. dollar to appreciate. In the opposite case, if the Federal Reserve Board lowered its target interest rate, net capital outflows would reduce the demand for dollars, thereby causing the dollar to depreciate against foreign currencies.

In contrast, Hong Kong essentially pegs the value of its currency to the U.S. dollar and allows free capital flows. (Hong Kong is a Special Administrative Region of China, but maintains its own currency.) The trade-off is that Hong Kong loses the ability to use monetary policy to influence domestic interest rates. Unlike the United States, Hong Kong cannot cut interest rates to stimulate a weak economy. If Hong Kong's interest rates were to deviate from world rates, capital would flow in or out of the Hong Kong economy, just as in the U.S. case above. Under a flexible exchange rate, these flows would cause the price of the Hong Kong dollar to change relative to that of other currencies. Under a fixed exchange rate, however, the monetary authority must offset these flows by purchasing domestic or foreign currency in order to keep the supply and demand for its currency fixed, and therefore the exchange rate unchanged. The capacity of the government to sustain large purchases and sales of its currency is ultimately limited by several factors, including the amount of foreign exchange reserves held by the government and its willingness to accumulate stocks of relatively low-return foreign currency assets.

Just as in the case of Hong Kong, China pegs its exchange rate to the U.S. dollar. China can operate an independent monetary policy, however, as it maintains restrictions on capital flows. In China's case, world and domestic interest rates can differ, because controls on the transfer of funds in and out of the country limit the resulting changes in the money supply and the corresponding pressures on the exchange rate.

As these three examples show, if a country chooses to allow capital to flow freely, it must also decide between having an independent monetary policy or a fixed exchange rate. Many factors affect how a country makes this crucial decision (Box 13-2).

Box 13-2: Choosing Among a Fixed Exchange Rate, Independent Monetary Policy, and Free Capital Movements

How does a country choose whether to give up a fixed exchange rate, independent monetary policy, or free capital movements? While country-specific factors play a role, experience has shown that these decisions also reflect global trends.

In the late 1920s, many countries, including the United States, adopted an exchange-rate system in which they pegged their currencies to a fixed quantity of gold. This system, which was used previously but was abandoned during World War I, was known as the *gold standard*. It effectively fixed the exchange rates of the currencies for all participating countries. Countries generally coupled this fixed exchange rate with the free movement of capital, relinquishing the ability to influence economic activity at home through the use of independent monetary policy.

This system proved sustainable until the Great Depression of the 1930s, when many governments abandoned exchange-rate stability in order to expand domestic demand by increasing the money supply and lowering interest rates. Following the economic recoveries under this regime, the choice of free capital flows and independent monetary policy remained popular through the end of World War II.

The postwar era, however, saw substantial international integration of markets and increasing cross-border trade. Countries such as the United States wanted to facilitate this increase in trade by eliminating the risks of exchange-rate fluctuations. At a summit held in Bretton Woods, New Hampshire, in 1944, representatives from the major industrial economies designed and implemented a plan that encouraged exchange-rate stability while maintaining autonomous monetary policies. The Bretton Woods system, as it became known, offered countries greater monetary independence while fixing the value of the dollar, yen, deutsche mark, and other currencies. Just as with the previous systems, however, something had to be sacrificed—the Bretton Woods arrangement required capital controls. Capital controls included caps on the interest rates that banks could offer to depositors and limitations on the types of assets in which banks could invest. Further, governments frequently intervened in financial markets to direct capital toward strategic domestic sectors. Though none of these controls alone prevented international capital flows, in combination they allowed governments to restrain the amount of cross-border capital transactions.

Box 13-2 — continued

In the early 1970s, the Bretton Woods system gave way to a more-diverse set of regimes. Ultimately, as growth in other countries outstripped growth in the United States, demand shifted from the U.S. dollar to foreign currencies, putting downward pressure on the dollar's value. After several negotiated devaluations of the dollar, governments agreed to abandon the system rather than continue to be forced to change domestic interest and inflation rates to keep the dollar's value constant. Furthermore, greater financial sophistication and increasing capital mobility made it more difficult and costly to sustain capital controls in the advanced economies.

Since the end of the Bretton Woods system, countries have chosen a variety of exchange-rate regimes. Countries in the euro zone, for instance, have adopted the euro as a common currency. This is equivalent to fixing the exchange rates among the participating countries. The euro, however, is allowed to move freely against other currencies such as the dollar. Each of the countries within the euro zone has had to give up its own independent monetary policy. The value of the U.S. dollar, on the other hand, floats freely against other currencies. The free movement of capital has been uniformly embraced by the advanced industrial economies and is increasingly being adopted by developing economies.

Encouraging Free Capital Flows

The Administration supports the free flow of capital between the United States and other countries and encourages countries to take steps to open their markets to international investment. Such efforts include the negotiation of Bilateral Investment Treaties, as well as Trade and Investment Framework Agreements. Under these agreements, foreign countries commit to treating U.S. investors fairly and to allowing U.S. corporations to operate in foreign countries in closer accordance with standard U.S. practices and procedures. This protection reduces the risks associated with investing abroad and encourages U.S. multinational companies to expand through foreign direct investment.

Investment measures and protections have also played a central role in free trade agreements negotiated by the United States (these are discussed in Chapter 12, *International Trade and Cooperation*). Recent trade agreements, such as that with Chile, have included investment provisions that protect American investors and ensure their access to foreign investment opportunities.

The United States also encourages countries to undertake the reforms that will help them best reap the benefits of greater investment and capital flows. These reforms include improvements in corporate governance and the distribution of accurate, timely, and complete information on economic conditions, government regulations, and corporate performance. The Administration has focused on reducing the risks of destabilizing capital flows in a number of ways.

One important development in this regard has been the increased inclusion of "collective action clauses" in international bonds issued by emerging market countries—a practice that has been supported and encouraged by the United States. These clauses allow a majority of creditors to bind a minority to key financial terms in the event of a debt restructuring. They also help facilitate ongoing discussions and negotiations between a sovereign and its creditors. By making it easier for issuers and bondholders to agree to changes in bond terms in the event of a default or restructuring, collective action clauses provide a contractual method for improving the resolution of situations where sovereign debt levels are unsustainable. Such improvements to the debt-resolution process should reduce the unnecessary loss of value to creditors and thereby lessen the risk of lending to emerging market countries.

The United States has also endorsed the efforts of the International Monetary Fund and the World Bank to increase the availability, frequency, scope, and quality of the reported data of their member countries. Better and more timely information can assist policy makers and investors to make appropriate decisions. Some of these efforts include:

- The Financial Sector Assessment Program, which involves a rigorous and in-depth analysis of a country's financial system.
- The Special Data Dissemination Standard, which sets certain standards of timeliness and quality for economic and financial statistics to guide countries that have (or desire) access to foreign capital markets.
- The implementation of agreed-upon norms, such as the Code of Good Practices and Fiscal Transparency, which emphasize adherence to certain standards of good practice and promote quality accounting procedures and fiscal transparency.

These programs help investors, public-sector lenders, and governments identify weaknesses and vulnerabilities in firms, sectors, and the economy in general. They also target areas for reform in a country's macroeconomic policy, financial sector, and supervisory systems. This combination of policies should help developed and developing countries take advantage of greater capital market integration, while minimizing the risks.

Finally, the Millennium Challenge Account, a Presidential initiative enacted in January 2004, provides incentives for developing countries to adopt policies that spur economic growth and reduce poverty. First-year funding for the

Millennium Challenge Account is $1 billion. The Administration has requested that this amount rise to $5 billion per year by fiscal year 2006. The Millennium Challenge Corporation, which administers the Millennium Challenge Account, will direct development grants to poor countries that have appropriate economic, political, and structural conditions to benefit from foreign assistance. The Millennium Challenge Corporation will partner with countries that demonstrate a strong commitment to ruling justly, investing in their people, and encouraging economic freedom in order to develop their own strategies for catalyzing economic growth and reducing poverty. The Millennium Challenge Account is designed to provide funding for programs that have clear objectives, a sound financial plan, and measured benchmarks for demonstrating progress in overcoming major obstacles to sustained economic growth. The Millennium Challenge Account will not only improve the ability of recipient countries to fight poverty and to grow more quickly, but will also encourage the international investment that helps to strengthen growth.

Conclusion

Underlying each of the policies promoted by the Administration is the goal of helping countries reap the substantial benefits of the free flow of international capital. Foreign direct investment can facilitate the transfer of technology, allow for the development of markets and products, and improve a country's infrastructure. Portfolio flows can reduce the cost of capital, improve competitiveness, and increase investment opportunities. Bank flows can strengthen domestic financial institutions, improve financial intermediation, and reduce vulnerability to crises. These flows are not without their risks, but such risks can be reduced if countries adopt prudent fiscal and monetary policies, strengthen financial and corporate institutions, and develop the regulations and agencies that supervise such institutions. Such steps allow countries to fully gain from free capital flows.