

Capital Flows to Emerging Markets: The Myths and Realities

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“Think of capital flows as a medicine with occasionally horrific side-effects. The evidence suggests that we have no good way of controlling the side effects. Can it be good regulatory policy to remove controls on the sale and use of such a medicine?”

--Dani Rodrik (1998)

“...capital account liberalization is...similar to the issue of how the human race should make use of fire. Fire warms our homes. It cooks our food, our internal combustion engines. It powers our automobiles and trucks and our turbojets. It powers our airplanes. No doubt, fire is very useful, and we are not going to give up its manifold benefits. On the other hand, fire can also burn you down and do a great deal of damage”

--Michael Mussa (1998)²

I. Introduction

Concerns about capital account liberalization and the free movement of capital have existed since the early 1900's. In the 1920's Ragnar Nurkse wrote about “destabilizing capital flows” and warned of the consequences from volatile international financial markets.³ In the 1970's Charles Kindleberger wrote a history of the world's “manias, panics and crashes” and the contributing role of international capital mobility.⁴ After World War II when officials met at Bretton Woods to reconstruct the international financial system, John Maynard Keynes and Harry Dexter White debated options for limiting global capital mobility.

The current international financial system, which was largely developed during these discussions at Bretton Woods, requires that IMF member countries have convertible currencies for the purposes of current account transactions, but not necessarily capital account transactions. In

¹ Thanks to James Soldano for excellent assistance preparing this paper.

² Comments at the IMF Economic Forum, “Capital Account Liberalization: What's the Best Stance?” on 10/2/98.

³ Nurkse (1944).

⁴ Kindleberger (1978).

other words, countries are free to enact controls limiting the flow of capital across their borders. Most countries initially kept some capital controls in place after the Bretton Woods meetings, but over time they realized that the free movement of capital could have widespread benefits. For example, capital account liberalization can increase capital inflows, thereby financing investment and raising growth. Capital inflows—especially in the form of direct investment—can provide improved technology and management techniques, as well as access to international networks, all of which further raise productivity and growth. Liberalization can facilitate the diversification of risk, thereby reducing volatility in consumption and income. It can also increase market discipline, thereby leading to a more efficient allocation of capital and higher productivity growth. In order to obtain these widespread benefits of capital account liberalization, most developed countries and many developing countries lifted their capital controls over time.

By the spring of 1997, there was such widespread support for free capital flows that the IMF Interim Committee suggested amending the IMF Articles of Agreement to make capital account liberalization a purpose of the IMF and extending the IMF’s jurisdiction to include capital movements. Soon after this recommendation was released, however, a series of financial crises spread across Asia and disproportionately affected countries that had recently liberalized their capital accounts. In contrast, several Asian countries that had maintained more stringent capital controls—such as China and India—emerged from the crisis relatively unscathed. These experiences caused a reassessment of the desirability of capital account liberalization in emerging markets.

Many leading economists and policymakers now support the use of capital controls in some circumstances, especially taxes on capital inflows. For example, former U.S. Treasury Secretary, Robert Rubin expressed sympathy for controls on capital inflows, such as those adopted by Chile in the 1990’s.⁵ A series of reports by the G-22 in 1998 raised concerns about capital account liberalization and cautiously endorsed taxes on capital inflows.⁶ Dani Rodrik (1998) wrote: “If the recent evidence teaches us anything, it is that there is a compelling case for maintaining controls or taxes on short-term borrowing.” Even senior officials from the IMF, formerly the bastion of capital market liberalization, have expressed support for taxes on capital inflows.⁷

This debate on the merits of free capital flows and capital controls for emerging markets, however, is far from resolved. As Barry Eichengreen recently wrote: “The implications of capital mobility for growth and stability is one of the most contentious and least understood issues of our day....It is hard to think of another issue over which there is more dispute or where the stakes for policy are higher.”⁸ Unfortunately, many of the arguments made in this dispute rest on claims that are unproven, not fully developed, or in some cases even inaccurate. This paper reviews a number of the popular claims used against capital account liberalization for emerging markets. More specifically, it discusses six arguments:

⁵ For example, see Rubin and Weisberg (2003), pg. 257.

⁶ See Group of Twenty-Two reports released in 1988: *Report of the Working Group on Transparency and Accountability*, *Report of the Working Group on Strengthening Financial Systems* and *Report of the Working Group on International Financial Crises*.

⁷ For example, Stanley Fischer (2002), former First Deputy Managing Director of the IMF writes: “The IMF has cautiously supported the use of market-based capital inflow controls, Chilean style.”

⁸ Eichengreen (2003), pg. 3.

- the empirical evidence on the benefits of capital account liberalization is inconclusive;
- the Chilean capital controls were successful and should be employed by other emerging markets;
- capital account liberalization will not benefit emerging markets since capital flows from poor to rich countries;
- lifting capital controls increases a country's vulnerability to financial crises;
- capital account liberalization has reduced the capacity of the IMF to respond to crises; and
- capital controls should only be lifted after strengthening other financial, institutional and macroeconomic capabilities.

The paper evaluates the merits of each claim, assessing whether it is a “myth” or “reality.” Although there is “reality” behind some of these arguments, in many cases the facts are misconstrued to create “myths” and reach inaccurate conclusions. In some cases these claims incorporate valid concerns, but the “reality” can be addressed through constructive policy responses. Therefore, these arguments should not be interpreted as reasons to avoid lifting capital controls. Instead, capital account liberalization should be an important goal for emerging markets, although exactly how they attain this goal may be more nuanced than earlier recommendations for immediate and comprehensive liberalization.

II. Empirical Evidence on the Benefits of Capital Account Liberalization is Inconclusive

“...if financial integration has a positive effect on growth, there is as yet no clear and robust empirical proof that the effect is quantitatively significant.”

--Eswar Prasad, Ken Rogoff, Shang-Jin Wei and Ahyan Kose (2003)

“Capital account liberalization, it is fair to say, remains one of the most controversial and least understood policies of our day...empirical analysis has failed to yield conclusive results.”

--Barry Eichengreen (2002a)

One critique of capital account liberalization is that if it does yield net benefits, then these benefits should be measurable and identifiable in empirical analysis. An extensive literature has therefore attempted to measure the macroeconomic effects of capital account liberalization, but this literature is generally interpreted as showing little conclusive evidence that liberalization yields significant benefits. This interpretation, however, overlooks a number of recent studies that use microeconomic and case-study evidence to provide persuasive evidence of the benefits of capital account liberalization.

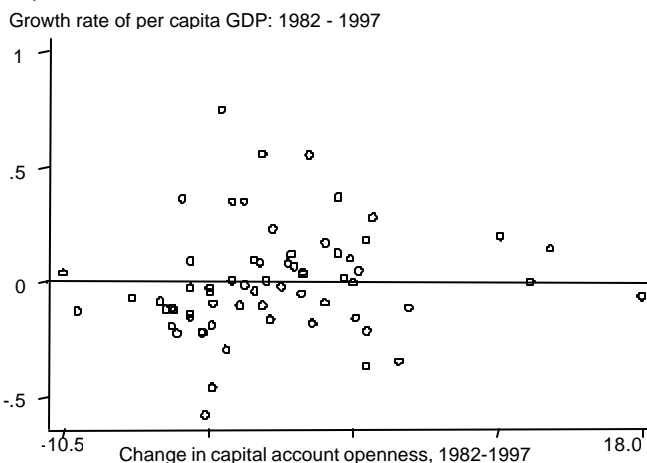
It is a “reality” that the macroeconomic literature has had limited empirical success, to date, in consistently showing that capital account liberalization has a positive effect on growth.⁹ Most papers in this literature use a variant of the standard cross-country growth regression to test if lifting capital controls or greater capital account liberalization is correlated with higher economic growth. Prasad et al. (2003) provide a detailed survey of this literature and argue that the results

⁹ For excellent surveys of this literature, see Eichengreen (2002a) or Prasad et al. (2003).

are inconclusive. More specifically, of the 14 recent papers they examine, three find a positive effect of financial integration on growth, four find no effect, and seven find mixed results. The only consistency in the papers surveyed is that none find evidence that capital account liberalization significantly reduces growth. Prasad et al. (2003) also perform their own analysis, with the key result replicated in Figure 1. They find no significant relationship between financial openness and the growth in real per capita income across countries—even after controlling for standard variables in this literature.¹⁰

There are a number of possible reasons for these conflicting results and lack of consensus in the macroeconomic literature.¹¹ First, it is extremely difficult to accurately measure capital account openness.¹² Many studies have used rough numerical indices of different policies and regulations, but even the more carefully constructed measures cannot capture the complexity and effectiveness of a country's liberalization. Due to these problems, other studies have used *de facto* measures of integration (such as capital flows or foreign asset holdings). These are also problematic, since some countries with large capital inflows still maintain relatively strict capital controls (such as China), while other countries with relatively unrestricted capital accounts receive fairly little foreign capital (such as many African nations). Still other studies have examined market comovement to measure integration with international markets, but these studies face the challenge of controlling for factors other than integration that could cause markets to commove—such as global shocks or similar underlying asset structures. A final approach has been to study onshore-offshore interest rate differentials. This approach is also problematic since not only are these differentials only available for a limited set of countries, but also interest rate differentials could move due to a number of factors other than capital account liberalization.

Figure 1: Conditional Relationship Between Financial Openness and Growth, 1982-97



Notes: Growth is measured by growth in real per capita GDP. Conditioning variables are: initial income, initial schooling, average investment/GDP, political instability, and regional dummies
Source: Prasad, Rogoff, Wei and Kose (2003)

Second, different types of capital flows and capital controls may have different effects on growth and other macroeconomic variables. For example, recent work suggests that the benefits of foreign direct investment may be greater than that of other types of capital flows. Reisen and Soto (2001) examine the impact of six different types of capital flows on growth and find that only two—FDI and portfolio equity flows—are positively associated with growth. Henry and Lorentzen (2003) argue that equity market liberalizations are more likely to promote growth than

¹⁰ The control variables include: initial income, initial schooling, average investment/GDP, political instability, and regional dummies.

¹¹ For a more thorough discussion of these challenges, see Eichengreen (2003), Ch. 3 or Prasad et al. (2003).

¹² See Edison, Klein, Ricci and Sloek (2002) for an excellent discussion of different measures of capital account openness.

debt market liberalizations. Other papers argue that controls on capital inflows may be less harmful than controls on capital outflows, because controls on inflows may be viewed as a form of prudential regulation, while controls on outflows may be viewed as a lack of government commitment to sound policies. For example, Rossi (1999) finds that controls on capital inflows reduce the risk of a currency crisis, while controls on capital outflows heighten the risk.

Finally, the impact of removing capital controls could depend on a range of other, hard-to-measure factors that are difficult to capture in simple cross-country regressions.¹³ For example, recent work suggests that countries are more likely to benefit from capital account liberalization if they have stronger institutions, better corporate governance, and more effective prudential regulation. Closely related, there may be “threshold effects” that are difficult to capture in linear regressions. Countries may need to attain a certain level of financial market integration or overall economic development before attaining substantial benefits from lifting capital controls. Also, the sequence in which different types of capital controls are removed may determine the aggregate impact. For example, lifting restrictions on offshore bank borrowing before freeing other sectors of the capital account may increase the vulnerability of a country’s banking system (as seen in Korea in the mid-1990’s).

Given all of these challenges to measuring the impact of capital controls on growth, it is not surprising that the empirical literature has had difficulty documenting the costs of capital controls at the macroeconomic level. Moreover, to put these challenges in perspective, the current status of this literature is similar to the earlier literature on how trade liberalization affects growth. Economists generally believe that trade openness raises economic growth, but most of the initial work on this topic (which used the same cross-country framework as these studies of capital account openness) reached similar, inconclusive results. In some cases trade liberalization appeared to have a positive correlation with economic growth, but in most cases these results were not robust to sensitivity testing. Stanley Fischer recently made this point: “With regard to empirical evidence on capital account liberalization, I believe we are roughly now where we were in the 1980’s on current account liberalization—that some evidence is coming in, but that it is at this stage weak and disputed.”¹⁴ Since accurately measuring capital account liberalization and its interactions with other key variables may be even more difficult than for trade liberalization, it is not surprising that the initial work in this area has generated mixed results to date.

Moreover, although the macroeconomic empirical evidence on how trade openness affects growth took years to develop, at a much earlier date several studies using microeconomic data and case-study evidence found compelling evidence that trade liberalization raises productivity and growth. Similarly, recent work using microeconomic and case-study evidence has been much more successful than the macroeconomic literature in documenting the costs of capital controls. Although case studies have the shortcoming that it is difficult to control for other simultaneous events, this approach can avoid many of the problems with the macroeconomic, cross-country literature. Moreover, this approach can facilitate a much more detailed measurement of exactly how capital account liberalization affects the allocation of resources and market efficiency.

¹³ Section VII discusses this literature in more detail.

¹⁴ Fischer (2003).

Several recent studies have adopted this microeconomic approach, yielding much more conclusive results than the macroeconomic, cross-country research.¹⁵ This evidence is too lengthy to survey here, but an overview of several of these studies shows the diversity of approaches and evidence. For example, one series of papers documents the widespread and significant costs of capital controls. Desai et al. (2004) examine U.S. multinational behavior and show that capital controls not only reduce the total amount of foreign direct investment available to host countries, but also create distortions in trade patterns, profitability and dividend repatriation. Harrison, Love and McMillan (2004) find that restrictions on capital account transactions increase firm financing constraints. Forbes (2003) shows that the Chilean capital controls made it more difficult for smaller firms to obtain financing for productive investment. Johnson and Mitton (2002) show that the Malaysian capital controls provided a shelter for government cronyism and reduced market discipline.

Instead of focusing on the costs of capital controls, an additional series of microeconomic papers documents the potential benefits from capital account liberalization. For example, Chari and Henry (2004) show that stock market liberalizations in emerging markets lead to increased investment and a higher return to capital, suggesting that higher investment after capital account liberalization “does not constitute a wasteful binge.”¹⁶ Galindo, Schiantarelli, and Weiss (2002) find that financial reform leads to increased efficiency in the allocation of investment in the majority of emerging markets in their sample. Jaramillo, Schiantarelli, and Weiss (1996) focus only on firms in Ecuador in the 1980’s and find a similar result—that capital account liberalization increases credit flows to more “technically efficient” firms.

Although this literature examining the microeconomic effects of capital controls is only in its infancy, the combination of results is compelling. These papers use diverse methodologies to examine very different aspects of capital controls in a range of countries and time periods, yet each finds a consistent result; capital controls have significant economic costs and lead to a misallocation of resources. Even if it is difficult to capture these effects at the macroeconomic level during periods when countries undergo rapid structural reform, this misallocation of resources is bound to reduce productivity and potential growth rates.

Therefore, although the cross-country macroeconomic evidence on how capital account liberalization effects growth has yielded mixed results to date, it is a myth that “the empirical evidence on the benefits of capital account liberalization is inconclusive.” The empirical challenges are daunting—to say the least—and even more complex than those which hindered empirical research on the effects of trade liberalization on growth. Despite these challenges, a series of microeconomic studies has found persuasive evidence that capital account liberalization can improve the allocation of resources, and that capital controls have pervasive and substantial costs. This literature, although still in its infancy, provides compelling empirical evidence of the benefits of capital account liberalization.

¹⁵ See Forbes (2004) for a more detailed survey of several papers showing that the microeconomic costs of capital controls.

¹⁶ Also see Henry (2000), which shows that stock market liberalizations in emerging markets lead to increased investment and a lower cost of capital.

III. The Chilean Capital Controls Were Successful and Should be Employed by other Emerging Markets

“...some kinds of restriction on inflows (not outflows) of capital will make sense for many developing countries...Chile’s well-known system...was a success worth emulating.”

--*The Economist* (1998)

“The IMF should therefore advise those emerging economies with fragile domestic financial sectors to impose Chile-type holding-period taxes on short-term inflows...”

--*Council on Foreign Relations* (1999)

Another argument used to support capital controls is based on the Chilean experience of the 1990’s. From 1991 to 1998 Chile enacted the *encaje*, or unremunerated reserve requirement (URR), which required that a fraction of certain types of capital inflows be deposited at the central bank in a non-interest bearing account for a fixed term.¹⁷ The exact terms of the *encaje* were frequently modified, but it basically acted as a tax on capital inflows, with a higher effective tax rate for shorter-term investments. During the period when the *encaje* was in place, Chile experienced a period of impressive growth and strong economic performance. Growth averaged about 8% per year from 1991 to 1998, the highest of any country in Latin America and more than double that experienced by Chile over the previous two decades. Some people have interpreted this positive Chilean experience with the *encaje* as support for other countries to adopt similar taxes on capital inflows.

There are a large number of studies—almost a whole literature—assessing the macroeconomic effects of the *encaje*.¹⁸ These studies use a range of modeling strategies, definitions, and econometric methodologies, and reach several general conclusions (albeit some differences exist across papers). First, although the primary goal of the *encaje* was to moderate the appreciation of the Chilean peso in order to maintain competitive export prices, there is no evidence that the *encaje* affected the exchange rate. Second, there is little evidence that the capital controls protected Chile from the shocks emanating from other emerging markets during the Mexican, Asian, Russian, and Brazilian crises. Third, there is some evidence that the *encaje* did not significantly affect the total volume of capital inflows, but did shift the composition of capital inflows to longer maturities. Finally, there is some evidence that the *encaje* raised domestic interest rates by creating a wedge between domestic and foreign interest rates (although there is no agreement on whether this was a short- or long-run effect).

Of course, all of these results are subject to the caveat that it is extremely difficult to construct the counterfactual of what the Chilean exchange rate, capital inflows or interest rates would have been without the capital controls. But even ignoring this problem, these results suggest that—at best—the benefits of the *encaje* were to slightly raise interest rates and increase the maturity of capital inflows. There is little evidence that the *encaje* reduced Chile’s vulnerability to crises or increased its growth rate. Although the period from 1991 to 1998 was a period of strong economic performance in Chile, this undoubtedly resulted from the package of sound economic policies enacted by the Chilean government—such as strengthening its banking system,

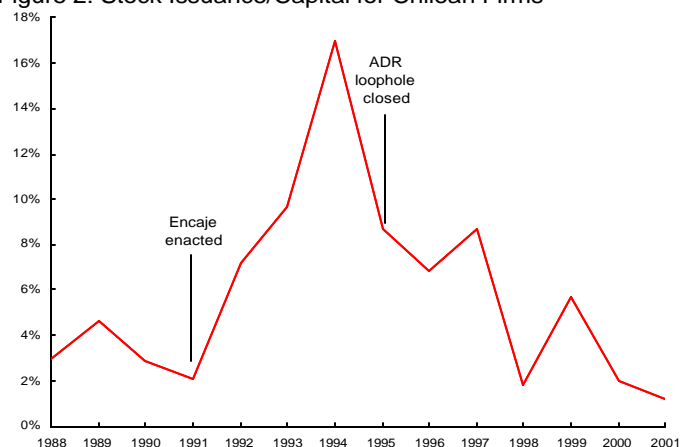
¹⁷ See Forbes (2003) for more detailed information on the *encaje*.

¹⁸ An excellent survey of the empirical work on this subject is Nadal De Simone and Sorsa (1999).

liberalizing trade, supporting privatization, increasing exchange rate flexibility, maintaining low inflation rates, and running sound fiscal policies. This package of sound, market-oriented policies, not the *encaje*, drove Chile's strong economic performance during the 1990's. Even Robert Rubin, who is sympathetic to Chilean-style capital controls, admits that: "The central reasons for Chile's success were sound policies and a floating exchange rate."¹⁹ There is no evidence that the capital controls made a significant contribution to this successful performance.

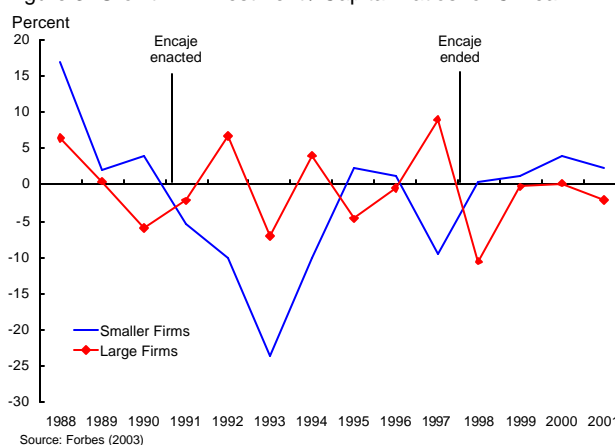
Moreover, there is evidence that the *encaje* had substantial costs and created a number of economic distortions for Chilean companies. For example, immediately after the *encaje* was enacted, many firms chose to issue stock that could then be cross-listed in the United States as ADRs (and avoid paying the *encaje*). In 1995, however, the Chilean government closed this loophole by including ADRs under the *encaje*, and the number of Chilean firms issuing stock plummeted. Figure 2 shows these distortions to stock listings created by the *encaje*.

Figure 2: Stock Issuance/Capital for Chilean Firms



Potentially even more important, Forbes (2003) performs an empirical analysis that indicates that the *encaje* significantly increased financial constraints for smaller, publicly-traded companies (but not for larger firms). In other words, the capital controls made it relatively more difficult and expensive for smaller companies to raise financing. Figure 3 (replicated from the paper) shows investment growth for publicly-traded Chilean firms around the time of the capital controls, without controlling for all the variables in the more formal empirical analysis. Investment growth was higher for smaller firms both before and after the *encaje* (which is a standard result in the finance literature). During the period that the capital controls were in place, however, investment growth plummeted for smaller companies and was generally lower than for large companies.

Figure 3: Growth in Investment / Capital Ratios for Chilean Firms



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In another analysis of the microeconomic effects of the *encaje*, Gallego and Hernández (2003) document additional distortions created by these capital controls. For example, they show that the *encaje* raised the cost of borrowing, causing firms to reduce leverage and paid capital while

¹⁹ Rubin and Weisberg (2003), pg. 257.

increasing their reliance on retained earnings. Firms also shortened the maturity of their debt while reducing their overall reliance on short-term financial debt. These aggregate effects were fairly small, however, and mask substantial variations across different types of firms. For example, large firms, firms belonging to a conglomerate, and firms able to issue securities abroad responded to the *encaje* by substituting paid equity for debt. On the other hand, smaller firms were more likely to resort to retained earnings or increase their reliance on short-term financial debt. The paper concludes: “In sum, the evidence provided here supports the view that capital controls, by distorting relative prices in the economy, were costly.”²⁰

Therefore, the claim that “the Chilean capital controls were successful and should be employed by other emerging markets” is a myth if success is defined as having substantial benefits with minimal costs. The empirical evidence on the macroeconomic benefits of the *encaje* is limited, at best. The microeconomic evidence, however, suggests that the *encaje* created a number of distortions, such as forcing firms to change their financial structure to avoid the tax and making it more difficult for smaller companies to obtain financing for productive investment. This behavior created a deadweight loss, and this inefficient allocation of capital and resources undoubtedly reduced productivity and growth in Chile. The disproportionate burden on smaller firms of this type of capital control could be particularly harmful for emerging markets, where small and new firms are often important sources of job creation and economic growth.

IV. Capital Account Liberalization Will Not Benefit Emerging Markets Since Capital Flows from Poor to Rich Countries

“One basic problem for the dream was that capital did not, in practice, flow from rich to poor, as we’d hoped. Instead it flowed from poor to rich—and overwhelmingly, in recent years, into the United States.”

--Brad DeLong (2004)

“These figures belie the idea of a steady tide of capital running from rich countries to poor.... Why...does capital today not flow in much larger quantities from rich parts of the world to poor?...So where the flow of international capital could do most good—in the developing countries—there is precious little of it...The benefits of access to global capital markets are called into question only for poor countries.”

--The Economist (2003)

For emerging markets, some of the greatest potential benefits of capital account liberalization arise from capital inflows (such as providing capital for investment, bringing in advanced technology, and spurring competitiveness). Since capital is relatively scarce in low-income, labor-intensive economies, the return to capital investment should be higher, on average, than in capital-abundant, wealthy countries. Therefore, standard economic theory predicts that when emerging markets lift their capital controls, capital should tend to flow in from wealthier countries. One criticism of capital account liberalization, however, is the “paradox” that capital tends to flow from poor to wealthy countries instead of from wealthy to poor countries. As a

²⁰ Gallego and Hernández (2003), pg. 245. The paper also concludes with the caveat that to reach a final conclusion on the desirability of the *encaje*, it is necessary to jointly analyze the costs documented in this paper with other effects, such as the impact on the composition of capital flows.

result, emerging markets are less likely to see capital inflows increase after removing their controls, and they are therefore less likely to benefit from capital account liberalization.

It is a “reality” that most capital currently flows in a direction opposite from what standard theory predicts; today, on aggregate, capital tends to flow from poor to wealthy countries and between wealthy countries. As shown in Figure 4, emerging markets have been net exporters of capital, instead of net importers, since 2000. Focusing on total (instead of net) capital inflows reveals a similar pattern. Figure 5 shows that capital flows into all emerging markets were only about half that into just the Euro zone in 2003, and 40% that into just the United States. In the same year, developing countries received only 15% of the private capital flows received by wealthier countries. Particularly striking, Figure 6 shows that the United States imports over 70% of net global capital, and Figure 7 shows that two of the world’s largest net exporters of capital are emerging markets (China and Russia).

This current pattern of capital flowing from poor to wealthy countries, on aggregate, masks two important points. First, capital flows have not always moved in this direction. For example, between 1865 and 1914, roughly two-thirds of all capital exports flowed from wealthy European countries to poorer countries in the western hemisphere.²¹ Second, today’s aggregate statistics mask important differences across individual countries. Some developing countries have recently received large amounts of foreign capital. For example, in

Figure 4: Net Capital Flows to Emerging Markets

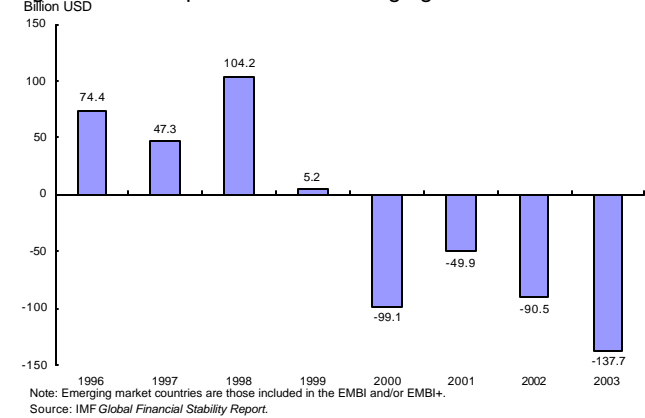


Figure 5: Global Capital Inflows

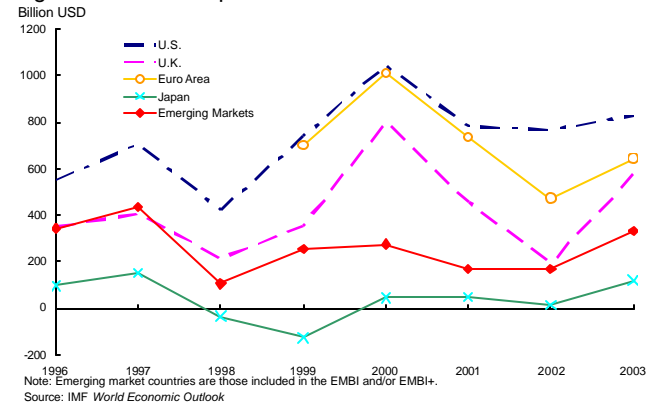
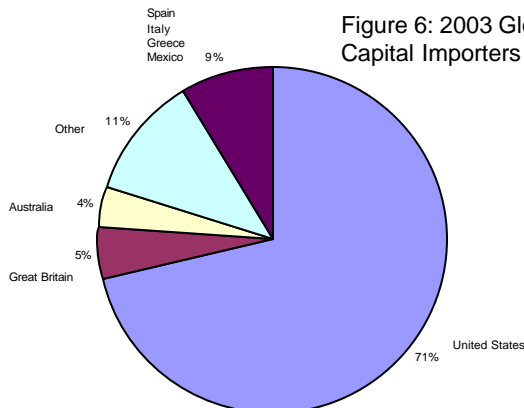
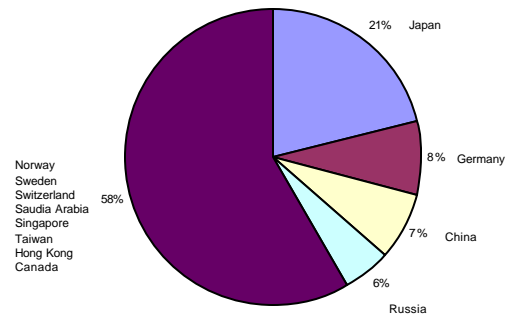


Figure 6: 2003 Global Capital Importers



Source: IMF 2004 Global Financial Stability Report. Capital import measured by the countries' current account deficit

Figure 7: 2003 Global Capital Exporters



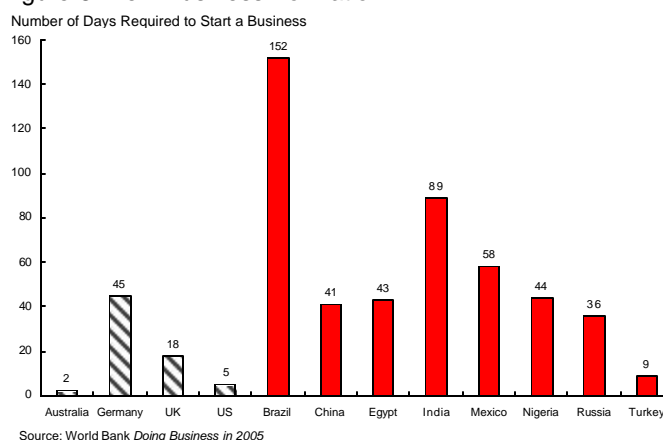
Source: IMF 2004 Global Financial Stability Report. Capital exports measured by the countries' current account surplus

2003, China received \$53 billion in FDI inflows and was the world’s largest recipient of FDI. In the same year, Mexico received \$12 billion in net FDI inflows, Brazil received \$10 billion, and India and Russia received \$4 billion each. Moreover, Japan and Germany, two of the world’s wealthiest countries, were the world’s two largest capital exporters.

There are a number of reasons why capital flows show different patterns across countries of similar income levels, as well as why developing countries are currently, on aggregate, net capital exporters. First the enforceability of property rights is weak in most developing countries. De Soto (2000) claims that over 80% of the world’s non-Western population suffers from an absence of genuine property rights and the presence of large informal economies. While informal economies can provide a source of employment, they also limit the emergence of well-functioning markets that can provide a sustained basis for employment and higher living standards. For example, a large informal economy slows the development of common legal standards that are important for markets to operate efficiently. These factors discourage investment.

Second, administrative barriers can discourage foreign investment in developing countries. These barriers include the absence of transparent, “investor friendly” rules, delays and uncertainties in the approval of investment, corruption, and the absence of trained, professional civil servants. The difference in these measures across countries is substantial. For example, as shown in Figure 8, it takes only two days to start a business in Australia, as compared to 36 days in Russia and 152 days in Brazil.²² It takes 250 days to enforce a contract in the United States as compared to 330 days in Russia and 566 days in Brazil. On average, the administrative costs of doing business in poor countries are about three times higher than in wealthier countries.

Figure 8: New Business Formation



Third, lower levels of human capital can reduce productivity and the return to capital in poorer countries. Lucas (1990) argues that wealthier countries receive larger capital inflows because they have higher levels of human capital, and human capital creates externalities that raise productivity growth.

Finally, higher credit risk and poor, past economic performance can constrain capital flows to poor countries. Reinhart and Rogoff (2004) identify fifteen “serial defaulters,” which are countries that have defaulted on their debt at least three times since 1901. They argue that: “The key explanation to the paradox of why so little capital flows to poor countries may be quite

²¹ Eichengreen (2002b).

²² Similarly, Djankov, la Porta, Lopez-de-Silanes and Shleifer (2002) find that the costs of business entry tend to be significantly higher in countries that are not in the wealthiest quartile.

simple – countries that do not repay their debts have a relatively difficult time borrowing from the rest of the world.”

This series of explanations suggests that it may not be a “paradox” that poor countries receive a relatively small share of global capital flows. After adjusting for risk and externalities, the return on capital in emerging markets may be lower than in developed countries. This current, aggregate pattern of capital flowing from poor to rich countries, however, should not be interpreted as a reason to avoid capital account liberalization. Instead, it should provide an incentive for emerging markets to adopt policies to address the factors which lower the risk-adjusted return of investment. Straightforward policy reforms can increase the expected returns to investment in emerging markets, causing capital to flow in—instead of out—as they liberalize their capital accounts.

The policy reforms that could increase capital inflows to emerging markets follow directly from the discussion of which factors tend to reduce expected investment returns in these countries. For example, developing countries should strengthen property rights through legal reforms and institutional capacity building. Countries should invest in human capital. Countries should improve their creditworthiness by establishing a track record of continuous debt repayment, as well as limit and structure borrowing so that debt burdens are sustainable. Countries should take steps to improve business conditions and simplify administrative burdens. More specifically, the World Bank recently surveyed business practices in 145 countries and identified five key areas on which to focus: (1) the ease of starting new businesses; (2) the ability to hire and fire workers; (3) contract enforcement; (4) access to credit; and (5) the costs of business closure.²³

Developing countries that adopt these policy reforms could substantially improve the attractiveness of their investment climate and therefore stimulate capital inflows—instead of outflows—under a liberalized capital account. Recent empirical research provides additional evidence of these effects. For example, Gelos and Wei (2002) show that international mutual funds are more likely to invest in countries with greater transparency. Wei (2000) shows that higher levels of corruption tend to reduce inflows of foreign direct investment. Smarzynska and Wei (2000) show that in Central and Eastern Europe, weaker local governance discouraged investment by more technologically-advanced firms, thereby not only reducing the quantity, but also the quality, of FDI.

Therefore, although it is a “reality” that capital currently tends to flow, on aggregate, from poor to rich countries, it is inaccurate to conclude that “capital account liberalization will not benefit emerging markets.” Some individual developing countries have received large capital inflows and these inflows have substantially benefited their economies. Moreover, emerging markets can and should adopt reforms to raise the return to investment in their countries—such as by improving the business environment. Countries that adopt these reforms are likely to experience net capital inflows—instead of outflows—and substantially benefit from this aspect of capital account liberalization. Furthermore, even if developing countries did not receive capital inflows after lifting controls, they could still benefit from other aspects of liberalization. For example, countries could benefit from the greater opportunities for portfolio diversification among domestic savers, and improved access to investment opportunities for domestic firms.

²³ World Bank (2004).

V. Lifting Capital Controls Increases a Country's Vulnerability to Financial Crises

"The freeing of financial markets to pursue their casino instincts heightens the odds of crises...Because unlike a casino, the financial markets are inextricably linked with the world outside, the real economy pays a price"

--Lawrence Summers and Victoria Summers (1989)

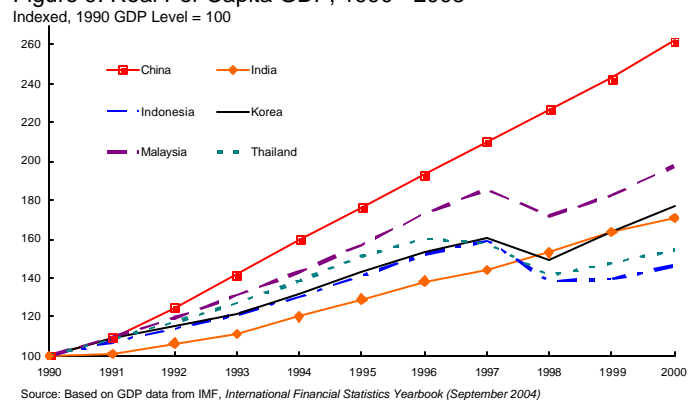
"...with financial deregulation and capital account liberalization, the crisis problem has grown more severe. Crises can erupt less predictably, and their effects can be more virulent..."

--Barry Eichengreen (2003)

One of the most popular arguments against capital account liberalization is that it increases country vulnerability to financial crises, crises that can entail substantial economic costs. Anecdotal evidence suggests that this concern may be a "reality." One of the most frequently cited examples is how different countries were affected by the recent Asian crisis. In 1997 Indonesia, Korea, Malaysia, Philippines, and Thailand experienced net financial outflows of \$13.9 billion²⁴. Partly due to these financial outflows, the currencies of each of these countries experienced significant depreciations—falling against the dollar by 77% in 1997 and another 44% over the first half of 1998. These financial outflows and the concurrent crises also resulted in sharp contractions in growth in the region. In sharp contrast, China and India maintained capital controls and appeared to be less affected by the crises in their neighbors. Figure 9 shows this contrast—relatively stable growth in China and India during 1997, in contrast to the sharp slowdowns in several of their neighbors.

This anecdotal evidence, however, misses several important points. First, although the capital controls may have reduced China's and India's vulnerability to the 1997 Asian crisis, capital controls provide no security against financial crises in general. Domestic vulnerabilities, macroeconomic imbalances, and unsustainable domestic policies are far more important determinants of financial crises than capital account liberalization. In fact, many countries with capital controls have experienced devastating crises. For example, several Latin American countries experienced severe debt crises in the 1980's—despite the existence of capital controls. Even India experienced a major currency crisis in 1991 and China experienced a major currency crisis in 1994—despite the existence of capital controls in both countries that were even more stringent than in 1997.

Figure 9: Real Per Capita GDP, 1990 - 2003



²⁴ Data from the IMF, *International Financial Statistics* (September 2004). Financial account statistics only. The financial account includes net sum of direct investment, portfolio investment, financial derivatives and other investment.

Second, even if capital controls can insulate a country from currency crises for some period, they tend to lose their effectiveness over time. By the early 1970's, the capital controls included in the Bretton Woods system had become increasingly porous, allowing imbalances to accumulate that eventually led to the breakdown of the system. Since then, capital mobility has only increased and financial market instruments have become increasingly complex. As a result, even if capital controls were able to reduce country vulnerability to crises in the past, they are likely to be even less effective in the future.

Third, recent empirical evidence on the relationship between capital controls and crises suggests that the relationship is more complicated than suggested by individual case studies. Most studies using both a bivariate and multivariate framework generally find a positive—instead of negative—correlation between capital controls and the occurrence of currency crises.²⁵ Taken at face value, these results could be interpreted as suggesting that crises may actually be more likely—instead of less likely—to occur in countries with capital controls.

A closer look at this evidence, however, suggests that these results are not surprising and reflect the endogeneity between a country's economic vulnerability and its decision to enact capital controls. Countries with macroeconomic imbalances (and which are therefore more vulnerable to crises), may choose to impose capital controls in order to avoid difficult economic reforms, or to avoid capital outflows that may trigger a crisis. In fact, several economic studies show that capital controls are more likely to be utilized by countries with macroeconomic imbalances.²⁶ Developed countries, or emerging markets with sound macroeconomic environments, are not only less likely to experience crises, but also less likely to enact capital controls and forego the benefits of free capital flows. Therefore, the empirical evidence is problematic and cannot be interpreted as evidence that capital controls can increase or decrease country vulnerability to crises.

Finally, even if free capital flows did have the benefit of reducing country vulnerability to crises, any decision to impose capital controls should weigh this potential benefit against any costs. Capital controls share many similarities to most standard regulations—such as labor market regulations that make it more difficult to fire workers. Regulations on both capital flows and labor markets may create safer, less volatile markets, whether in the form of more stable capital flows or workers less likely to lose their jobs. Both regulations also have a cost, whether in the form of lower levels of investment or lower aggregate employment, both of which reduce efficiency and economic growth. To evaluate the overall desirability of a specific regulation, it is necessary to weigh the costs against the benefits.

A thorough evaluation of this tradeoff is beyond the scope of this paper, and Sections II and III discussed some of the costs of capital controls. It is highly plausible that these pervasive costs of capital controls could lower potential growth rates and far outweigh any benefit of reduced vulnerability to crises. A reduction in growth rates, even if minor, when compounded over time can lead to a substantial reduction in aggregate income and standards of living. A short-lived financial crisis, although devastating when it occurs, could have a much smaller effect on

²⁵ For example, see Glick and Hutchinson (2000) or Eichengreen (2003), Ch. 3.

²⁶ For a list of studies, see Eichengreen (2003), pg. 63.

aggregate income and living standards. As a result, even if capital controls reduce the chance of crises, the short-term benefit from avoiding crises may be small compared to the long-term benefit of lifting capital controls and raising long-term growth rates.

Therefore, although some anecdotal evidence could support the claim that “lifting capital controls increases a country’s vulnerability to financial crises,” the empirical evidence is tenuous enough that it is impossible to verify that this is a “reality”. Most empirical evidence actually suggests the opposite relationship—that countries with capital controls are more likely to experience crises—although this evidence suffers from endogeneity and it is impossible to establish causality. Mismanaged countries are still vulnerable to crises—whether or not they have capital controls—and the effectiveness of capital controls fades over time. Perhaps most important, any assessment of the merits of capital account liberalization should not solely be based on the possible cost of increased vulnerability to crises. Any assessment should weigh the possible costs against any possible benefits, such as higher long-term growth rates.

VI. Capital Account Liberalization Has Reduced the Capacity of the IMF to Respond to Crises

“The question arises whether the IMF, as crisis lender, has sufficient resources to do the job... Whether the Fund will in [the] future be large enough relative to the scale of problems, will depend on the future scale and volatility of international capital flows.....”

--Stanley Fischer (1999)

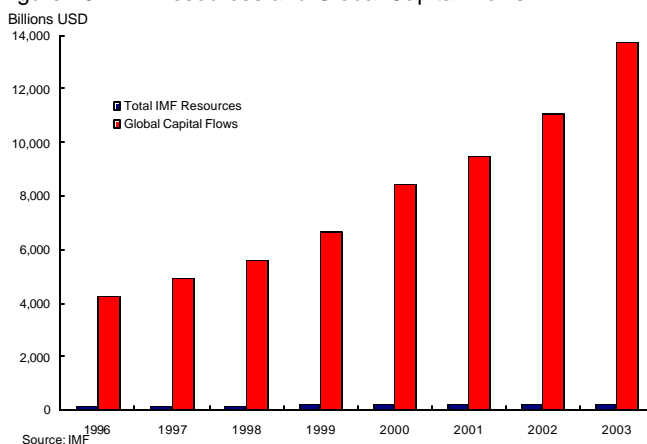
“I have long favored having the Fund phase out of the bailout business. In the long run, this seems inevitable. With the explosion of private markets, the Fund’s most important role is in its so-called surveillance capacity, and in providing a secretariat for global financial leadership.”

--Kenneth Rogoff (2004)

Over the past decade, many countries have liberalized their capital accounts and global capital flows have increased dramatically. IMF resources, however, have grown at a much slower rate. This has raised the concern that as capital accounts have become more liberalized and global capital flows have increased, the IMF no longer has the capacity to respond effectively to financial crises. Measuring the adequacy of IMF resources, however, is complicated. Although IMF resources seem sufficient under reasonable scenarios, it is plausible that they could be inadequate under extreme scenarios, especially as the global economy evolves.

It is a “reality” that there is a large and growing discrepancy between the size of global capital flows and IMF resources. Figure 10 shows that between 1996 and 2003, total global capital flows (including debt, equity, and syndicated credit) increased from about \$4 trillion to over

Figure 10: IMF Resources and Global Capital Flows

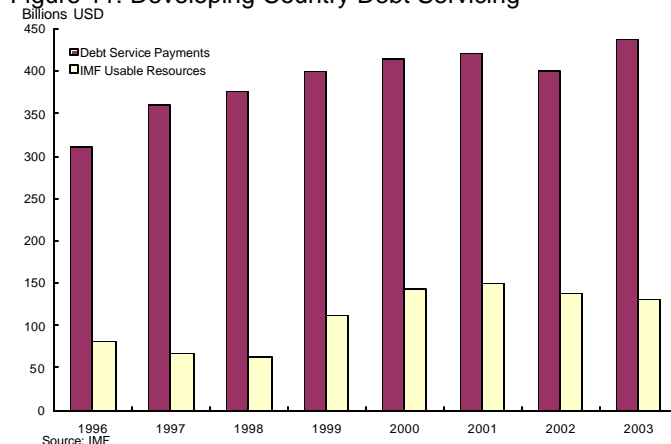


\$13 trillion. Total IMF resources, however, only increased from \$200 billion to \$300 billion over the same period.²⁷ IMF resources were not only much smaller than global capital flows at the beginning of this period, but they have grown at a much slower rate. Moreover, this trend in IMF resources reflects a substantial increase in IMF quotas (and therefore resources) that was approved in 1998 in response to concerns about insufficient resources after the Asian crisis. Therefore, if IMF resource adequacy is assessed based on a comparison of IMF resources to the volume of global capital flows, the ability of the IMF to respond to financial crises appears to be limited.

This comparison of the volume of global capital flows to total IMF resources, however, is a flawed measure of the IMF’s capacity to respond to crises. Global capital flows include a sizable amount of equity finance that IMF lending would not be expected to support. Roughly 60% of global capital markets consist of private sector securities that the IMF would also be unlikely to support. Moreover, nearly all of the recent growth in global capital markets has taken place among developed countries with deep capital markets, countries that are unlikely to request IMF loans. Therefore, the rapid growth of global capital flows and global financial markets is not the relevant measure to assess IMF resource adequacy.

Instead, there are several alternative and more informative measures of IMF resource adequacy. One measure is the relative size of usable IMF resources compared to the annual debt servicing requirements (interest and principal payments) of developing countries. Usable resources are total resources less gold and the quotas of countries considered by the Board to be in “weak” external positions. Debt servicing requirements from developing countries provide a more accurate indicator of the potential demand for IMF loans. As shown in Figure 11, usable resources of the IMF have averaged roughly one quarter of annual debt-servicing payments of developing countries in recent years. (Since developing countries are unlikely to all face liquidity crises simultaneously, IMF usable resources can still be adequate even if they do not fully cover all debt-servicing payments.) According to this measure, IMF resource availability is similar to resource availability in 1996.

Figure 11: Developing Country Debt Servicing



Another measure of IMF resource adequacy is to compare usable IMF resources with potential future borrowing requests based upon the size of IMF member quotas. In normal circumstances, countries can borrow up to 100% of their quota within one year (and up to 300% of their quota

²⁷ Moreover, a portion of these resources would not be immediately available to respond to a crisis. As of August 2004, the one-year forward lending capacity of the IMF was \$93 billion. About \$50 billion of this is the General Arrangements to Borrow (GAB) and New Arrangements to Borrow (NAB), which are contingent credit lines maintained with various IMF members that the Fund can draw upon if necessary. Drawing on these resources, however, would require approval by the IMF Executive Board and, for the United States, would also require a congressional appropriation.

cumulatively). As shown in Figure 12, however, a majority of this value reflects quotas for developed countries that are unlikely to draw on IMF resources.²⁸ Assuming that the maximum IMF resources that could be required in any year would occur if all non-OECD countries simultaneously drew on their full quota, the demand on IMF resources would be just over \$100 billion. IMF total usable resources (which are currently close to \$160 billion) would be adequate to cover this situation, and could even be adequate if a fraction of non-OECD countries drew on their maximum cumulative quota over three years. In more limited circumstances, however, the IMF can permit countries to receive “exceptional access” and exceed quota limits. For example, Brazil’s current IMF program includes commitments greater than 900% of Brazil’s quota. If a number of emerging markets received exceptional access at the same time, IMF lending resources could be stretched.

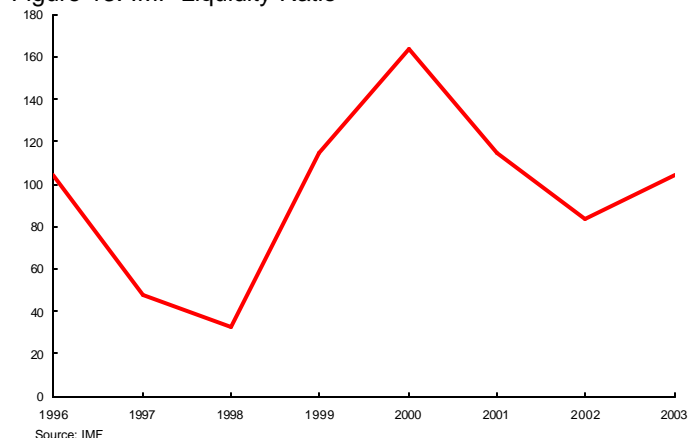
A final and narrower measure of IMF resource adequacy is the IMF’s “liquidity ratio,” which measures the Fund’s net uncommitted usable resources relative to liquid liabilities.²⁹ Under “normal conditions” a ratio of 100% is generally considered to reflect adequate resource availability. As of August 2004, the Fund’s liquidity ratio stood at 132%. As shown in Figure 13, the liquidity ratio has recently ranged from a high of 160% in 2000 to a low of 32% during the Asian financial crisis. By this measure, IMF resources are currently as adequate as they were in 1996, despite the surge in capital flows over this period.

This discussion of different measures of IMF resource adequacy suggests that it is extremely difficult to calculate exactly how large IMF resources would need to be in order for the IMF to effectively respond to a series of crises. Most measures suggest that despite the recent increase in global capital flows, the IMF is currently sufficiently positioned to handle several financial crises simultaneously, and is at least as well positioned as it was in the mid-1990s. It is also possible, however, to craft “worst case” scenarios where a large number of countries simultaneously experience crises and IMF resources are inadequate. As global capital flows and financial markets continue to expand, it will undoubtedly become easier to construct these types of scenarios.

Figure 12: IMF Quotas – October 2004 (in millions)

Country	Quota Size		Percent of Total
	SDRs	US Dollars	
Argentina	2,117	\$2,964	1.0
Brazil	3,036	\$4,250	1.4
China	6,370	\$8,919	3.0
India	4,158	\$5,821	2.0
Japan	13,313	\$18,638	6.3
Russia	5,945	\$8,323	2.8
Saudia Arabia	6,985	\$9,779	3.3
Turkev	964	\$1,350	0.5
U.K.	10,739	\$15,035	5.1
U.S.	37,149	\$52,008	17.5
Total OECD	139,317	\$208,806	64.5
Total non-OECD	74,074	\$111,020	35.5

Figure 13: IMF Liquidity Ratio



²⁸ For example, the U.S. quota size is 17% of total quotas, and the combined quotas of the United Kingdom and Japan is another 11% of the total.

²⁹ Liabilities are the sum of reserve tranche positions of countries (what countries are automatically entitled to borrow upon request) plus IMF borrowing from GAB and NAB

Therefore, as global financial integration increases and global financial markets continue to develop, the role of the IMF will inevitably evolve. Assessing the adequacy of IMF resources to respond to different events is a difficult task. It is possible to construct extreme scenarios in which IMF resources would be insufficient, but it was also possible to construct these scenarios in the past during periods with less capital mobility. According to some measures, IMF resources are as adequate today as in 1996, despite the rapid growth in global capital flows over this period. Therefore, it appears to be a myth that “capital account liberalization has reduced the capacity of the IMF to respond to crises.” Moreover, far more important than the IMF’s total lending capacity is how these resources are utilized (such as reducing loans to protracted lenders in order to free resources for emergency lending) and the policies adopted by member countries. As countries liberalize their capital accounts, they should simultaneously adopt policies to strengthen their macroeconomic, financial and institutional environment (as discussed in Section VII). All of these policies would reduce the need for IMF lending in the future and increase the likelihood that IMF resources would be adequate.

VII. Capital Controls Should Only Be Lifted After Strengthening Other Financial, Institutional and Macroeconomic Capabilities

“The freeing of capital flows in haste, without putting in place monitoring and regulatory mechanisms and banking reforms, amounts to a rash, gung-ho financial capitalism. It can put nation-states at serious risk of experiencing massive, panic-fed outflows of short-term capital funds, which would drive their economies into a tailspin.”

--Jagdish Bhagwati (2004)

“Experience suggests they [capital controls] should only be removed gradually, at a time when....the necessary infrastructure (in the form of strong domestic financial institutions, a sound macroeconomic framework, a market-based monetary policy, the underpinnings of an effective foreign-exchange market, and the information base necessary for the markets to operate efficiently) is put in place.”

--Stanley Fischer (2003)

After the backlash against capital account liberalization in the late 1990’s, most (although certainly not all) economists and policymakers appear to have moved toward a more nuanced view. This view argues that capital account liberalization should be a long-term goal for emerging markets, but countries should accomplish a number of prerequisites before removing capital controls. The list of prerequisites generally includes steps such as: building strong institutions, implementing sound regulations, strengthening financial systems, enacting prudential supervision, enforcing a strong rule-of-law, and building a stable macroeconomic environment. All of these steps will increase the benefits from capital account liberalization while reducing the risks. For example, strengthening banking systems is important to ensure that any increased capital inflows are allocated to their most efficient uses, instead of being loaned to cronies or directed to inefficient state-sanctioned projects. All of these steps will improve confidence in the country’s economy, so that investors and domestic citizens are less likely to withdraw capital during liberalization. These steps will also help ensure that local companies and banks can better withstand any shifts in capital flows that occur as the controls are removed.

The empirical evidence on the importance and prioritization of these supposed prerequisites for capital account liberalization, however, yields mixed results. For example, Chinn and Ito (2002) emphasize the importance of legal and institutional development, and show that financial systems with a higher degree of legal and institutional development benefit more, on average, from liberalization.³⁰ Gelos and Wei (2002) emphasize the importance of transparency and show that countries with greater transparency are not only more likely to attract international equity investment, but are less vulnerable to herding and capital flight during crises. Klein and Olivei (1999) emphasize the importance of overall development, finding that capital account openness only stimulates financial development in OECD countries. On the other hand, Arteta, Eichengreen and Wyplosz (2001) find mixed evidence of the role of a country's institutions (as measured by the rule of law) and financial depth on the relationship between capital account openness on growth. Instead, they conclude that the most important factor determining if capital account liberalization has a positive effect on growth is the absence of a large black-market premium—which they interpret as a measure of macroeconomic imbalances.

Moreover, anecdotal evidence also suggests that even if countries do attempt to undertake many of these steps, such as strengthening their financial systems and implementing sound regulations, these steps are no panacea. For example, many European countries had well-capitalized banks, sound supervision, and relatively good governance in the early 1990s, yet they still experienced sharp capital outflows and many abandoned their fixed exchange rates during the ERM crisis. Brazil had a relatively sound, well-supervised banking system and even a flexible exchange rate, but still experienced a surge in capital outflows, large currency depreciation, and sharp increase in borrowing costs during its election in 2002.

Equally important, experience suggests that countries should NOT wait to successfully complete all of these ambitious financial, institutional, and macroeconomic reforms before liberalizing their capital accounts. All of these steps are clearly beneficial and desirable, not only to reduce the risks from capital account liberalization, but also to strengthen overall economies and raise long-term growth rates. Countries should move forward in these areas, no matter what the status of their capital accounts. But these steps should not be viewed as necessary for liberalization. If countries waited to liberalize until they had accomplished all of these ambitious goals, they would forego the benefits of liberalization for decades—or even longer. Would the United States have been better off with a closed capital account in the 1980's due to its financial vulnerabilities in the savings and loan industry? Should Japan have avoided liberalization due to its significant banking sector problems in the 1990's? The answer is clearly no.

Moreover, even if countries have not completed all of these ambitious steps, liberalizing their capital accounts and increasing competitive pressure, or even just making concrete commitments to liberalize in the near future, could help accelerate these useful reforms. For example, reforming banking systems to ensure that they lend based on commercial assessments rather than political connections can be a prolonged and difficult process. Removing capital controls (such as allowing foreigners to invest in the banking system or allowing domestic citizens to invest abroad) could increase market discipline in the banking system. Several papers document that

³⁰ Aghion, Bacchetta, and Banerjee (2000) develop a theoretical model of why financial development is a key variable determining the impact of capital account liberalization.

capital account liberalization can strengthen banking and financial systems.³¹ Removing capital controls could encourage the very reforms that in turn increase the benefits and reduce the risks from capital account liberalization.

China's recent experience highlights how capital account liberalization can provide an important incentive for governments to progress on important domestic reforms. The Chinese government realizes that capital account liberalization is in the country's best long-term interest and that movement in this direction is inevitable as China becomes more fully integrated in the global economy. China is also reticent to fully open its capital account today, partially due to its weak financial system and the need to strengthen regulations and prudential supervision. Therefore, China committed to gradually open its banking sector to foreign investment as part of its WTO accession, with an important commitment to allow foreign banks to do business in domestic currency in 2007. This looming deadline has, in turn, encouraged the Chinese government to accelerate steps to strengthen and reform the banking system. For example, the government injected \$45 billion into the two largest state-owned banks, is working to improve accounting, transparency, and risk-based assessments of loans, and is moving to list selected banks on the stock market. Although much, much work still needs to be done, the impending market discipline expected from competition with foreign banks has accelerated the pace of these difficult reforms.

Therefore, the claim that "capital controls should only be lifted after strengthening other financial, institutional and macroeconomic capabilities" is partially a "myth," and partially a "reality." Capital account liberalization does have greater benefits and reduced risks if an economy has implemented strong institutions and prudential supervision and built a healthy financial system and macroeconomic environment. Countries should not wait until all of these steps have been fully completed, however, before undertaking liberalization. Instead, countries should continually move forward in removing capital controls, setting concrete goals and deadlines for future liberalization in order to accelerate the very reforms that facilitate the process.

VIII. Conclusions

The series of financial crises in the late 1990's prompted a fairly widespread backlash against capital account liberalization in emerging markets. This backlash generated a number of arguments which have become popular justification for emerging markets to delay lifting their capital controls and allowing the free movement of capital. This paper argues, however, that six of the most common arguments are largely "myths" instead of "realities".

The first argument was that "the empirical evidence on the benefits of capital account liberalization is inconclusive." Although the cross-country macroeconomic evidence on how capital account liberalization effects growth has yielded mixed results to date, this statement is clearly a myth. A series of microeconomic studies has found persuasive evidence that capital account liberalization can improve the allocation of resources, and that capital controls have

³¹ For example, see Chinn and Ito (2002). Klein and Olivei (1999) also find evidence that capital account liberalization increases financial depth, although their results are strongest for developed countries.

pervasive and substantial costs. This literature, although still in its infancy, provides compelling empirical evidence on the benefits of capital account liberalization.

The second argument was that “the Chilean capital controls were successful and should be employed by other emerging markets.” This is also a myth if success is defined as having substantial benefits with minimal costs. The empirical evidence on the macroeconomic benefits of the Chilean controls is limited, at best. The microeconomic evidence, however, suggests that the Chilean controls created a number of distortions, such as forcing firms to change their financial structure to avoid the tax and making it more difficult for smaller companies to obtain financing for productive investment. This inefficient allocation of capital and resources undoubtedly reduced productivity and growth in Chile, with little concrete benefit.

The third argument was that “capital account liberalization will not benefit emerging markets since capital flows from poor to rich countries.” Although it is a reality that capital currently tends to flow, on aggregate, from poor to rich countries, it is a myth to thereby draw the conclusion that therefore “liberalization will not benefit emerging markets.” Liberalization can yield substantive benefits in addition to capital inflows. Some individual developing countries have received large capital inflows and these inflows have substantially benefited their economies. Moreover, emerging markets can and should adopt reforms to raise the return to investment in their countries—such as by improving the business environment. Countries that adopt these reforms are likely to experience net capital inflows—instead of outflows—and substantially benefit from this aspect of capital account liberalization.

The fourth argument was that “lifting capital controls increases a country’s vulnerability to financial crises.” Although some anecdotal evidence supports this claim, the empirical evidence is tenuous enough that it is impossible to verify that this is a “reality.” Most empirical evidence actually suggests the opposite relationship—that countries with capital controls are more likely to experience crises—although this evidence suffers from endogeneity. Mismanaged countries are still vulnerable to crises—whether or not they have capital controls—and the effectiveness of capital controls fades over time. Perhaps most important, any assessment of the merits of capital account liberalization should not solely be based on the possible cost of increased vulnerability to crises, but should also weigh any possible benefits, such as higher long-term growth rates.

The fifth argument was that “capital account liberalization has reduced the capacity of the IMF to respond to crises.” Assessing the adequacy of IMF resources is difficult, but this is also a “myth” since according to some measures, IMF resources are as adequate today as in 1996, despite the rapid growth in global capital flows over this period. Granted, it is possible to construct extreme scenarios in which IMF resources would be insufficient, but it was also possible to construct these scenarios in the past during periods with less capital mobility. As global financial integration increases and global financial markets continue to develop, the role of the IMF will inevitably evolve, but IMF resources currently appear to be adequate for a range of reasonable scenarios.

The sixth and final argument was that “capital controls should only be lifted after strengthening other financial, institutional and macroeconomic capabilities.” This claim is partially a “myth,” and partially a “reality.” Capital account liberalization does have greater benefits and reduced

risks if an economy has implemented strong institutions and prudential supervision, and built a healthy financial system and macroeconomic environment. Countries should not wait until all of these steps have been fully completed, however, before undertaking liberalization. Instead, countries should continually move forward in removing capital controls, setting concrete goals and deadlines for future liberalization in order to accelerate the very reforms that facilitate the process.

Therefore, this series of arguments used as a justification for countries to delay capital account liberalization is largely based on “myths” instead of “realities.” Several of these arguments do raise important issues that should be taken into account when countries lift their capital controls—such as the importance of simultaneously building strong institutions and financial systems. The importance of combining liberalization with good policies, however, should not be used as an excuse to avoid liberalization entirely. Emerging market officials should instead focus on the realities of the substantial benefits from free capital flows over time, and avoid being distracted by the wide-ranging myths.

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