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SHOULD THE IMF PURSUE CAPITAL-ACCOUNT CONVERTIBILITY?

STANLEY FISCHER, RICHARD N. COOPER, RUDIGER DORNBUSCH,
PETER M. GARBER, CARLOS MASSAD, JACQUES J. POLAK,
DANI RODRIK, AND SAVAK S. TARAPORE



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS
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The authors contributing to this Essay are Stanley Fischer, Richard N. Cooper, Rudiger Dornbusch, Peter M. Garber, Carlos Massad, Jacques J. Polak, Dani Rodrik, and Savak S. Tarapore. They have all written extensively on the subject of international capital movements and bring several points of view to the discussion here. The authors' affiliations and recent publications are noted in the Preface.

PETER B. KENEN, Director International Finance Section

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CONTENTS

PREFACE Peter B. Kenen	V
CAPITAL-ACCOUNT LIBERALIZATION AND THE ROLE OF THE IMF Stanley Fischer	1
SHOULD CAPITAL-ACCOUNT CONVERTIBILITY BE A WORLD OBJECTIVE? Richard $N.\ Cooper$	11
CAPITAL CONTROLS: AN IDEA WHOSE TIME IS PAST Rudiger Dornbusch	20
BUTTRESSING CAPITAL-ACCOUNT LIBERALIZATION WITH PRUDENTIAL REGULATION AND FOREIGN ENTRY $Peter\ M.\ Garber$	28
The liberalization of the capital account: chile in the 1990s $Carlos\ Massad$	34
THE ARTICLES OF AGREEMENT OF THE IMF AND THE LIBERALIZATION OF CAPITAL MOVEMENTS $Jacques\ J.\ Polak$	47
WHO NEEDS CAPITAL-ACCOUNT CONVERTIBILITY? Dani Rodrik	55
AN INDIAN APPROACH TO CAPITAL-ACCOUNT CONVERTIBILITY Savak S. Tarapore	66

TABLE

1	Developing Countries with No Restrictions on Capital-Account Transactions, 1973–1996	61
	FIGURES	
1	Economic Growth and Capital-Account Liberalization, 1975–1989	62
2	Investment as a Share of GDP and Capital-Account Liberalization, 1975–1989	63
3	Inflation and Capital-Account Liberalization, 1975–1989	64

PREFACE

In September 1997, at its Hong Kong meeting, the Interim Committee of the International Monetary Fund (IMF) adopted a statement on the liberalization of international capital movements. It asked the executive board of the Fund to complete work on an amendment to the IMF's Articles of Agreement that would make the liberalization of capital movements one of the purposes of the Fund and would extend the Fund's jurisdiction by requiring member governments to assume "carefully defined and consistently applied obligations" with regard to capital-account liberalization. In effect, the Interim Committee was recommending that the definition of currency convertibility in the Fund's Articles, which is currently limited to current-account transactions, be extended to capital-account transactions as well.

This essay contains eight short papers reflecting on the issues raised by the Hong Kong statement. It begins with a paper by Stanley Fischer, First Deputy Managing Director of the IMF, outlining the case for liberalizing capital-account transactions and for giving the Fund jurisdiction in this matter. It includes contributions by Richard N. Cooper, Rudiger Dornbusch, Peter M. Garber, Carlos Massad, Jacques J. Polak, Dani Rodrik, and Savak S. Tarapore.

Stanley Fischer has been First Deputy Managing Director of the IMF since 1994. Before joining the Fund, he was Killian Professor in the Department of Economics at the Massachusetts Institute of Technology. From 1988 to 1990, he served as Chief Economist of the World Bank. He has written extensively on macroeconomic theory and policy and is a coauthor, with Olivier Blanchard, of *Lectures on Macroeconomics* (1989).

Richard N. Cooper is Maurits C. Boas Professor of International Economics at Harvard University. He has served as Chairman of the Federal Reserve Bank of Boston and as Undersecretary of State for Economic Affairs. His books include *The Economics of Interdependence* (1980) and, most recently, *Environmental and Resource Policies for the World Economy* (1994). This is his third appearance in a series published by the International Finance Section.

Rudiger Dornbusch is Ford Professor of Economics and International Management at the Massachusetts Institute of Technology. He has made important analytical contributions to open-economy macroeconomics and worked extensively on the problems of stabilization and debt in developing countries. This is his third publication in a series issued by the International Finance Section.

Peter M. Garber has been Professor of Economics at Brown University since 1985 and has also taught at the Universities of Rochester and Virginia. He has written about monetary economics, international finance, and financial history. He is a coauthor, with Robert Flood, of *Speculative Bubbles, Speculative Attacks and Policy Switching* (1994). This is his second contribution to the publications of the International Finance Section.

Carlos Massad is Governor of the Central Bank of Chile. He has also served as Deputy Executive Secretary of the United Nations Commission for Latin America and the Caribbean and as Executive Director of the IMF. He has written and edited numerous publications on capital formation, adjustment with growth, and internal debt and financial stability, with particular attention to the Latin American experience.

Jacques J. Polak began his association with the IMF in 1947. He was Director of Research from 1958 to 1980, Economic Counsellor from 1966 to 1980, and Executive Director from 1981 to 1986. He has played a key role in developing the Fund's approach to the analysis of balance-of-payments problems. His books include *An International Economic System* (1953) and *Financial Policies and Development* (1989). He is also the author of *The Changing Nature of IMF Conditionality*, published by the International Finance Section in 1991.

Dani Rodrik is Professor of International Political Economy at the John F. Kennedy School of Government at Harvard University and a research associate at the National Bureau of Economic Research. He has published a number of important papers on trade, growth, and economic development and is the author of *Has Globalization Gone Too Far?* (1997). This is his second appearance in a series published by the International Finance Section.

Savak S. Tarapore has had a long career with the Reserve Bank of India, retiring as Deputy Governor in 1996. He served as chairman of the Reserve Bank's Committee on Capital Account Convertibility, and his paper for this symposium draws on the committee's recommendations. He is currently a member of the Government of India's Committee on Banking Sector Reforms.

CAPITAL-ACCOUNT LIBERALIZATION AND THE ROLE OF THE IMF

Stanley Fischer

Over fifty years ago, the original Articles of Agreement of the International Monetary Fund (IMF) put current-account convertibility—unrestricted access to foreign exchange to conduct trade in goods and services—and trade liberalization at the center of the Fund's mandate. Now, as the globalization of capital markets proceeds apace, the Fund's executive board has been charged with completing an amendment of the Articles of Agreement to promote capital-account liberalization.

International capital flows have increased rapidly since 1990. Annual net capital inflows to developing countries averaged more than \$150 billion a year from 1990 through 1995 and exceeded \$200 billion in 1996,¹ an amount equal to 0.8 percent of world gross domestic product (GDP) and well above 2 percent of developing-country GDP. Asia, in particular, benefited from these inflows, receiving more than \$60 billion a year from 1990 through 1995 and more than \$100 billion in 1996. Net inflows to some Asian countries averaged 5 to 8 percent of GDP over long periods, much of it in foreign direct investment.

These flows were driven by high rates of return in recipient countries, by the liberalization of international capital transactions by both industrial and developing countries, by the development of financial systems in the recipient countries, and by external factors, including the declining trend in longer-term interest rates in the advanced economies over the last decade and the emergence of large institutional investors in the industrial countries.

An earlier version of this paper was presented at a seminar in Hong Kong in September 1997. I am grateful for the assistance of Barry Johnston and Owen Evans. The views expressed here are the author's and not necessarily those of the International Monetary Fund.

 $^{^{1}}$ Here and throughout, "billion" equals one thousand million.

As a result of the recent Asian crisis, the volume of capital flows to developing countries has declined from its peak in 1996.² However, this decline is probably only a temporary interruption to the trend increase. Portfolios in the advanced countries remain insufficiently diversified internationally, and the residents of developing countries likewise have much to gain from investing in capital markets in other countries. The volume of gross international capital flows is thus likely to return to a rising trend as the worst of the recent crisis recedes, as information about developing-country markets spreads, as transactions costs continue to decline, and as the liberalization and sophistication of capital markets continues to advance. Nonetheless, the Asian crisis forcefully raises the questions of whether capital-account liberalization has moved too quickly, and whether it should not be delayed for as long as possible.

I reject this view. But the concerns of those who fear the consequences of capital-account liberalization should not be lightly dismissed. In this essay, I would like to persuade you that:

- the potential benefits of liberalizing the capital account outweigh the costs;
- countries need to prepare well for capital-account liberalization; they will need to adapt their policies and institutions, particularly their financial systems;
- an amendment of the Fund's Articles of Agreement is the best way for the international community to help ensure that capitalaccount liberalization is carried out in an orderly, nondisruptive, way that minimizes the associated risks.

1 The Benefits and Risks of Capital-Account Liberalization

There are two chief arguments in favor of capital-account liberalization. The first is that it is an inevitable step on the path of development, which cannot be avoided and should be embraced. After all, the most advanced economies all have open capital accounts.

The second and more powerful argument for liberalization is that the potential benefits outweigh the costs. Put abstractly, free capital movements facilitate an efficient global allocation of savings and help channel

² A detailed analysis of the Asian crisis is provided in the IMF's *World Economic Outlook Interim Assessment* (IMF, 1997). See also Fischer (1998). Both documents are available on the IMF website (www.imf.org).

resources into their most productive uses, thus increasing economic growth and welfare. From the individual country's perspective, the benefits take the form of increases in the pool of investible funds and in the access of domestic residents to foreign capital markets. From the viewpoint of the international economy, open capital accounts support the multilateral trading system by broadening the channels through which countries can finance trade and investment and attain higher levels of income. International capital flows expand the opportunities for portfolio diversification and thereby provide investors in both industrial and developing countries with the potential to achieve higher risk-adjusted rates of returns.

Still, what about the risks? International capital flows tend to be highly sensitive to macroeconomic policies, to the soundness of the banking system, and to economic and political developments. Accordingly, market forces can exert a disciplining influence on macroeconomic policies. Normally, when the market's judgment is right, this discipline is valuable, rewarding good policies and penalizing bad. Of course, policymakers may not welcome such discipline. Nor are they likely to admit that the capital markets are only the messenger, delivering a verdict on their performance. Rather, they may be tempted to shoot the messenger.

However, markets are not always right. Sometimes inflows are excessive, and sometimes they are sustained for too long. Markets tend to react late, but then, to react fast and sometimes excessively. Of most concern, market overreactions sometimes take the form of contagion effects, spillovers from one market or country to others. Some spillovers are rational and efficient—for instance, when a country devalues, the equilibrium exchange rate for its competitors may also depreciate. But sometimes contagion effects are excessive.

In sum, liberalization of the capital account can bring significant benefits to countries. Residents and governments are able to borrow and lend on more favorable terms, and domestic financial markets become more efficient as a result of the introduction of advanced financial technologies, leading to a better allocation of both saving and investment. As a result, income and living standards are likely to rise more rapidly and to be more sustainable. At the same time, capital-account liberalization increases the vulnerability of the economy to swings in sentiment. Usually, these swings are rationally based, but they may on occasion be excessive, and they may sometimes reflect contagion effects.

2 Managing a Liberalized System

What is the right response to operating in a system that offers considerable benefits, but in which financial flows may reverse rapidly, sometimes penalizing mistakes severely, sometimes as a result of contagion effects? The prime need is to avoid policies that can contribute to rapid reversals in capital flows, and to strengthen the structure of the economy so as to minimize vulnerability. Most of what is required of emerging-market countries is well known. They should, in particular, pursue sound macroeconomic policies, strengthen their domestic financial systems, phase capital-account liberalization appropriately, and provide information to the markets. At the international level, there is also the role of surveillance to consider, including the provision of information, and the potential need for financing. Let me take these topics up in turn.

The Macroeconomic Policy Framework

A sound policy framework promotes growth by keeping inflation low, the budget deficit small, and the current account sustainable. As a matter of debt dynamics, the sustainability of the current account depends on the economy's growth rate and the real interest rate. But sustainability has another sense—the ability to withstand shocks—that is less susceptible to formal analysis. In any case, large current-account deficits should be cause for concern. Although current-account deficits financed by longer-term borrowing and by foreign direct investment are generally more sustainable, large deficits financed primarily by short-term capital flows are a cause for alarm.

It is sometimes difficult to deal with short-term capital inflows that are a response to high domestic interest rates. This is the capital-inflow problem that many countries have recently faced. Although there is no easy answer, a tightening of fiscal policy provides the first line of defense. A second response is to increase the flexibility of the exchange rate.

Strengthening the Financial Sector

The critical role of financial-sector strength in determining an economy's response to a crisis has become ever clearer during the 1990s and has been further underscored by events in Asia. By now, policymakers have a good idea of what needs to be done to strengthen financial systems. They need to improve supervision and prudential standards, to ensure that banks meet capital requirements, make adequate provision for bad

loans, limit connected lending, and publish informative financial information, and they need to ensure that insolvent institutions are dealt with rapidly (Folkerts-Landau and Lindgren, 1998). The task is urgent, both in countries now seeking to recover from recent crises and in those that seek to avoid future disasters.

Phasing and the Use of Controls

There are dangers in liberalizing capital movements in an economy in which the macroeconomic framework and the financial sector are weak. There is thus a case for phasing liberalization while paying due regard to the country's macroeconomic and external situation, the development of its markets and institutions, and the impact of existing controls.

Absent coordination of capital-account liberalization and financial-sector reforms, there may be regulatory distortions and regulatory incentives for capital movements, unrelated to underlying economic conditions. Both factors could cause instability in capital movements. Weak financial institutions may be incapable of efficiently intermediating large flows of funds to which they gain access as a result of capital-account liberalization. They may, in addition, be adversely affected by movements in asset prices that result from international capital flows. Most important, weak financial institutions are especially vulnerable to reversals of flows.

Prudential controls on foreign-capital flows are already appropriately in place in many countries, for instance, in restrictions on the open foreign-currency positions that banks can take. Similar restrictions could be contemplated on open positions taken by corporations—although much work needs to be done in this regard, both in establishing an adequate reporting system and in devising efficient prudential controls. Such controls, intended to reduce the vulnerability of domestic institutions to shifts in foreign capital flows, could well form part of a set of internationally accepted prudential standards.

In addition to prudential controls, a case can be made that countries with weak financial systems should restrict short-term inflows. Such controls are likely to do less damage if they are market based, as in the case of reserve requirements on foreign deposits, rather than if they are quantitative. Controls on capital outflows may have been imposed for balance-of-payments reasons and retained both for those reasons and because they provide captive funds for domestic financial institutions. Their gradual removal is generally desirable.

Information Provision

One of the many lessons drawn from the Mexican crisis is that the difficulties were exacerbated by the poor quality of public economic information. Specifically, information about official reserves was provided only with a long lag, and information on the structure of the external debt was not readily available. As a result, the IMF introduced a data-standards initiative that resulted in the establishment of the Special Data Dissemination Standard in early 1996.³ The Asian crisis has reinforced the argument for better and more timely provision of information, including detailed information about central-bank reserves and forward operations. There are two arguments for providing such information. First, better-informed markets will discipline policies more effectively. Second, the obligation to publish information can help prevent unwise decisions and can concentrate policymakers' minds at an early stage, before a full-fledged crisis has developed. In addition, there is a clear need for improved provision of information by the private sector, in the form of corporate accounts and financial-sector information that meet international standards.

The Role of Surveillance

Since the Mexican crisis, the IMF has placed increased emphasis on timely surveillance of market developments. It is fair to say that the Fund's new surveillance procedures worked well in the case of Thailand. In other cases, although the IMF identified and warned about financial-sector and other weaknesses in advance, it did not foresee the impending crises or their scale.

Although it is essential to seek continually to improve surveillance, it would be a mistake to imagine that any surveillance mechanism will be perfect. The Fund will surely miss the warning signs of some future crises and will just as surely predict some crises that do not occur. The international system cannot be built on the assumption that improved surveillance or information provision will prevent all future crises—although they should reduce the frequency of crises.

The Need for Financing

In a crisis, private financing evaporates, and countries are forced to take painful adjustment measures. One purpose of the IMF—set out in

³ The Dissemination Standards Bulletin Board (DSBB) on the internet (dsbb.imf.org) provides information on countries' economic and financial data systems. By February 1998, there were forty-three subscribing countries.

the first Article of Agreement—is "to give confidence to members by making the general resources of the Fund temporarily available to them under appropriate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity." The IMF—that is, the international community—has shown its willingness to act in this way in many crises. It will continue to act in accordance with its purposes and to provide financing, with the conditionality that affords the safeguards mentioned above, to countries facing an external crisis.

The Mexican and Asian crises, and the proposed capital-account amendment to the Fund's Articles of Agreement have raised two important questions about IMF lending. First, does the increased scale of international capital flows require a reexamination of the criteria that determine the size of IMF loans? Second, does the Fund's willingness to lend in such circumstances create a moral hazard?

The need to reconsider financing needs arises because, as the efficiency of the international capital markets improves, there may well be fewer crises requiring official funding, but they may be larger. In the Mexican, Thai, and Indonesian crises, the Fund was able to provide very large loans relative to a country's quota only by invoking the "exceptional circumstances" clause.

More recently, with the introduction of the Supplemental Reserve Facility, which was made available to Korea, the Fund has gained the ability to provide very large loans at a higher interest rate and for a shorter term than apply in its normal facilities. Thus, the Fund is now able to provide financing to members to deal with potentially large crises, possibly associated with massive and sudden capital-account reversals.

There has been much discussion about the moral hazard associated with the Fund's willingness to lend to countries in trouble. The hazard is not that the availability of IMF financing in emergencies encourages countries to behave recklessly, because IMF conditionality is such that governments in trouble are usually too slow rather than too fast to come to the Fund. The hazard is, rather, that the private sector may be too willing to lend, because it knows that a country in trouble will go to the Fund rather than default.

Spreads in some markets were so low until mid-1997 as to support this view. As the Asian crisis has developed, however, it has become clear that most creditors of the affected countries have taken significant losses. Thus, the problem of moral hazard is increasingly seen to apply mainly to lending in the interbank market and to lending to sovereigns. The international community has struggled with the question of how to reduce this moral hazard but has not yet found a good solution. This issue will certainly be a main focus of the post-crisis analysis and search for institutional reform.

3 The Role of the Fund and the Capital-Account Amendment

As the volume of capital flows has risen, the Fund has become increasingly involved, de facto, in helping member countries liberalize in a manner that does not undermine economic and financial stability. Yet, the only right the Fund has de jure regarding capital-account transactions is its right to require countries to impose capital controls in certain contexts.

In April 1997, the Interim Committee of the IMF agreed that there would be benefits to amending the Fund's Articles of Agreement to make the liberalization of international capital movements a central purpose of the Fund and to extend the Fund's jurisdiction to capital movements. In brief, the principal goal of the amendment would be to enable the Fund to promote the orderly liberalization of capital movements.

The difference between the analytic understanding of capital-versus current-account restrictions is striking. The economics profession knows a great deal about current-account liberalization, its desirability, and effective ways of liberalizing. It knows far less about capital-account liberalization. It is time to bring order to both thinking and policy on the capital account.

In addressing this issue, it is likely that the Fund will develop analogies for the capital account from the existing Articles VIII and XIV that apply to the current account. In accepting the obligations of Article VIII, a country provides confidence to the international community that it will not impose restrictions on the making of payments and transfers for current international transactions without Fund approval and that it will, therefore, pursue policies that will obviate the need for such restrictions. Until a country is ready to accept Article VIII, it may, under Article XIV, maintain and "adapt to changing circumstances" the restrictions that were in place when it joined the Fund. This framework has allowed the Fund to take account of the different starting positions of its members and has provided a basis for dialogue between the Fund and a member about the appropriateness of the member's restrictions and the policies and reforms that will be necessary to allow for their elimination.

Similarly, in the case of the capital account, we can envisage members eventually accepting the objective of liberalizing the capital account fully over time and availing themselves in the interim of transitional arrangements that would be approved by the Fund. Members would be able to adapt to changing circumstances the controls in place when the amendment comes into force. New restrictions could be approved for prudential reasons and to reflect the evolution of markets and institutions. The Fund might also have the authority to approve temporarily restrictions needed to address macroeconomic and balance-of-payments problems. As with current-account convertibility, a member's acceptance of the new obligations with respect to capital movements would send a clear signal of its intentions to the international financial community, possibly strengthening thereby its access to international markets.

If this framework is adopted, the Fund—and the economics profession—will have to develop further the analysis of different kinds of capital controls. In doing so, we will need to distinguish between capital-inflow controls and capital-outflow controls, between general and selective controls, between market-based and quantitative controls, between prudential controls and controls imposed for balance-of-payments or macroeconomic reasons, and among controls on different kinds of capital flows.

A capital-account amendment that provides for a transitional period, during which capital controls could remain in place, would make it possible for the Fund to encourage liberalization while paying due regard to the varying circumstances of its members. It would facilitate the establishment of a universally applied code of good behavior in the application of capital controls, enabling the Fund to determine when macroeconomic, structural, and balance-of-payments considerations require adherence to—or permit exemptions from—obligations relating to capital-account liberalization. This is of particular importance in light of the fact that the Fund may also be called upon to finance balance-of-payments problems caused by capital movements. The extension of Fund jurisdiction would complement rather than duplicate existing bilateral, regional, and multilateral agreements and initiatives in this area.

4 Concluding Remarks

An international environment of free international capital movements provides enormous opportunities for countries and the international monetary system. It also entails significant challenges and risks, as is vividly illustrated by recent developments. Even the countries in crisis, however, have derived many benefits from capital inflows, a fact that should remind us that no country can afford to cut itself off from the international capital markets. The increasing importance of international capital flows is a fact that needs to be better reflected in the laws and agreements that help bring order to the international economy and to the process by which individual countries liberalize their capital accounts. The proposed amendment to the IMF's Articles of Agreement will serve this purpose and the international community well.

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SHOULD CAPITAL-ACCOUNT CONVERTIBILITY BE A WORLD OBJECTIVE?

Richard N. Cooper

The Interim Committee of the International Monetary Fund (IMF) has suggested that the IMF's Articles of Agreement should be amended to permit the IMF to assist member countries with balance-of-payments deficits arising from net capital outflows, as well as from current-account deficits, and that the IMF should, in that connection, stipulate that countries should strive for capital-account convertibility of their currencies. Capital-account convertibility should be interpreted as applying to both inward and outward movements of capital. The question is would this change be a good idea?

A cynic could argue that whether or not the IMF embraces capitalaccount convertibility as a formal objective will make no difference whatsoever. He might point out that the IMF's Article VIII made current-account convertibility an objective, indeed a condition, of membership in good standing, in 1946. In deference to the exigencies of post-1945 financial and economic adjustment, the IMF architects allowed for a transition period, projected at the time to last five years, for members to achieve the desired objective. Fifty years later, over sixty members—one-third of the total—were still operating under the transitional Article XIV. Over the years, the IMF has been tolerant of restrictions on current-account convertibility, and some members pre-1991 India comes to mind—have for years objected to currency convertibility, not simply as a practical necessity, but even on principle. The rapid movement of former communist countries to current-account convertibility in the 1990s suggests that the developing countries could also have adopted convertibility more rapidly, if sufficient external pressure (which would have been entirely appropriate under the Fund's Articles) had been applied.

Given this precedent of inaction, the adoption of capital-account convertibility would seem to be only hortatory and could be expected to exert no influence whatsoever on the behavior of member countries. Assuming that the question is serious, however, and that if the Articles were amended to embrace capital-account convertibility, the IMF would press its members toward adoption, we might ask a different

question. Actually, we might ask two questions: (1) is universal capital-account convertibility a good idea, and (2) is it of such compelling interest to the community of nations that they should exert pressure on their fellow states to adopt it? The answer to (2) might be negative, even if the answer to (1) is positive, in the interest of preserving as much local choice as possible (what Europeans call the "principle of subsidiarity"). Of course, if the answer to (1) is negative, (2) becomes hypothetical.

This essay will argue that the answer to (1), whether universal capital-account convertibility is a good idea, depends critically on the economic and regulatory context, and that in many circumstances, the answer is negative or at least in doubt. Even in those cases in which the answer is affirmative, it is unclear why the international community should badger countries to adopt capital-account convertibility.

In discussing the desirability of capital-account convertibility, I want to put aside the issue of whether the IMF should require controls, either to improve the balance of payments or as a condition for a loan, on capital movements in or out of countries that have of their own accord adopted capital-account convertibility. My general answer (there might be particular exceptions) is negative. Where a country has adopted capital-account convertibility, the IMF should respect that decision and stand ready in times of need to assist such a country, framing the loan conditions so as to take into account the consequences of full currency convertibility.

1 Why Capital-Account Convertibility Might Be a Good Idea

There are two positive reasons and two negative reasons supporting the adoption of full currency convertibility, including capital transactions. The first is concerned with maximizing efficiency in the world's use of capital, a scarce resource. To be used most efficiently, capital must be allowed to migrate to wherever its returns are highest, regardless of national boundaries. The second is concerned with an aspect of private property rights; individuals should be free to dispose of their income and wealth as they see fit, provided their doing so does not harm others. The third reason arises from the practical difficulty, perhaps the impossibility, of controlling international movements of capital, even if we wished to. If we act as if we can, when, in fact, we cannot, capital controls will favor scofflaws over law-abiding citizens, with corrosive effects on public morality. The fourth arises from the discretion given to officials to approve exceptions to general prohibitions on international capital movements, giving rise to possibilities of favoritism and corruption.

Of these various reasons for favoring capital-account convertibility, economists usually give greatest weight to the first, the contribution that capital-account convertibility could make to the efficient use of the world's capital. I find it far less compelling than the other three reasons taken together, and perhaps even taken separately.

Why Capital-Account Convertibility Might Not Lead to an Efficient Allocation of Capital

There are at least three reasons to question the claim that capital-account convertibility will contribute to the efficient international allocation of capital, a declaration that may superficially seem similar to the claim that free trade enhances the efficient use of world resources by encouraging specialization along lines of comparative advantage.

First, it has long been established that capital mobility in the presence of significant distortions to trade will result in a misallocation of the world's capital and, indeed, even a worsening of the economic well-being of the capital-importing country (Brecher and Díaz-Alejandro, 1977). The basic argument is that, if capital flows freely into a labor-rich country that protects its capital-intensive industries (a common occurrence, especially with respect to steel and automobile production), the world's capital stock will be misallocated, the country's national product at world prices will be reduced, and the country's national income will be reduced further by the payment of returns to the foreign capital. Taxes on the earnings of the foreign capital mitigate but do not eliminate the reduction of national income; economies of scale mitigate the reduction of both national product and national income, but they must be strong to overcome these effects. Although worldwide restrictions on imports are much lower than they were two decades ago, they are still substantial, especially in many developing countries. Free movement of capital is likely to become allocationally efficient only after trade barriers have come down substantially, particularly barriers on capital-intensive activities in labor-rich countries.

Free movement of capital may not be allocationally efficient even in the absence of barriers to trade. Much foreign capital flowed into U.S. Treasury securities during the early 1980s, helping to finance the growing U.S. budget deficit. The inflows, and the boost to the dollar, would undoubtedly have been even greater with universal capital-account convertibility. Would larger inflows and an even stronger dollar have resulted in a more efficient allocation of the world's capital stock?

Second, every nation levies taxes, usually at substantial rates. If marginal tax rates were the same everywhere on capital income, foreign or domestic, the taxes in themselves would not compromise the desirability of capital-account convertibility on allocational grounds. But marginal tax rates on capital income are not the same everywhere, and capital income is defined differently for tax purposes in different countries. Free capital mobility is therefore an invitation to escape domestic taxes by lodging capital abroad where taxes are lower or effectively nonexistent and where the tax authorities are unlikely to report the income back to one's home tax authorities.

The issue of capital taxation is complicated, and instances are easy to construct in which tax evasion is allocationally efficient. But it is equally easy to construct cases in which tax evasion (or even legal tax avoidance) is allocationally inefficient, especially when exported capital can escape taxation altogether in a world where capital taxation is widespread. Even when it may be allocationally efficient, moreover, the evasion will not be optimal from a social point of view when taxation on capital income reflects the norms and notions of equity in the community.

Capital-account convertibility becomes allocationally efficient in a world of widespread potential tax evasion only if marginal tax rates on capital are harmonized and if national tax authorities cooperate closely enough to reduce to negligible levels tax evasion on capital income—an agenda that is much broader and more ambitious than capital-account convertibility. Of course, if one's agenda is to eliminate taxes on capital income, capital-account convertibility deserves consideration. But that very different objective should be made explicit.

This discussion pertains, in practice, to the export of capital from developing countries, because all rich countries—including, now, Japan—have capital-account convertibility. But much tax-evading export of capital takes place from rich countries; Luxembourg and Switzerland thrive on it. The very large measurement error in world current-account positions (a deficit larger than \$100 billion for 1996), with recorded payments of capital income being much greater than recorded receipts, gives credence to the suggestion that a substantial portion of international capital movements is tax-avoiding in motive and in effect, although other factors undoubtedly also contribute to the asymmetrical measurement errors.

Third, improved allocation of capital occurs only if adequate information is available and if investors take advantage of it in making their

¹ Here and throughout, "billion" equals one thousand million.

investment decisions. Yet, financial markets are well-known for their herd behavior, in which market judgments become heavily one-sided. Sometimes this is in response to genuinely new information, which informs all investors similarly. But sometimes there is no new information, but only a change in sentiment that leads everyone to rush in or out in order not to be left behind. Examples of herd behavior are numerous, and it is difficult to see how improved allocation of the world's capital can be ascribed to them. It might be the case, to be sure, that the withdrawal of foreign (and domestic) capital from Thailand in 1997 "sent a signal" to the government that its economic policies, especially its rigid exchange rate and loans to the property market, were not sustainable. But even if that is true, it is difficult to ascribe similar social value to the flow of foreign capital into Thailand in 1995 and 1996. The large inflow followed by the large outflow cannot both have been a socially useful signal, and it is possible that neither was. In any case, the large outflow from Malaysia following the Thai crisis in July 1997 was a case of pure contagion; it was economically disruptive, with little useful allocative or signaling effect. From London or New York, all of Southeast Asia is a blurred spot on the globe, and the traders (or holders of regional mutual funds) issued their sell orders before asking discriminating questions. Moreover, as we learned during the fad of monetarism in the United States in the early 1980s, market participants may have in mind an incorrect model of the way in which the economy works and may therefore send wrong signals.

It is not persuasive to argue, as Allan Meltzer (1998) has, that the large international capital flows of recent years merely demonstrate the moral hazard created by the prospect of IMF bailouts should a country run into difficulty. Only interbank loans or purchases of government securities have even the possibility of qualifying for bailouts. That fact, however, did not keep foreigners from making large purchases of equities in emerging markets or from making direct loans to nonbank enterprises, especially in Indonesia. Herd behavior, moreover, could be observed in financial markets long before the establishment of the IMF. John Maynard Keynes, an acute observer of, and participant in, both foreign-exchange and equity markets in the 1920s and 1930s, both on his own account and as bursar of King's College, likened financial markets to a beauty contest in which the judges are asked not to select the most beautiful contestant, but to select the contestant that the other judges would choose as the most beautiful. The most successful traders are not those who judge corporate or country fundamentals correctly, but those

who guess what their competitors will next buy or sell. Both traders and analysts are subject to waves of euphoria or pessimism about classes of securities, and the fact that their actions may create profit-making opportunities for contrarians in the longer run is small comfort to those who experience real current economic damage. Moreover, for reasons to be sketched below, waves of euphoria or pessimism may sometimes be self-fulfilling when currencies are involved, so even contrarians may lose.

Participants in financial markets may have no worse information than government officials and may have as good an idea about how economies work, but they act from a fundamentally different perspective. They are motivated solely by "greed and fear," that is, they want to make money in the economic system as they find it, without exposing themselves to excessive risk. Many succeed, but many also fail, indicating poor judgement as well as bad luck. Their behavior is, however, always myopic. They do not adopt, and in the absence of official pressure cannot be expected to adopt, a perspective of system maintenance and system evolution. Because financial systems are not intrinsically robust, however, governments must concern themselves with system maintenance.

The Interim Committee of the IMF has agreed that capital-account convertibility should not interfere with the imposition of prudential rules on financial institutions. But unless the prudential rules are to be harmonized internationally—another ambitious project, going way beyond capital-account convertibility—capital-account convertibility alone will lead to "unfair competition," that is, to competitive pressures on those countries that choose prudential regulations that are more rigorous than those prevailing in serious competitor countries.

There is little doubt that controls on international capital movements can lead to serious distortions in the allocation of capital, which in turn will lead to an inefficient use of capital. The very low returns to investment in large industries in South Korea, compared to returns available abroad, offer only one of many examples of the way in which prohibitions on the export of private capital may have reduced national income below what it might have been. But controls on international capital movements are only one of many factors that have contributed to this result; a similar phenomenon can be found in Japan, where restrictions on capital outflows have recently been much lower. Many other factors distort the allocation of capital, including imperfect legal systems, corruption, and, especially, a strong management preference (often reenforced by tax codes) for the retention of corporate earnings. The presence

of these distortions suggests a case for liberalizing international capital movements in some instances, but not a case for generalized capital-account convertibility. The argument for liberalization of international capital movements needs to be made, not assumed.

In short, building a case for capital-account convertibility on allocational grounds requires specifying the *context* in which it is to occur. Is it to occur in parallel with (or following) removal of all other policy impediments to the efficient allocation of capital across boundaries (a farreaching and ambitious program for international cooperation)? Is it to occur with all other impediments and incentives remaining about the same as they are today? Or is it to occur with partial removal of other factors that distort capital movements? If the last, exactly which distortions will be removed and which will remain? The allocational effects of capital-account convertibility cannot be assessed analytically without answers to these questions.

3 The Other Reasons Favoring Capital-Account Convertibility

As noted above (p. 12), I find the last three reasons for adopting capital-account convertibility more persuasive than the first (allocative rationale), but they, too, need to be examined closely. It is probably true that anyone determined to export private capital from a country can find a way, at a price, to do so. But that ability is not equivalent to capital-account convertibility. Classes of institutions (notably banks) that are, or should be, under continual supervision can effectively be prevented from moving large amounts of capital across national boundaries. Stockbrokers can be discouraged, through threat of losing their licenses, from purchasing foreign securities for residents. In short, the barriers to movements of capital can be raised, even if they cannot be made insurmountable, and that might be sufficient to inhibit large euphoric or fearful movements of capital, except when the fundamentals are badly out of line (in which case, leads and lags in current payments can result in substantial, but finite, movements of capital).

My preference for being free to place my assets wherever I want may be widely shared, but others may give less weight to such freedom in the larger scheme of things. In either case, the degree of respect to be accorded to this preference is exactly the kind of decision that seems best left to each community, not a decision to be imposed from outside. A similar observation can be made with respect to domestic favoritism and corruption.

4 Is Capital-Account Convertibility Fundamentally Incompatible with Flexible Exchange Rates?

Within a large economy, the national price level is beyond the reach of anyone except the national central bank; all players in the financial markets take it to be autonomously determined. The same is not true for small, open economies; their national price levels are strongly influenced by their exchange rates, at least in the short to medium term. Yet the exchange rate, being the barter price between two nominal variables, is technically not anchored by anything in the long run, or even in the short run, if the central bank does not peg the exchange rate, or if it has insufficient reserves to hold a peg against large market-driven shocks. A large financial player can influence the exchange rate, and thus the national price level, of a small country by selling its currency short. Furthermore, given the dynamics of thin financial markets, a single player does not need to have the resources to move the exchange rate radically; he or she has merely to start a run on the currency, through a combination of sales and rumors. If the word goes out persuasively that a currency will depreciate, many will join the herd and the currency will depreciate. If the price level adjusts and the central bank later accommodates the adjustment for macroeconomic reasons, the depreciation will have been justified ex post. This is a fundamentally unstable dynamic that has been featured in much of the recent literature on exchange-rate crises (for example, Obstfeld, 1986). But it is not new. Robert Aliber (1962) illustrated this point with an example from the early 1920s, when the Belgian franc was dragged down by the French franc, despite very much better Belgian "fundamentals." The currency depreciation in the open Belgian economy led to inflation, which subsequently justified the depreciation.

Domestically, at least in the United States, market manipulation, in both the commodity and securities markets, is prohibited by law. Convicted market manipulators can be sent to jail. There are no such sanctions internationally, however, and small countries are particularly vulnerable.

The strong conclusion that flows from this fact is that, except in large and diversified countries with well-developed and sophisticated financial markets, free movements of capital and floating exchange rates are basically incompatible. Of course, free movements of capital are also incompatible with fixed but adjustable exchange rates. Thus, unless countries are prepared to fix the values of their currencies permanently

to a leading currency, or to adopt a leading currency as their own national currency, they may reasonably choose to preserve the right to control at least certain kinds of capital movements into and out of their jurisdictions.

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CAPITAL CONTROLS: AN IDEA WHOSE TIME IS PAST

Rudiger Dornbusch

When capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.

—John Maynard Keynes

In the aftermath of the Mexican crisis, the issue of capital-market opening came sharply into question. Chile, which had received high marks from the interventionists, moved up yet another notch for what was considered its effective way of sheltering the Chilean economy from the instability of international capital flows. Now, following the Asian collapse, the issue is once again paramount. As after every crisis, everyone wants to draw a lesson, preferably a lesson with a systemic theme.

Japanese officials are declaring that Asia's collapse is the first of a new kind of crisis, a crisis of global capitalism; their deep ignorance of Latin America—"Asia is different"—overlooks the fact that Mexico, like Korea, had been doing fine on fiscal fundamentals but still experienced a collapse. Malaysia's prime minister, Mahathir Mohamad, is calling for a new system in which speculators will be ostracized. And even the International Monetary Fund (IMF), despite its flirting with mandatory capital-account convertibility, cannot deny some role for short-run, ad hoc capital controls. The issue of capital-account liberalization has been coming on for twenty years. It is now as urgent a concern as is the question of the right exchange-rate system in a world of intense capital mobility.

The correct answer to the question of capital mobility is that it ought to be unrestricted. Countries must urgently recognize two corollaries: first, the scope for discretionary policies has become extremely limited, and countries stand to gain by enlisting the capital markets in support of good policies, and second, intense capital mobility puts greater burdens on a country to assure that its financial system is well supervised and regulated. Any question of sequencing is not one of trade versus capital but, rather, of "cleanup" followed by opening. Postponing both regulation and liberalization, as Korea did, is an invitation to a megacrisis.

1 Old Answers

The old discussion of liberalization revolves around two themes. One, most clearly articulated by James Tobin (1984) argues that goods markets should be sheltered from the vagaries and fancies of international capital markets. The more scope there is for short-term round-tripping, the more goods markets will reflect the volatility of capital markets. Because capital-market disturbances are not necessarily connected to changes in fundamentals, the best remedy may be to "throw sand in the wheels" by imposing a foreign-exchange tax. The other strand of the discussion, best represented by Ronald McKinnon and Huw Pill (1995) focuses on sequencing: which should come first, the capital account or the current account? In McKinnon's opinion, there is no question, the capital account must come first. Various accidents in Latin America are advanced as evidence of misguided sequencing.

Consider first the Tobin tax, advocated originally in the context of rich countries, but now just as relevant, if not more relevant, for emerging economies facing their first encounters on free-market terms with the international capital market. Tobin, echoing Keynes, argues that a transactions tax would lengthen horizons, shifting attention from speculation to enterprise.

In several earlier papers (1986, 1996, 1997), I joined the argument for a cross-border payments tax by underlining Tobin's point that a small fee lengthens the horizon but does nothing more. I suggested that, if sand is not enough, we might try rocks. I also recognized (1997) that, however desirable a Tobin tax might be for controlling noise, it cannot accomplish much more than that. Although it screens out some noise, it does not afford governments any room to pursue policies that deteriorate the long-term prospects for capital without affecting current exchange-market conditions. A Tobin tax is not an answer to capital flight arising from the prospective collapse of asset prices, financial institutions, or even political continuity. It would not have prevented the Asian bankruptcy; anyone contemplating a 30 percent depreciation would happily pay a 0.1 percent Tobin tax! The answer, dull as it is, must be foresight, not safety belts.

If Tobin's point is that a foreign-exchange tax limits short-term round-tripping, the rejoinder is that, in emerging markets, such a tax already exists. Segmentation ensures that transactions costs are very substantial and that the fees and bid-ask spreads effectively amount to a Tobin tax. At the outset of a crisis, moreover, these spreads widen sharply. Thus, a Tobin tax is already in place. Even so, faced with a

serious prospect of meltdown, money will want to leave. Something more basic is required.

The McKinnon debate as to which should come first, free trade or the free flow of capital, also misses the practical point. Both trade liberalization and financial liberalization involve industrial restructuring—in one case, of the goods and services industries and, in the other, of the financial sector. There is no presumption as to which should wait or which should come first. Because protectionism wastes resources, the sooner the better is the answer for both. Moreover, because gradualism and sequencing are more likely to be hijacked by political pressures adverse to the best use of resources, a persuasive case for gradualism has never been made, and full steam ahead is the right answer.

But the McKinnon analysis focuses correctly on a basic issue that must be highlighted, namely, the balance-sheet question. For import-competing textile producers, the balance-sheet question is not of interest; they may or may not go bankrupt, but the welfare economist should not care. For banks and other financial institutions, however, the question is paramount, because banks are special. Implicitly or explicitly, their liabilities are guaranteed. Coming out of a period of financial repression and political control, banks will tend to be bad or very bad. Even before the Asian crisis, the IMF (1996, p. 114) reported on the financial strength of banks in emerging markets. Of a total of 151 major banks, only 11 percent were rated C+ or better. There were no A banks at all, and only Singapore had B+ banks, and Hong Kong, B banks. It should be no surprise that the remaining 90 percent fall in the slightest storm.

Opening the capital account therefore drives a process of almost inevitable bankruptcy. With bad loans on the books, bad banks will borrow abroad to carry bad loans at home. Their borrowing creates a national hazard because, by definition, they cannot repay. The dynamic goes further, however. Good customers will leave bad banks because they can get better terms from new entrants. Thus, bad banks will have reduced earnings on their loan portfolios and will pay more in funding costs. They will make more speculative loans and thus grow worse, and they will borrow at short maturities because that is the only money they can get. They will borrow unhedged in foreign currency because they can go bankrupt only once, and unhedged borrowing seems the best way to avoid a slow death. Such borrowing does, indeed, avoid a lingering death, but by exchanging it for an unexpected quick demise. This is the situation we have seen recently in Asia.

The message is that financial opening must not occur in an environment where the banking and financial systems are badly regulated and badly supervised. This is an argument not so much for delaying financial opening as for hastening the cleanup of financial repression, bad regulation, and inferior financial supervision.

2 New Thinking about Capital Controls

The current debate about lessons from the Asian crisis involves two kinds of advocacy. Some quarters favor *ad hoc*, *ex post* capital controls. On this view, the authorities should respond to a crisis by simply suspending capital-account convertibility. Those who are already in are then trapped, cannot leave, and cannot push down the currency and amplify the crisis. They become part of the solution instead.

This is a simplistic and deeply flawed answer. It is true that, in a particular situation, *ad hoc* capital controls will limit the immediate damage. But two consequences will ensue. First, in a global setting, *ad hoc* capital controls in one country will immediately cause contagion not only to the "usual suspects" but even beyond. Fearful that the crisis might spread, investors will act preemptively everywhere. They will pull out their money without waiting for more bad news. Inevitably, capital controls will be slammed on everywhere, and the scope for stabilizing speculation will become severely limited. Nobody wisely lends into a situation where, in bad states, he will become illiquid. Premia for those states will emerge, maturities will shrink, and preemptive capital flight will become the rule. *Ad hoc* capital controls are, thus, just about the worst kind of system.

Far preferable is a system of preventive capital controls that limits the extent of capital inflows in the first place or, at least, structures their maturities. In this perspective, equity investment is best, followed by long-term bonds, and short-term borrowing should be avoided. If such a plan can be followed, the problem of an avalanche of outflows cannot even arise, or, if it does, a flexible exchange rate becomes an important stabilizing mechanism, at least for long-term debt and equity, where rate movements widen yields and bring in stabilizing speculation. If a country owes mountains of short-term debt, however, exchange-rate movements add to the bankruptcy risks. In Asia, the predominance of short-term debt far in excess of reserves excluded this mechanism of stabilizing speculation.

Implementing control of capital inflows is, of course, the hardest part. Chile has been effective in this regard, but it is hard to believe that countries with poor governance can manage the situation as effectively as Chile has. Korea is a case in point. In Korea, external capital was limited to short-term borrowing; equity and long-term bonds were off limits. Much of the short-term borrowing, moreover, went into Russian bonds and Brazilian Brady bonds and never even entered Korea. Are capital controls the answer for such a situation, or would it be better to improve the structure for handling risk? As some have argued, limiting capital inflows is the better strategy.

3 Better Answers

A modern answer to the question of integration with the world capital market is enthusiastically positive. The capital market fulfills an important supervisory function over economic policy. Governments may be disinclined to have the bond market look over their shoulders, but savers and investors should welcome it. This message is clear from a decade of policy reorientation in the United States and Europe. Now, governments' first thoughts are of the bond market, and as a result, their policymaking has become more disciplined. Emerging economies can even less afford to be at odds with the world capital market. Because most of them need capital, they should not switch off the monitor that helps provide it on better and more lasting terms.

A look at the financial crisis in Asia, or at the earlier crisis in Mexico, reveals a shocking lack of appropriate supervision by all concerned. The IMF is obviously guilty. After Mexico, the IMF touted a new system of data dissemination, including data on the maturity structures of debt. Nobody saw any of these data, however, or evidence of any system that would have drawn attention to the great vulnerability already in place.

The rating agencies are next in line for criticism. Their analysis of risk is absurdly outdated, and their competition to provide upbeat ratings to drum up demand for business is very questionable. Surely, they must have learned something from the recent crises, but it is doubtful that their existing staff and technical resources are anywhere near capable of assessing country risk. Their focus on debt-export ratios, for example, highlights how little they perceive the issue to be a balance-sheet problem rather than an old-fashioned current-account problem.

Lenders also come in for criticism, as they have after every crisis. Long ago, Frank Taussig (1928, p. 130) wrote about excessive capital flows and their abrupt reversal:

The loans from the creditor country begin with a modest amount, then increase and proceed crescendo. They are likely to be made in exceptionally large amounts toward the culminating stage of a period of activity and speculative upswing, and during that stage become larger from month to month so long as the upswing continues. With the advent of crisis they are at once cut down sharply, even cease entirely.

The pattern remains the same, all experience notwithstanding.

Crisis-country governments, of course, bear a large part of the responsibility. Cronyism and generalized corruption were key factors in the Asian crisis, from Indonesia to Korea to Thailand. Bad exchange-rate policy added to the setting that gave rise to the crisis (Dornbusch and Park, 1995). And so did the extraordinary incompetence of bureaucrats who gambled away the last nickel of reserves to stave off disaster, only to be swept up in an even more acute crisis.

An effective supervisory system would at the very least put in place a mandatory value-at-risk (VAR) analysis, not only for individual financial institutions in a country (as in the United States), but for the country as a whole. The great question of how the IMF could become more effective in preventing, rather than resolving, crises is easily answered. Allowing for a transition period of, say, a year or two, every member of the IMF could be required to have in place not only supervisory and regulatory systems that meet international standards, but also a regime for VAR analysis. Compliance could be monitored by the IMF, and any country found to be deficient would not qualify for IMF support.

Honest, unforeseeable, crises would thus be generously resolved with IMF credits, whereas predictable crises attributable to corruption and regulatory failure would receive no international relief and would fall heavily on the deficient country. Capital markets would, of course, pay close attention to the IMF endorsement of financial conditions and would severely punish, with increased spreads, a shortcoming in a country's risk assessment. In a postmortem of the recent crises, the single factor that stands out is the presence of large dollar-denominated short-term liabilities. It is clear that any VAR analysis would immediately have seized on the risks inherent in this situation: that large exchangerate swings could devastate balance sheets unless hedged, that adverse conditions could lead to a funding crisis, and that a funding crisis would

bring with it a generalized country-credit risk and the disappearance of orderly markets. This is exactly what happened. In some remote sense, this could happen in any country, but it is far more likely to happen in a country that has large short-term dollar debt relative to balance sheets and reserves. Gigantic debt-equity ratios such as those in Korea increase the potential dramatically. The moment the focus shifts from sustainability to vulnerability, the entire discussion changes. Then, the focus is on the bad situation and just how bad it might become. A systematic VAR analysis would highlight this possibility. Countries would then be impelled to alleviate excessive exposure by lengthening maturities, calling for the hedging of liabilities, increasing reserves, tightening budgets, and doing everything required to push down risk levels. As a result, countries could perfectly well live with open capital markets and highly mobile capital.

Another way to address vulnerability is to set up reinsurance mechanisms. Bankrupt governments that have gambled away their foreignexchange reserves and their international credit standing cannot be the lender of last resort for either their financial institutions or the country at large. The appropriate response to the risk of an international credit crisis is to create backup facilities. It is totally appropriate for a country to require that its commercial banking system have international recourse facilities. Argentina has put just such a system in place. The charm of the mechanism is not only that resources become available when needed and thus mitigate the meltdown, but, even more important, that the participating lenders will have a strong interest not to lend into a bad situation. Accordingly, they will themselves supervise the solvency and liquidity of their potential clients. Such a mechanism would prevent cumulative bad lending and, as a result, prevent crises or, at least, limit their depth. The world capital market is there to provide not only money but also monitoring, if only we empower it.

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BUTTRESSING CAPITAL-ACCOUNT LIBERALIZATION WITH PRUDENTIAL REGULATION AND FOREIGN ENTRY

Peter M. Garber

The economic logic of opening the capital account turns on the assumption that capital allocation is more efficient in the absence of capital controls and barriers to competition in financial markets. With capital-account openness, it is said, domestic and international savers and investors in a country will find partners offering the best deals, capital will find its way to the most ideal risk-return combinations, and more sustained and balanced growth will naturally follow. Under controls that hinder capital inflows or force it through narrow and politically determined channels, however, domestic savers are likely to be penalized by low and excessively risky yields, only politically connected investors will gain access to the lowest-cost finance, and all parties will suffer from the inefficiencies of the high-cost financial sector.

This textbook lesson must be tempered somewhat if controls are imposed as a blunt means of reducing excessive risk-taking in the domestic system, but generally such measures are merely pretexts for disbursing political favors. The International Monetary Fund's push for a set of principals and goals aimed at opening the capital accounts should therefore have the textbook result—at least in those countries that are already open.

Unfortunately, in those countries that have extensive controls and that restrict competition to the domestic financial sector, prescriptions to open the capital account, even with carefully programmed sequencing and an eye on transitional problems, should include an admission that they will almost inevitably lead to a financial crisis. The opening of the capital market will destroy the profitability of the protected domestic financial sector. It will turn large segments of that sector into "walking dead" financial institutions, and it will simultaneously permit the financial sector to take highly risky bets with depositors' and taxpayers' money. It is therefore no surprise that almost all the important emerging-market countries, and many industrial countries, have experienced financial crises when they have made efforts to deregulate their financial sectors and open capital accounts.

That financial crisis will almost certainly follow capital-account opening should not serve as an argument against such opening, as apparently it has in the aftermath of the Asian predicament. The Asian crisis follows from the misallocation of capital prior to the opening and the required repricing of assets to international values after the elimination of controls. What generates hesitation in relaxing controls is the potential for frenzied multiplication of past losses—to be passed on to the public sector—as threatened domestic institutions thrash about for survival after a liberalization.

It is in this context that the replacement of controls by their first cousin—effective prudential regulation—is generally prescribed. According to this prescription, if the phased opening to competition from foreign financial institutions to the unhindered movement of capital is accompanied by a simultaneous push to world-class risk control and a supervisory environment, the add-on costs of capital-market opening can be minimized or avoided. Thus, a snapshot of the first-class financial systems suggests that countries opening their capital account should strengthen the capital base of their financial institutions and improve supervision and prudential standards. These improvements include upgrades of supervisory personnel, senior and risk-control management in the financial institutions, accounting systems to make capital requirements meaningful, provisioning rules, and legal systems governing bankruptcy. In addition, connected lending should be limited and insolvent institutions speedily eliminated, however politically unpalatable the process.

It is difficult to object to these truisms, which have been central chapters in the supervisor's bible for many decades. It is their implementation that has been the problem, and their sudden invocation by the IMF and other macroeconomically oriented international institutions does not tell us how to get from here to there. Even in the industrial countries—for example, Japan and France—politically motivated actions have made a mockery of these principles, and in the United States, where they are most touted, they were honored in the breach until only the beginning of this decade; how well they have been applied will be determined only after the next economic downturn.

Even if an effort is made to implement policies to reach these goals, the inevitable doubling up of bets by troubled institutions will exacerbate the crisis. This problem will have to be faced; we shall have to decide that it is worth recognizing and filling a hole in bank balance sheets amounting to 15 percent or more of gross domestic product now in order to gain a better mechanism to allocate capital in the long

term. Efforts to minimize this cost while opening capital accounts will prove of limited value unless a pervasive and uniform set of prudential regulations limits avenues of evasion. Such prudential regulation is an alternative name for controls.

Prudential regulations can be circumvented, as can loosely maintained controls. For example, a system of reserve requirements that penalizes short-term inflows in favor of longer-term investments can be evaded through offshore swaps with call features; an apparently long-term flow can thereby be converted into an overnight foreign-exchange loan. If outflows are not regulated, domestic residents can readily engage in such operations, because they can deliver margin to the lender to cover their bets. In general, the creation of a first-rate system of prudential regulation prior to the transition to capital-account opening is unlikely.

Nevertheless, gathering the fruits of liberalization depends ultimately on effective, world-class prudential regulation supported by opening the domestic financial system to international competition. The positive effects of these changes are evident. Rather than review them, however, I shall devote the rest of this essay to discussing how such changes may feed into the inevitable post-liberalization financial crisis.

1 Foreign Entry

Financial liberalizations are associated with the realization and recognition of losses in the financial sector. Once these initial, post-liberalization problems are addressed, so that the banking system reaches a zero-capital level, one can recapitalize the banks by allowing and encouraging foreign acquisition, or even foreign entry, through the issuance of new bank charters. Even if the acquisitions take the form of subsidiaries, there will typically be a close association of the parent with the subsidiary. Ideally, the parent bank will take steps to preserve its reputation by assuring that the subsidiary will not run into solvency or liquidity problems. If a foreign bank establishes a branch, its own national deposit insurance may cover any potential risk to depositors. Finally, an additional set of regulators responsible for the purchasing bank and uninfluenced by local political concerns, will examine the bank. This additional review will be an improvement, unless the regulatory standard in the purchasing bank's country is lower than the domestic standard. Of course, the principal concern of the foreign regulators is with the parent bank and not necessarily with the subsidiary; they worry about the subsidiary only to the extent that it is excessively connected

to the parent bank. Indeed, because foreign regulators have an incentive to reduce excessive ties with the parent bank, the subsidiary might have to subsist on its own access to the market. Foreign subsidiaries may, given their immediate knowledge of the domestic banks, also provide extra liquidity in times of crisis. In addition, their competitiveness and international experience may allow them to impose an upgrade in the risk-control systems and business practices of domestic banks.

More likely, however, is a scenario in which the risk-control programs at corporate headquarters require the foreign subsidiary to cut off liquidity lending to domestic banks during a crisis—cutting back on direct lending and even repurchases of paper in a scramble to reduce counterparty risk. This is what happened in Mexico and Indonesia, where country-risk controls at corporate headquarters forced massive withdrawals of domestic liquidity. Well-capitalized domestic banks, which should be a key source of liquidity to the better credit risks, would, by contrast, not face a country limit.

On the downside, it is a classic view that foreign banks tend to select out the prime retail markets, leaving the more difficult markets to the domestic banks. They therefore force the domestic banks out of the profitable wholesale domestic market (to the extent that it still exists onshore) and leave them with the risky lending. In addition, once in a market, foreign banks are adept at using their international connections and expertise to earn profits by picking apart the domestic prudential and tax regulations. They push domestic banks into risky and speculative markets while simultaneously providing the operating tools for the domestic banks to engage in such operations. It is difficult to stop foreign banks from providing these tools. They can always operate offshore and provide the same services to domestic banks, while taking away much of the domestic banks' wholesale business. Once onshore, however, the foreign banks have direct access to local currency liquidity.

Capital injections from foreign banks into the banking system may be neither easy to obtain nor benign. In the presence of widespread insolvencies, foreign banks may fear that, after they have invested in the local market, they will be assessed to pay for past failures, along with the rest of the banking system. They may therefore hesitate to undertake an onshore investment, preferring instead to conduct their business with domestic institutions from offshore. To attract them into a bankrupt system, deposit insurance must be set up to assess premiums that cover only future losses.

Finally, suddenly admitting foreign banking competition into an undercapitalized system can further reduce the franchise value of

domestic banks and lead within a few years to a secondary crisis, as domestic banks compete to retain market share. A drive for market share generally implies an underpricing of products. This secondary crisis can be avoided only by strict controls on the expansion of the domestic banks. Because supervisors will then appear to be favoring the newly arrived foreign banks, such control of the domestic institutions may be politically problematic.

2 The Liquidity Demands of Risk Control

One rationale for the IMF's drive toward opening the capital account and the associated upgrading of financial-sector risk management is to organize financial systems to reduce spillover effects of crises that start in individual countries. One cannot argue with this motivation with respect to the emerging-market countries. If for example, Korean banks had implemented first-class market-risk controls, their losses would have been much smaller during the Asian crisis, and the crisis would have spread less extensively.

Ironically, however, the imposition of state-of-the-art risk-management systems by the chief international financial institutions is a primary source of crisis contagion. Such systems require, for example, that bond index funds hold only investment-grade securities, so that a downgrading of a country's credit rating leads to an immediate sell-off of its bonds and to the country's inability to approach the market for additional funding. These systems require that margin calls in foreign exchange be made on domestic counterparties when the derivative positions of those counterparties (perhaps established as a risk-reducing hedge) take losses from market-price movements. If the domestic financial systems are one-sided in their positions, such margin calls lead to immediate sales—on a macroeconomic level—of domestic for foreign currency, and possibly to an additional round of margin calls as exchange rates depreciate or domestic interest rates rise.

Risk-management systems operate on the basis of international variance-covariance matrices of market prices or macroeconomic variables to get at the best statistical models of market and credit events, perhaps orchestrated by widespread use of riskmetric- or creditmetric-like programs. These imply that a jump in market volatility in one country will automatically generate an upward reestimate of credit and market risk in a correlated country, mechanically triggering margin calls and tightening credit lines. These operations are not the responses of panicked green-screen traders arbitrarily driving economies from a good

to a bad equilibrium. Rather, they work with relentless predictability and under the seal of approval of supervisors in the main financial centers.

Thus, the "herd behavior" that generates spillover emanates from the discipline imposed by supervisory authorities in the principal financial centers: modern prudential regulation and state-of-the-art risk-control systems are the emerging-market countries' spillover generator. They are simply means of enforcing the proper amount of liquidity on the counterparties of financial contracts. Eliminating such spillovers involves both a tightening-up of prudential regulation in the emerging-market countries to reduce excessively risky inflows and a relaxation of the automatic nature of risk-control systems in the financial centers.

3 Conclusion

If it is indisputable that opening the capital account should be "carried out in an orderly, nondisruptive, way that minimizes the risks that premature liberalization could pose for an economy," (Fischer, 1997, p. 2) liberalization should be undertaken in parallel with acceptable and gradually diminishing controls. Such a process presents a problem, however. Partial controls may be ineffective, because financial engineering houses are designed to pick apart and arbitrage capital-flow channels that are not airtight. Thus, a smooth transition to an open and competitive environment is unlikely to occur.

Capital-account opening will inevitably force the recognition of systemic losses. Because these losses already exist prior to liberalization and reflect the cumulative misallocation of capital under a controlled, uncompetitive system, capital-account opening will generally be followed by a crisis. Tightening prudential regulation and admitting foreign competitors are desirable for the long-term equilibrium, but they yield mixed results during the transition.

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THE LIBERALIZATION OF THE CAPITAL ACCOUNT: CHILE IN THE 1990s

Carlos Massad

1 Introduction

The decision by the International Monetary Fund (IMF) to extend convertibility to the capital account in the IMF's Articles of Agreement came about at almost the same time as economic turmoil overtook Southeast Asia. These two events placed the issue of capital-account liberalization at the forefront of economic debate. The fact that several of the nations most affected by the Asian crisis had for some years received substantial flows of foreign capital has raised questions about the role capital inflows have played in creating the conditions that generated the crisis or favored its dissemination. The suitability of capital-account regulations in emerging markets is, in my view, a topic due for discussion.

The nature and degree of regulations on capital-account transactions and the conditions to be met before liberalization are subjects debated time and again by both academics and economic policymakers. This essay contributes to the debate by analyzing some relevant aspects of the Chilean case. Chile has been liberalizing its capital account gradually and selectively during the past ten years, giving special attention to prudential factors. The Chilean experience supports the hypothesis that a complete liberalization of the capital account through the removal of nonprudential restrictions is a desirable goal for an emerging-market economy but that liberalization should proceed gradually over time, and only after the economy has met certain conditions. "Gradual," however, does not mean "immobile." Emerging markets can reap enormous benefits from international financial markets. It is *premature* liberalization that should be avoided.

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¹ Dooley, 1996, gives a complete review of the literature.

The capital account is understood to be fully open when there are no restrictions on capital flows. Regulations affecting the asset and liability positions of banks and other institutions, however, should not be considered restrictions on capital flows but should be regarded, instead, as prudential measures that limit the exchange-rate, interest-rate, and maturity risks that these institutions may assume. The "pure" model of a free capital account is the one present in most industrial nations, where, although there is free mobility of capital flows, regulations are in place to limit the risks of banks and other financial institutions.

It is even possible to envision a fully open capital account, where some prudential regulations are made extensive even to nonfinancial companies. These kinds of regulations may be particularly important in developing countries, where corporations might otherwise rapidly increase their foreign-debt financing in anticipation of cost advantages. The foreign-exchange exposure that this generates may entail risks for the corporations, the financial system, and the country as a whole. Although it is theoretically possible to induce the nonfinancial sector to hedge such risks by monitoring the financial sector and provisioning against the exposure of bank debtors, such a framework has not yet been developed and may well face severe practical limitations (Eyzaguirre and Le Fort, 1997).

This essay reviews the reasons leading to the implementation of capital-account regulations in Chile, describes the nature of those regulations (some of which are still in place), analyzes Chile's economic performance and the ways in which regulation has helped to achieve that performance, and reviews the effects of the Asian crisis on Chile.

2 Building Blocks for Regulation of the Capital Account and Conditions for Its Liberalization

The benefits of an open capital account are well known.² It allows for the stabilization of consumption over time at lower cost than is possible with a restricted capital account; it allows for international portfolio diversification, which is much more feasible now than it was some years ago, thanks to developments in the telecommunications and computer industries; and it allows for the development of a more efficient financial-services industry, which is beneficial for local users.

 $^{^2}$ See Williamson (1991), and Le Fort and Budnevich (1997) for a complete breakdown of the costs and benefits associated with capital-account liberalization.

Yet capital-account liberalization also poses a series of problems for a small open economy such as Chile's. First, the transition from a closed capital account (or one having little access to international markets) to an open capital account tends to lead to massive inflows of capital. These inflows generally result from the initial stock excess demand for domestic assets by international investors responding both to the wide differentials between rates of return on capital in developing countries and in international markets and to their own desire for further portfolio diversification. These massive inflows can cause large and even excessive changes in domestic asset prices, including the exchange rate, and can expand aggregate domestic demand, putting pressure on the inflation rate, widening the current-account deficit, or both. All these effects can lead to a misallocation of resources, particularly between tradable and nontradable sectors, as has been shown by the experience of several stabilization programs that have allowed unrestricted capital inflows.

After several years of massive capital inflows, the accumulation of a large stock of foreign liabilities, in excess of liquid international assets, will cause the country's external position to deteriorate severely. This deterioration of the financial position makes the economy very vulnerable to changes in the cyclical patterns of the industrial countries and to shifts in market sentiment that may affect the confidence of international capital markets in the economy. A loss of confidence may generate a run on the currency and cause a rapid loss of international reserves, exaggerated devaluations ("overshooting"), and a contraction in the level of economic activity. The combined effects of depreciation and recession, moreover, may well lead to a domestic financial crisis that will take years to overcome.

Second, by opening the capital account, the central bank loses some of its autonomy in monetary policy, because it is less able to control domestic demand. To a certain extent, capital-account controls isolate the domestic capital market, especially the short-term market, from international markets, allowing the central bank to raise interest rates without generating an arbitrage response that can undermine the control of spending by inflows of foreign credit and appreciation of the currency. In a financially open economy, monetary policy is even more effective in terms of controlling nominal variables, such as the exchange rate and inflation, because of the effect capital flows have on the exchange rate, but the influence of monetary policy on aggregate demand is eroded because capital inflows and currency appreciations have an expansionary effect on spending.

Thus, although monetary policy can keep inflationary pressures subdued even when faced by huge capital inflows, it will not be able to prevent the current-account deficit from widening and exposing the economy to sudden reversals in capital movements. Although fiscal policy can help to contain the external deficit, its effect is somewhat limited. Fiscal spending is usually a fraction of total expenditure, and enhanced fiscal accounts might further encourage capital inflows.

Third, speculation, and the relatively scant information on which it is based, causes capital flows to be very volatile and to overreact to short-term signals, generating wide and sudden short-term swings that can be very harmful to a developing economy.

Finally, emerging economies are subject to exchange-rate runs and moral hazard. Because the authorities generally try to avoid sudden or large shifts in exchange rates, and because short-term assets in local currency have fixed nominal values, there is, in practice, an implicit guarantee of the value of those assets in foreign currency. This means that the exchange-risk premium remains low while investors keep up their confidence in the country's political and financial situation. This "implicit guarantee" evaporates, however, when there is a massive capital outflow. As with the banks, therefore, any signal that causes a loss of confidence may become a "self-fulfilling prophecy" and produce a massive flight of capital. Furthermore, countries sharing similar characteristics or geographical location are assumed to have similar problems, and so contagion from one country to another can be an important factor. In addition to implicit exchange-rate guarantees, implicit and explicit guarantees are attached to the liabilities of the financial system, and these also generate moral hazard, which may induce excessive credit expansion and accumulations of highly risky assets.

Although the monetary authorities should, in general, try not to interfere with the functioning of capital markets, there are reasons that justify certain interventions in the case of emerging-market economies. These reasons are closely linked to the implicit and explicit guarantees attached to the liabilities of the financial system and to the external debt of the whole economy, as well as to the fact that the central banks of emerging-market countries tend to avoid pronounced fluctuations in the exchange rate and thus give implicit exchange-rate insurance to international speculators. Central banks attach importance to exchange-rate stability because a rapid depreciation of the domestic currency tends to be transmitted quickly to prices, particularly when foreign trade is a relatively high proportion of gross domestic product (GDP).

Bearing these problems in mind, we must address a series of questions: Is liberalization of the capital account desirable in the long run? What is the best way to set it free? What conditions are required for liberalization to occur?

The strongest evidence favoring total liberalization over the long term is the fact that most of the industrial countries have free capital accounts (Fischer, 1997). This does not mean that these countries are immune to the costs associated with liberalization. It simply means that, given the high degree of both real and financial development in these countries and the lesser importance of foreign trade relative to GDP, the costs of such freedom are low compared to the benefits.

There are at least three main reasons why mature economies are less vulnerable than emerging-market economies are to changes in market sentiment. First, their markets are consolidated and therefore do not face the same risk of bubbles and overshooting of asset prices as the newly opened emerging markets. Second, their risk of contagion, given their good reputations and financial strength, is much lower than the risk for emerging-market economies. Third, because they constitute—or group into—large trade areas, with intraregional trade taking place at a fixed exchange rate, they are much less affected than emerging-market economies are by exchange-rate volatility against third markets.

The main risk the industrial economies face is the possibility of a speculative attack against their currencies. The experience of Europe at the beginning of this decade illustrates this well. The fact that the developed nations have agreed to adopt completely free capital accounts means that they believe that the benefits surpass the costs of full integration once certain conditions are met. However, the industrial countries continue to apply prudential regulations to the financial institutions, in order to diminish the exposure of those institutions to sudden changes in capital flows.

In the long run, therefore, although there are net advantages to be gained from a free capital account, liberalization should advance cautiously and only after certain conditions have been met (Le Fort, Budnevich, and Reinstein, 1997). The most important conditions are:

• Local interest rates must not be much higher than international rates, so as to avoid massive capital inflows and exchange-rate appreciation. A country's rapid growth should naturally lead to a divergence between local and international rates of return. Regulations of capital inflows must continue insofar as the domestic interest rate necessary to maintain the internal balance significantly exceeds international levels.

- Exchange-rate flexibility is necessary if monetary policy is to remain autonomous. To reduce the problem of moral hazard that implicit guarantees generate, moreover, medium- and long-term interest rates should be flexible; their determination should be left to the market, and the central bank should keep control of short-term rates as a means of implementing its monetary policy.
- If it is not possible or credible to limit deposit guarantees, the financial system should be adequately regulated and supervised, so that capital flows are properly channeled to the various sectors of the economy and an appropriate matching of currencies and maturities can be made.
- A flexible fiscal policy is desirable to save more in periods of large capital inflows to cover periods of small inflows. As is well known, tax revenues are closely linked to aggregate expenditure. When spending rises with transitory increases in capital inflows, excess fiscal revenues should be saved to cover periods of increased capital outflows.
- The financial indicators of solvency and liquidity should be strong and fiscal accounts healthy. Both are fundamental to maintaining the confidence of international capital markets and to avoiding capital flight. In particular, a country must be able to count on a sound reserve position in relation to its short-term foreign debt and local financial liabilities in foreign currency. If the internal debt of the government is sizable, every effort should be made to lengthen its maturity, so as to limit the extent of potential liquidity if a currency attack emerges.
- A sound macroeconomic position must be maintained, in terms of a low inflation rate, a sustainable current-account deficit, and the conditions underlying both, including monetary, fiscal, and exchange-rate policies and the soundness of the financial system. All these are of vital importance in avoiding currency crises.

These several conditions imply that there are clear advantages to opening the capital account gradually over time. The success of the liberalization process will depend importantly on preventing the process from giving rise to significant disruptions in the economy, which could generate pressures to reverse the opening.

An alternative to the regulation of capital inflows lies in sterilizing the monetary impact of inflows through the sale of domestic debt by the central bank. Any such sterilized intervention will entail a cost, however, because domestic interest rates are higher than international rates, and liabilities to foreigners thus pay higher interest rates than the assets in which foreign-currency reserves are invested. Additionally, if domestic and foreign assets are close substitutes, sterilized intervention is ineffective.³

Another option lies in resorting more extensively to fiscal policy. In countries where a significant fiscal surplus is present over a long period of time, however, it becomes politically cumbersome to pursue this option. Moreover, fiscal policy is not very flexible in the short term, because changes usually require legislative approval.

3 Regulations that Govern the Capital Account in Chile

As a result of the tight-currency situation Chile suffered during the 1980s,⁴ a system of controls was reinstated for both the foreign-currency market and for capital flows. These regulations prevented the exit of currencies from the system and protected international reserves. During the 1990s, the Chilean economy has significantly liberalized its capital account. Capital outflows are now completely free except for one regulation still in effect, and only certain regulations still bar capital inflows.

With the arrival of capital inflows at the start of the 1990s, Chile began to lift the controls on outflows. Today, there is full freedom to purchase, sell, and hold foreign currencies. Exporters are free to decide whether they wish to repatriate their earnings or to keep them invested abroad, and local residents have complete freedom to make investments abroad. The only significant remaining restriction on outflows is the one-year minimum waiting period before repatriation of a foreign investment is allowed. In effect, the capital account is fully open, and only prudential regulations remain in place for financial institutions such as banks, pension funds, and insurance companies. It is worth mentioning that the liberalization of capital outflows caused some increase in capital inflows, because foreign investors were freer to repatriate their capital; this reduced the implicit cost of foreign investment in Chile (Labán and Larraín, 1997).

 $^{^3}$ Jang-Yung Lee (1996) discusses the use of the monetary policy instrument in a situation of abundant capital inflows.

⁴ A large array of quantitative and other controls on capital inflows and outflows, as well as on current payments, was put into effect after the Great Depression in the 1930s. These continued to prevail, with short interruptions, until the late 1970s. They were removed in 1979.

The regulations that still exist on capital inflows remain either because certain requirements must still be met or because the controls act as substitutes for prudential regulations of nonfinancial enterprises, where such regulations do not apply. Domestic interest rates continue to be substantially higher than international rates. Under complete financial integration, the higher domestic rates would entice a significant capital inflow and the domestic currency would appreciate strongly, producing a larger current-account deficit. Furthermore, the domestic capital market is still very small compared to the size of potential inflows and the lack of a sufficient degree of globalization. There are three main restrictions to the capital account currently in place in Chile. They are:

The reserve requirement. A mandatory, nonremunerated deposit with the central bank must be made for a given period (currently one year) and a given proportion (currently 30 percent) of any capital inflow in the form of debt or speculative investment. This instrument is meant to (1) reduce the differential between external and domestic short-term interest rates, thereby diminishing arbitrage inflows and giving greater independence to monetary policy; (2) impose a cost of entry and thus reduce short-term speculative capital inflows—in this context, it is important to note that, although the most obvious short-term arbitrage takes place in the fixed-yield market, capital controls can be fully effective only if they also establish barriers to the purchase of alternative domestic assets. The central bank has therefore to extend its reserve requirements to cover all transactions that are potentially speculative, such as secondary American Depository Receipts (ADRs). This wider coverage of the reserve requirement means that it can be more effective and can deal uniformly with the various sources of capital. By "speculative," it should be noted, we mean operations that focus on the short-term prospective of rates and asset prices, regardless of whether those rates and prices are consistent with the fundamentals and are therefore sustainable; (3) oblige banks to keep a percentage of their foreign-currency deposits in the central bank, thus reducing the risk of short-term illiquidity. As mentioned above, this is important in a context of implicit guarantees and the likelihood of currency runs.

The minimum term before repatriation. To discourage the entry of speculative capital and restrict the liquidity of foreign institutional investors, foreign direct and portfolio investments—except for primary and secondary ADRs—must be made for a minimum term of one year. For Foreign Capital Investment Funds (FICEs: closed mutual funds sold abroad and invested in Chilean financial assets), a five-year term is

required because, although FICE shares are financial investments, they are not subject to the reserve requirement; it is thus essential to prevent them from profiting from high short-term interest rates. Finally, bonds issued by local companies in international markets must have an average minimum maturity of four years to encourage long-term financing.

The minimum risk classification. This restriction limits the risk classification of companies that issue bonds and ADRs on international capital markets. To issue bonds and ADRs, a Chilean company must have a risk classification no lower than BB. This restriction is intended to reduce the risk that a Chilean company issuing debt or capital on international markets will fail to fulfil its commitments and will thus adversely affect the perceived creditworthiness of other Chilean companies and of the country itself.

4 Assessment of the Restrictions that Govern Capital Flows

The Chilean economy performed well during the 1990s: GDP grew at an average rate of 8.1 percent per year; inflation fell from 27.8 percent in 1990 to 6 percent in 1997; and the current-account deficit in the balance of payments averaged 3 percent of GDP. These good results suggest that the policies implemented have been successful in helping to achieve sustained growth in a context of decreasing inflation and sound external accounts. This evidence is not enough to assess the degree of influence attributable to the capital-account regulations, however, because there were other factors at work as well. Fiscal policy generated an average surplus of about 2 percent of GDP during this period, and the central bank made extensive use of monetary and exchange-rate policies, including sterilized intervention in the foreign-exchange market. The international reserves of the central bank increased by about \$12.3 billion between 1990 and 1997,⁵ reaching the equivalent of over 20 percent of GDP by the end of 1997.

A number of model-based studies of Chile have sought to evaluate the role played by capital-account regulations, controlling for other variables that might have influenced the results.⁶ They indicate that (1) the

⁵ Here and throughout, "billion" equals one thousand million.

 $^{^6}$ See Le Fort and Sanhueza (1997), Eyzaguirre and Schmidt-Hebbel (1997), and Soto (1997). Herrera and Valdés (1997) postulate that the reserve requirement generates a differential not subject to arbitrage that is lower than the one expected *a priori*, or than the one implied by simple calculations.

reserve requirement has made it possible to maintain a higher interest rate than would have been possible in its absence, although the differential is lower than expected, (2) the reserve requirement has induced a change in the composition of foreign financing, increasing long-term external financing relative to short-term financing, and (3) the evidence (other than adjusted interest differentials) on the effect of the reserve requirement on the amount of capital inflows into Chile is weaker.

One problem common to all such studies, which may explain why they have found no significant effect of the reserve requirement on the total amount of capital inflows, is that the econometric models used do not include an adequate scale variable such as the total capital flow to emerging-market countries. Nevertheless, a cross-country comparison shows that Chile received, on average, net capital flows equivalent to about 6 percent of GDP during the 1990–95 period. This amount is significantly lower than the flow of capital to emerging-market countries that did not regulate their capital accounts. Thailand and Malaysia, for example, received capital flows equivalent to about 10 percent of GDP during the same period. One wonders whether capital inflows into Chile during the 1990s would have been greater had there been no restrictions. If this had been the case, the cost of intervening in the foreign-exchange market to obtain the current set of macroeconomic results would have been higher.

It should be noted that, when foreign financing concentrates more on direct investment than on consumption and more on long-term debt than on short-term debt, the financial soundness of the country in the eyes of foreign creditors improves. With low short-term indebtedness, the speculative foreign-exchange-market turbulence of the sort suffered briefly by Chile in January 1998 does not become a typical attack on the currency, because it cannot involve an abrupt liquidation of shortterm indebtedness. Investors still seek to reduce their exposure to foreign-exchange risk, but the process involves portfolio adjustment. Such portfolio adjustment alters the relative prices of assets, which increases domestic interest rates and also entails a depreciation of the domestic currency. Because the portfolio shift is caused mainly by a demand for foreign-exchange risk coverage, however, the central bank can satisfy that demand by issuing liabilities expressed in domestic currency, indexed to the domestic price of foreign exchange but payable in domestic currency, without any loss of reserves.

A common criticism of controls on capital flows is that effective implementation gives rise to significant costs or distortions. Doubtless to say, the income that can be produced by evasion of the controls is a strong incentive for agents to exploit loop-holes in the system. Chile has been no exception to this tendency, which has led the authorities constantly to improve the country's regulations, a vigilance that continues to produce microeconomic costs. Despite these costs, and the fact that amendments have necessarily been introduced from time to time, the results achieved by the Chilean economy after six years suggest that the controls continue to be effective. In 1991, when the reserve requirement took effect, 16 percent of the capital flows into the country were subject to it. The coverage then increased to 52 percent, and in the following years, a lower efficiency became evident. This was reversed by the end of 1994, taking coverage to the vicinity of 42 percent in 1995 and 1996 (Le Fort and Sanhueza, 1997). The fact that about 60 percent of the capital inflow is free from the reserve requirement reflects, in part, a deliberate decision to exempt certain kinds of investment (such as foreign direct nonfinancial investment) and, in part, the gaps in the regulation.

5 The Effects of the Asian Crisis on Chile

The Asian crisis caused some turbulence in Chilean capital markets between November 1997 and the end of January 1998. The peso appreciated by about 10 percent, interbank real interest rates rose from 6.5 percent to 8.5 percent, and the central bank sold somewhat less than \$2 billion of its ample international reserves. Most of the demand for foreign exchange came from investors seeking to cover exchange-rate risk rather than from a need to make payments abroad. This is clearly shown by looking at the forward foreign-currency liabilities of the banks, which increased substantially during the period. To cover their short positions, the banks bought the international reserves being sold by the central bank. It is also important to note that foreign lending and direct-investment capital inflows fell only slightly between November 1997 and February 1998 relative to previous quarters, a fact that shows that the medium- and long-term foreign financing was not withdrawn. In fact, central-bank reserves grew again in February 1998.

The speculative attack on the peso was relatively weak compared to the attacks on the currencies of most of the emerging-market countries. This was probably attributable to the term structure of foreign debt in Chile and to its low amount relative to GDP, and to the international reserves of the central bank. It also reflected the low "structural" current-account deficit, sound macroeconomic indicators, and a strong financial system. The low accumulated external debt and its

long-term bias were achieved with the help of the capital-account regulations in place.

6 Conclusions

This assessment of the Chilean experience has stressed the suitability of capital-account regulation to the circumstances of emerging-market economies. The liberalization of the capital account is desirable over the long term, but, given the costs arising from the adjustment process, a gradual opening is recommended. Various conditions regarding the development of the economy and its financial markets must be met in order to make progress sustainable. The positive macroeconomic results achieved by Chile during the 1990s, when a gradual opening strategy was implemented, support the validity of such a strategy.

The regulations on the capital account are not the only factor explaining the success of the policies implemented in Chile, and they should not be construed as a substitute for sound macroeconomic policies. Chile's healthy macroeconomic performance has been achieved through the implementation of a series of policies, and the capital-account controls should be regarded as complements to them. Monetary policy in Chile seeks to limit the expansion of aggregate expenditure within margins compatible with productive capacity and with the prudent use of foreign savings. Exchange-rate policy leaves room for the market to determine the value of the peso but prevents "excessive" short-term changes and limits the real appreciation of the peso. For its part, fiscal policy has resulted in important surpluses and has made significant contributions to the country's savings rate. It would nevertheless be wrong to discount or disregard the contributions of the capital-account controls to the soundness of the country's external position and to its success in dealing with the recent turbulence in the foreign-exchange market.

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THE ARTICLES OF AGREEMENT OF THE IMF AND THE LIBERALIZATION OF CAPITAL MOVEMENTS

Jacques J. Polak

In its meeting on April 28, 1997, the Interim Committee of the International Monetary Fund (IMF) "agreed that the Fund's Articles [of Agreement] should be amended to make the promotion of capital account liberalization a specific purpose of the Fund and to give the Fund appropriate jurisdiction over capital movements." This essay analyzes the merits of these two proposed changes in the Fund's Articles. It concludes that the first—making capital liberalization one of the Fund's purposes—although not necessary from an operational point of view, is useful as a signal of the radical change that has taken place in members' attitudes toward restrictions on capital movements. It finds that the second, however—giving the Fund jurisdiction over capital movements—is neither necessary nor helpful in promoting the orderly liberalization of capital movements.

1 A Positive Attitude Toward the Liberalization of Capital Movements

The benefits of substantial freedom of capital movements are not a new discovery for the IMF. The Fund's first history, covering the period from 1945 to 1965, noted the resurgence of the view, dominant before the 1930s, that freedom of capital movements was highly desirable in itself (De Vries, 1969, p. 292). In the 1960s, convertibility on current and (partly) on capital account was still predominantly limited to the industrial countries. In the subsequent decades, however, that picture changed radically. Today, one-fourth of the developing-country members of the IMF have no restrictions on capital movements (Quirk et al., 1995, p. 34) and many other developing countries are moving in the same direction. To cite one striking example: India, which did not become convertible on current account until 1994, is moving rapidly toward a high degree of capital-account convertibility.

The Fund's policies reflect this changed attitude of its members. In spite of the bias toward capital controls contained in the Articles of Agreement, the IMF does not hesitate to "express views" on capital-

account issues in the context of its surveillance, financing, and technicalassistance activities (Quirk et al., 1995, p. 5). The provisions on foreign participation in domestic corporations in the recent standby arrangement with South Korea provide a striking example of the extent to which capital liberalization has entered into the Fund's conditionality. But the Fund has also warned against "draw[ing] general conclusions about the consequences of 'capital controls' without reference to the nature of such measures and the circumstances under which they were employed" (IMF, 1995, p. 13). Chile's controls on capital inflows have been generally praised, and Stanley Fischer has noted that Korea and Thailand could have benefited from similar measures (Uchitelle, New York Times, January 8, 1998) A fair representation of the current consensus on the subject would seem to be that (1) most capital controls, especially those on capital outflows, are both ineffective (except in the short run) and harmful to the country imposing them, (2) some controls on inflows of short-term funds can be helpful in preventing excessive domestic demand, and (3) some other controls (in particular on inflows of direct investment and portfolio investment) have both negative effects, such as a smaller supply of capital and of the managerial and technological innovation that often accompany direct investment inflows, and potential benefits of a prudential or political character.

In the 1940s, when the Fund's Articles of Agreement were drafted, a liberal regime for payments, even on current account, was an endangered species. It is fortunate that the agreement committed member countries to move toward such a regime. At present, current-account convertibility has been almost universally achieved (even though some sixty member countries still remain technically under the protective umbrella of the transitional provisions in Article XIV), and many countries, in all areas of the world, have become convinced by economic arguments or by the force of global markets that capital-account convertibility is, from most points of view, an equally desirable achievement. In acting on this conviction, they can count on the Fund to help them "liberalize in a manner that does not undermine economic and financial stability" (Fischer, 1997, p. 11).

All in all, this outcome appears to be highly satisfactory and is likely to improve further over time under the gentle prodding of the IMF. Why then is the IMF moving toward the adoption of an amendment to its Articles that would extend its jurisdiction to capital movements and thus "enable the Fund to promote the orderly liberalization of capital movements" (Fischer, 1997, p. 12)?

2 Signaling a New Attitude on Capital Movements

One reason cited for the amendment is the existence in the Articles of several awkward gaps, and some equally awkward provisions, on the subject of capital movements. The promotion of the worldwide flow of capital is not listed among the purposes of the Fund in Article I. This omission is to some extent remedied in Article IV as previously amended, which lists, in one breath, "the exchange of goods, services and capital among countries" as the essential purpose of the international monetary system (although not specifically of the Fund). The Fund has the legal power under Article VI to insist that a member introduce capital controls, but it has never, in my memory, used this power. Article VI also prohibits use of the Fund's general resources "to meet a large or sustained outflow of capital," and an IMF Occasional Paper on capital convertibility (Quirk et al., 1995) suggests that consideration should be given to the revision of that Article. This issue was addressed in 1961, however, when the same matter arose in connection with the proposal for the General Arrangements to Borrow, which were clearly designed to enable the Fund to deal with large capital outflows from reserve centers. Fancy legal footwork on that occasion produced the solution that a "large" outflow of capital could be interpreted as one that absorbed an excessively large part of the Fund's resources; this defused the issue into a purely operational one.

The Fund's Articles of Agreement are, of course, outdated in many other respects. Article VII, for example, still permits members to discriminate against a country whose currency has been declared "scarce." When the membership has agreed that the Fund should perform a new task, however, the Fund has usually found a way to do so without recourse to amendment. Thus, in the last decade, economic growth has de facto become a prime Fund objective, on a par with balance-of-payments equilibrium, even though, at Bretton Woods, growth was deliberately kept out of the Fund's purview, in order not to confuse the tasks of the IMF and the World Bank (Polak, 1991, pp. 17–19). When the World Bank wanted to engage in subsidized lending to low-income countries, it created a new and formally separate international organization, the International Development Association. The Fund achieved a similar outcome by taking a set of decisions establishing the Enhanced Structural Adjustment Facility to administer a separate pool

¹ The same Article also remedies to some extent one or perhaps two other shortcomings of the original Articles by the introduction of "the objective of fostering orderly economic growth with reasonable price stability" as a guideline for members' policies.

of resources contributed by members. More recently, the Fund has moved into governance and the avoidance of "nonproductive" government expenditure, again without expressing the need for an amendment to support these moves. As noted above, moreover, the Fund has whole-heartedly embraced capital liberalization in its surveillance, financing, and technical-assistance activities without being hindered by a lack of mandate or from the dated provisions of Article VI.

It is thus not necessary to add the liberalization of capital movements to the Fund's purposes. Yet it would seem desirable to do so and, at the same time, to eliminate the stale provisions of Article VI as a sign of official recognition of the substantive benefits that members would derive from greater freedom for capital movements. It does not follow, however, that it would also be a good idea for the Fund to assume jurisdiction over restrictions on capital movements. Indeed, as demonstrated by the discussion below, it would not.

3 Fund Jurisdiction over Restrictions on Capital Movements?

The Fund's Annual Report for 1997 (p. 39) expresses the view that

The Fund, given its mandate and its universal membership, should play a central role in promoting capital account liberalization and fostering the smooth operation of international capital markets. The Fund should also be prepared to advise its members in determining how the removal of restrictions should be sequenced with supporting structural and macroeconomic reforms. Likewise, the Fund [is] well placed to assess whether temporary imposition of controls [is] appropriate to address surges in capital inflows and outflows.

These observations are followed by the conclusion that most of the Fund's directors support an amendment of Article VIII that would extend the Fund's jurisdiction to capital movements, but no arguments are presented as to why such an amendment would promote the objectives mentioned. There are four good reasons to doubt that it would:

• The extension of the Fund's jurisdiction to capital movements involves much more than the deletion of the word "current" before "transactions" at various places in Article VIII. It does not simply broaden the Fund's jurisdiction from current transactions to all transactions; it introduces, in addition, two new concepts: (1) The existing Articles consider restrictions from the point of view of the balance of payments and accordingly address only *outpayments* of foreign exchange. By contrast, the current drive aims at liberalizing both *inflows*

and *outflows* of capital, and thus at removing restrictions that members may maintain for other than balance-of-payments reasons. (2) Although the existing Articles give the Fund jurisdiction over *payments* and *transfers* for current international transactions, leaving any jurisdiction over the transactions themselves to another international institution, the new jurisdiction sought for the Fund would refer to the capital movements themselves. Under the new proposals, therefore, the Fund would find itself legislating both outside its designated field of business (balance of payments) and across areas of jurisdiction of another international organization, the World Trade Organization, which is also approaching, although from a very different angle, the subject of capital movements among its membership (Ostry, 1997).² Such a significant expansion of the jurisdictional scope of the organization should be undertaken only if there is a clear benefit in terms of the objectives to be achieved.

• In that connection, a look at the Fund's experience with the removal of restrictions on current payments may be useful. The Fund's first history, for all its caution and reticence, shows that experience to have been far from happy. In the 1950s, the Fund's executive board engaged in a difficult debate on all aspects (including scope, periodicity, and form) of the consultations that the Articles mandated to be held with "any members retaining any restriction inconsistent with Article VIII, Sections 2, 3, or 4." The history mentions "vexing issues" that could not be settled, "jurisdictional disputes," and "fears of the Fund overstepping the mark" (De Vries, 1969, pp. 232-237). By 1965, more than a decade after the consultations had begun, Article VIII had been accepted by only eleven developing countries (not counting Saudi Arabia and Kuwait), all in Northern Latin America and the Caribbean, and three of these (Guatemala, Mexico, and Panama) had accepted convertibility from the start. By that time, moreover, the Fund had come to acknowledge "that there was no simple solution for the continuing restrictions" of developing countries and, although denying any legal basis for leniency based on countries' low income levels, as had been sought by UNCTAD, the Fund was "nonetheless careful, in implementing its policies, to take into consideration . . . problems related to

² The Interim Committee showed its awareness of the risk of potential conflict implied in bringing all capital movements under the Fund's jurisdiction and stated that "in both the preparation of an amendment to its Articles and in its implementation, the members' obligations under other international agreements will be respected. In pursuing this work [sic], the Committee expects the IMF and other institutions to cooperate closely" ("Statement," 1997).

economic development" (De Vries, 1969, p. 294). It moved away from trying to convert countries to the "true faith" of convertibility and toward education and technical assistance. For the next twenty-five years or so, the consultations with developing countries soft-pedaled (perhaps more accurately, ignored) the obligation of those countries to remove themselves from the "transitional arrangements" of Article XIV, and only a few countries took that step. The Fund continued to rely on suasion and never used its power under Article XIV, Section 3, to "make representations to any member that conditions are favorable for the withdrawal of any particular restriction, or for the general abandonment of restrictions." Still, countries did substantially liberalize their payment regimes during that time, making it possible for many of them to move to Article VIII in the 1990s, when the Fund initiated a drive to that effect.

This experience with restrictions on current transactions suggests a similar trade-off between two roles the Fund staff can play with respect to restrictions on capital movements. If given jurisdiction over such restrictions, the staff is likely to become the enforcer of the new legal code, making sure at each step that any policy it recommends or endorses can pass the test of the new Article. If not burdened with this legal task, the staff can be the unbiased adviser of member countries on the benefits and costs of capital liberalization and a reliable source of information about best practices in this field. It is a matter of concern that, even before the revised Articles have been drafted, the expected future code of conduct is casting its shadow ahead to color the staff's attitude toward restrictions on capital movements. One staff publication expresses "a general distaste for [capital] controls as a way of addressing balance of payments difficulties" (Quirk et al., 1995, p. 6). For any capital restriction to receive staff support, it must, it appears, be labeled as "temporary" or "for a transitional period." The notion that some controls on capital inflows may be useful on a permanent or long-term basis for stability or for prudential reasons seems to be beyond the pale.

• Even on matters of considerable importance to the system, jurisdiction is not the only option the Fund has to influence members' policies. The Fund learned that lesson after the collapse of the par value system destroyed its approval jurisdiction on exchange rates. The early discussions on reform in the Committee of Twenty (1972–1974) focused on reestablishing an approval regime in the form of a system of "stable but adjustable par values" with allowance for countries to

"adopt floating rates in particular circumstances, subject to Fund authorization, surveillance and review" (IMF, 1974, p. 12). When the time came to codify the results of the reform exercise, however, a provision requiring a country to seek Fund approval to float its currency proved unacceptable. At the same time, countries that wanted to maintain fixed rates were not prepared to accept Fund jurisdiction over the level of their rates, or changes in them, if the currencies of other countries continued to float. Thus, the only acceptable regime, as embodied in the amended Article IV, was one in which countries would be free to adopt the exchange arrangements of their choice, but in which their exchange-rate *policies* would be subject to "firm surveillance." Over the next twenty years, this deregulated regime allowed countries to experiment with a variety of exchange-rate arrangements, and it allowed the Fund, although the Fund no longer had the power to approve changes in rates, to influence members' exchange-rate policies by surveillance, conditionality, and technical assistance.

• The need for experimentation, rather than for the adoption of a new dogma, applies as much to the subject of capital liberalization as it did—and does—to the choice between fixed and floating rates. The Asian crisis has shown that there is still much to learn about the costs and benefits of capital decontrol. It is also worth noting that the broad support noted earlier for the liberalization of capital movements relates to the process of removing unnecessary, ineffective, and counterproductive restrictions, rather than to an *end result* of complete freedom of capital movements. I doubt that the consensus goes as far as the view that "economic logic advocates the dismantling of capital controls" or that "it is generally agreed that efficiency criteria argue for completely free exchange systems" (Guitián, 1996, p. 186). At that level of abstraction, the benefits to world welfare to be achieved by the unrestricted freedom of capital movements could equally well be claimed for the free movement of people; indeed, the European Union introduced both freedoms at about the same time. Yet it would seem (let us say) premature to argue that the Fund should consider bringing the immigration policies of its members under its jurisdiction.

The four considerations presented above would seem to support the conclusion that, rather than seeking Fund authority over capital restrictions, it would be more efficient to stick with the present deregulated regime, in which the Fund *promotes* the orderly liberalization of capital movements by means of the three instruments already at its disposal, that is, surveillance, conditionality, and technical assistance.

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WHO NEEDS CAPITAL-ACCOUNT CONVERTIBILITY?

Dani Rodrik

Imagine landing on a planet that runs on widgets. You are told that international trade in widgets is highly unpredictable and volatile on this planet, for reasons that are poorly understood. A small number of countries have access to imported widgets, while many others are completely shut out even though they impose no apparent obstacles to trade. With some regularity, moreover, those countries that have access to widgets get too much of a good thing, and their markets are flooded with imported widgets. This allows them to go on a widget binge, which makes everyone pretty happy for a while. However, such binges are often interrupted by a sudden cutoff in supply, unrelated to any change in circumstances. The turnaround causes the affected economies to experience painful economic adjustments. For reasons that are equally poorly understood, when one country is hit by a supply cutback in this fashion, many other countries experience similar shocks in quick succession. Some years thereafter, a widget boom starts anew. Your hosts beg you for guidance: how should they deal with their widget problem? Ponder this question for a while and then ponder under what circumstances your central recommendation would be that all extant controls on international trade in widgets be eliminated.

Substitute "international capital flows" for "widgets" and the description above fits today's world economy quite well. We have just gone through a lending boom-and-bust cycle in Asia that is astounding in its magnitude. In 1996, five Asian economies (Indonesia, Malaysia, the Philippines, South Korea, and Thailand) received net private-capital inflows of \$93 billion.¹ One year later, they experienced an estimated outflow of \$12 billion (IIF, 1998), a turnaround in a single year of \$105 billion, more than 10 percent of the combined gross domestic product (GDP) of their economies! Consequently, three of these economies (Indonesia, South Korea, and Thailand) are mired in a severe economic crisis, the magnitude of which would have seemed inconceivable even to the most knowledgeable and insightful observers of the region.

¹ Here and throughout, "billion" equals one thousand million.

The Asian crisis is not an isolated incident in the history of financial markets. We have seen at least two other significant international lending crises in the last twenty years: the generalized debt crisis of 1982 and the Mexican crisis of 1994–95. Charles Kindleberger (1984, p. 269), perhaps our wisest chronicler of financial folly, claims that financial crises have appeared at roughly ten-year intervals for the last 400 years or so. As he puts it (p. 273), "the record [in financial markets] shows displacement, euphoria, distress, panic and crisis occurring decade after decade, century after century." Boom-and-bust cycles are hardly a sideshow or a minor blemish in international capital flows; they are the main story.

From this perspective, embracing as the International Monetary Fund's next major mission the liberalization of capital accounts—albeit in an "orderly" fashion and buttressed by enhanced prudential regulation of financial practices—seems genuinely odd. One wonders which of the ills of international capital markets the proposed medicine will cure. Will the African countries get the foreign capital they need if they remove capital controls? Will "emerging markets" be less at risk of being flooded with foreign capital when such flows conflict with the domestic goals of controlling inflation or of maintaining a competitive exchange rate? Will sudden reversals in flows become less likely than before? Will contagion across countries become less severe? Will more of the inflows take the form of long-term physical investments rather than short-term financial flows?

It is not that capital controls are necessarily the answer to these problems; they are not. But capital-account liberalization helps even less. We can imagine cases where the judicious application of capital controls could have prevented a crisis or greatly reduced its magnitude. Indonesia and Thailand would have been far better off restricting borrowing from abroad instead of encouraging it. Korea might just have avoided a run on its reserves if controls on short-term borrowing had kept its short-term exposure to foreign banks at, say, 30 percent, rather than 70 percent of its liabilities. Which of the recent blowups in international financial markets could the absence of capital controls conceivably have prevented?

If the recent evidence teaches us anything, it is that there is a compelling case for maintaining controls or taxes on short-term borrowing. The three countries hardest hit by the Asian financial crisis—Indonesia, Korea, and Thailand—were the three in the region with the largest short-term obligations (in relation to reserves or exports).

Admittedly, we know too little about what kinds of controls work best in these circumstances. The evidence on the effectiveness of controls on short-term borrowing is patchy, even in the relatively clear, well-studied case of Chile (Edwards, 1998).

Where knowledge is limited, the rule for policymakers should be, first, do no harm. Enshrining capital-account convertibility in the IMF's Articles of Agreement is an idea whose time has not yet come. We have no evidence that it will solve any of our problems, and some reason to think that it may make them worse.

1 Current-Account versus Capital-Account Convertibility

It is tempting to think of capital-account liberalization as the natural follow-up to the establishment of convertibility for current-account transactions. If international trade is beneficial when it concerns goods and services, why not extend the freedom of trade to financial and physical assets too?

As the widget scenario above suggests, the analogy is misleading. There is a fundamental difference in the way markets operate in these different areas. Markets for goods and services are rarely textbook perfect, but they operate in most instances with a certain degree of efficiency and predictability. Financial markets too often do not. Market failures arising from asymmetric information, incompleteness of contingent markets, and bounded rationality (not to mention *irrationality*) are endemic to financial markets. Some of the consequences of these failures are well known and have been highlighted in the literature:

- Asymmetric information combined with implicit insurance results in excessive lending for risky projects.
- A mismatch between short-term liabilities and long-term assets leaves financial intermediaries vulnerable to bank runs and financial panic, a problem that is particularly severe in cross-border transactions where there is no international lender of last resort (Sachs, 1995; Radelet and Sachs, 1998).
- When markets cannot observe the intrinsic quality of money managers, these managers are likely to place too little weight on their private information and to exhibit herd behavior (Scharfstein and Stein, 1990), behavior resulting, in turn, in excess volatility and contagion effects.

• Because asset values are determined by expectations about future returns, the dynamics of asset prices can be quite rich, exhibiting bubbles and peso problems.

Such problems, to cite only a few of the *rational* explanations for observed anomalies in financial markets, are an integral part of the financial arena, rendering capital controls an inherently second-best problem.

2 Is It Mostly Fundamentals?

A counter-argument is that financial markets get it mostly right, and that sharp reversals of capital flows are usually the result of changes in fundamentals, such as external shocks or policy mistakes. But, although fundamentals surely underlie every financial crisis in at least some small way, the magnitude of the crises are often incommensurate with any plausible change in the fundamentals. We know of no changes in the fundamentals, for example, that could possibly account for the sharp reversal of capital flows to Asia in 1997. The simple fact is that commercial banks either got it terribly wrong in 1996 (and before) in showering Asian countries with loans or were terribly wrong in completely pulling out thereafter.

A sad commentary on our understanding of what drives capital flows is that every crisis spawns a new generation of economic models. When a new crisis hits, the previous generation of models is judged to have been inadequate. Hence, the earliest models of currency crises were based on the incompatibility of persistent monetary expansion with fixed exchange rates. These models seemed to account well for the myriad balance-of-payments crises experienced during the 1970s. The debt crisis of 1982 unleashed an entire literature on overborrowing in developing countries, placing the blame squarely on expansionary fiscal policies (and, in some countries, on inappropriate sequencing of liberalization). But crises did not go away when governments improved their monetary and fiscal behavior. The exchange-rate mechanism (ERM) crisis in 1992-93 could not be blamed on lax monetary and fiscal policies in Europe and therefore led to a new set of models with multiple equilibria. The peso crisis of 1994–95 also fit poorly, so economists came up with yet other explanations—this time focusing on overvaluations of real exchange rates and the need for more timely and accurate information on government policies. In the Asian crisis, neither the real exchange rate nor inadequate information seems to have played a significant role, so attention has shifted to moral hazard and crony capitalism in the affected countries (see Flood and Marion, 1997, and Krugman, 1998, on changing perspectives in the currency-crisis literature).

The moral of this twisted story is twofold: (1) financial crises will always be with us, and (2) there is no magic bullet to stop them. These conclusions are important because they should make us appropriately wary about statements such as, "we can make free capital flows safe for the world if we do x at the same time," where x is the currently fashionable antidote to crisis. Today's x is "strengthening the domestic financial system and improving prudential standards." Tomorrow's is anybody's guess. If we are forced to look for a new series of policy errors each time a crisis hits, we should be extremely cautious about our ability to prescribe a policy regime that will sustain a stable system of capital flows.

This point was recognized in a prescient set of comments by Arminio Fraga (1996, pp. 53–54) in an earlier Princeton symposium following the peso crisis:

If Mexico is thought to have borrowed so much, it is also fair to ask why the markets were so lax in providing the financing. Having asked the same question about the debt crises of the 1930s and 1980s . . . , I would answer again that investors behave myopically, each one perhaps thinking that it will be possible to exit ahead of the rest. . . .

At this point, I am forced to conclude that better disclosure of country data and stronger economic institutions (such as independent central banks and more transparent budgetary practices) can reduce the chances of another Mexican crisis but cannot totally prevent it.

Fraga sensed that the policy errors *du jour* emphasized by the policy community after the peso crisis may have aggravated the endemic instability of capital markets but that they were not the heart of the matter. The Asian crisis has proved him right.

One might add that the current emphasis on strengthening domestic financial systems glosses over the practical difficulties. Putting in place an adequate set of prudential and regulatory controls to prevent moral hazard and excessive risk-taking in the domestic banking system is a lot easier said than done. Even the most advanced countries fall considerably short of the ideal, as their bank regulators will readily tell you. The U.S. Comptroller of the Currency recently complained that only four of the sixty-four largest North American banks practice state-of-the-art portfolio risk management and that loan standards are therefore

more lax than they ought to be.² Imagine the problems that will keep bank regulators awake at night in India or Turkey!

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?

3 What About the Costs of Capital Controls?

The fundamental argument in favor of removing capital controls is that they are costly to economic performance. In theory, capital controls prevent risk-spreading through global diversification of portfolios,³ result in an inefficient global allocation of capital, and encourage irresponsible macroeconomic policies at home. What does the evidence show?

Table 1 lists all the developing countries that, according to the IMF, have had unrestricted capital accounts during at least part of the period since 1973.⁴ There are twenty-three such countries, four of which have maintained openness continuously throughout the period (Hong Kong, Indonesia, Panama, and Malaysia since 1974). Many others have experienced long stretches of openness: Bolivia (1987–96), Ecuador (1973–93), Liberia (1973–84), Mexico (1973–82), and the Republic of Yemen (1973–90), to cite some examples. The list includes a number of high-achievers, but also many underperformers. If there is a correlation between capital-account openness and successful economic performance, it does not jump out from the table.

More systematic evidence is presented in Figures 1 through 3, which show partial scatter plots relating capital-account liberalization to three indicators of economic performance: per capita growth in gross domestic product (GDP), investment as a share of GDP, and inflation. Each indicator is measured as an average over the 1975–89 period. The indicator of capital-account liberalization is the proportion of years

² "Banks Warned on Letting Loan Standards Slide," *Financial Times*, February 19, 1998, p. 5. I am grateful to Martin Feldstein for this reference.

³ Such diversification can be desirable not only because it reduces risk, but also because it allows higher-yield (and higher-risk) investments to be undertaken, thereby enhancing economic growth. See Obstfeld (1994) for a model of this scenario.

⁴ The information comes from the IMF's annual reports on exchange arrangements and exchange restrictions by way of Kim (1997). Countries with capital controls are those that the IMF classifies as having "restrictions on payments for capital transactions."

 $\begin{tabular}{l} TABLE\ 1\\ Developing\ Countries\ with\ No\ Restrictions\ on\ Capital-Account\\ Transactions,\ 1973-1996\\ \end{tabular}$

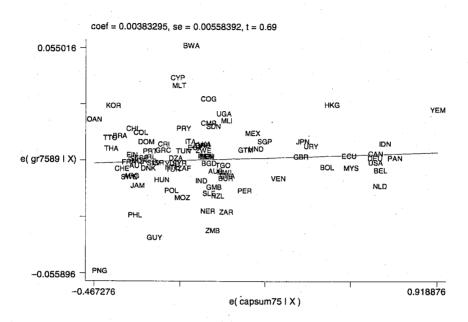
Country	Period without Restriction
Argentina	1994–96
Bolivia	1987–96
Costa Rica	1973–74, 1981–82, 1996
Ecuador	1973–93
The Gambia	1992–96
Guatemala	1974–80, 1990–96
Honduras	1973–80
Hong Kong	1973–96
Indonesia	1973–96
Islamic Republic of Iran	1975–78
Liberia	1973–84
Malaysia	1974–96
Mexico	1973–82
Nicaragua	1973–78
Niger	1996
Panama	1973–96
Paraguay	1983–84
Peru	1979–84, 1994–96
Seychelles	1978–96
Singapore	1979–96
Togo	1995
Uruguay	1979–93
Republic of Yemen	1973–90

SOURCE: Kim (1997), using IMF annual reports on exchange restrictions.

from 1975 to 1989 during which the capital account was free of restrictions. The sample covers almost 100 countries, developing as well as industrial. The following controls are used in each figure: initial per capita GDP, initial secondary-school enrollment rate, an index of the quality of governmental institutions, and regional dummies for East Asia, Latin America, and Sub-Saharan Africa. The scatter plots thus display the relationship between the capital-account regime and economic performance, after controlling for these other variables.

The bottom line is easily summarized. The data provide no evidence that countries without capital controls have grown faster, invested more, or experienced lower inflation. Capital controls are essentially uncorrelated with long-term economic performance once we control for other determinants.

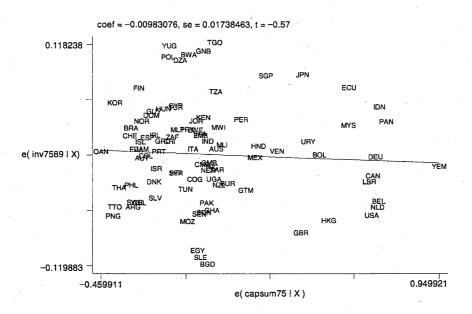
FIGURE 1
ECONOMIC GROWTH AND CAPITAL-ACCOUNT LIBERALIZATION, 1975–1989
(averaged for period)



Two issues relating to this exercise need further comment. First, policy choices with respect to the capital account are endogenous and are, to some extent, determined by economic performance itself. This potential for reverse causation clouds the interpretation of the scatter plots. But to the extent that this is a problem, it introduces a *positive* relationship between open capital accounts and good performance. Countries are more likely to remove their capital controls when their economies are doing well. If we could eliminate this bias, we might even find a *negative* relationship between open capital accounts and performance.

Second, capital controls come in various guises, and the measure I use to indicate the presence (or lack) of capital controls is an imperfect proxy for what we may be trying to capture. Let us distinguish between two questions that one might wish to answer with a statistical analysis of the kind presented here. First, we might be interested in the possibility that *some* forms of capital controls—deposit requirements on short-term borrowing, as in Chile, for example—will enhance economic performance. The dummy variable that I use for capital controls is too coarse for that purpose, so the exercise is not very informative. A

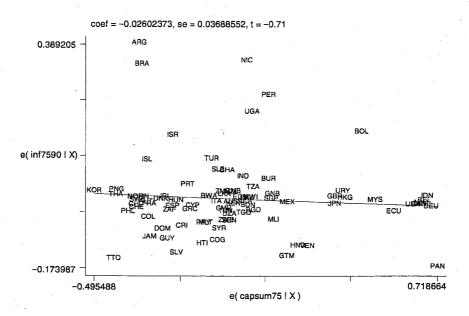
 ${\it FIGURE~2}$ Investment as a Share of GDP and Capital-Account Liberalization, 1975–1989 (averaged~for~period)



second question, however, is whether we are likely to see an improvement in economic performance following the removal of existing capital controls. The statistical evidence does bear on this issue, and it suggests that there is little reason for optimism. After all, countries are here classified according to the IMF's own rating of their policies. If an amendment to the IMF's Articles of Agreement were to come into effect, countries with capital controls would have to satisfy the IMF definition of openness on the capital account.

It is possible to assert that I have not carried out a fair test of the argument for removing capital controls because I have not distinguished between countries that have strong financial systems and other complementary institutions and those that do not. It is difficult to get a grasp on this issue, partly because the argument quickly becomes tautological. But the logic of this view suggests that capital-account convertibility should have beneficial effects in countries with strong institutions. I find no evidence for this in the data: interacting capital-account liberalization with indices of the quality of public institutions yields insignificant (and often "wrong"-signed) coefficients.

FIGURE 3
INFLATION AND CAPITAL-ACCOUNT LIBERALIZATION, 1975–1989
(averaged for period)



4 Where Does This Leave Us?

We have to live with financial markets that are prone to herding, panics, contagion, and boom-and-bust cycles. Appropriate macroeconomic policies and financial standards can reduce the risks but cannot eliminate them. This is as true of domestic financial markets as it is of international ones. Thanks to advances in technology and communications, international capital flows will likely continue to expand irrespective of government policy. The question is whether it makes sense to speed up this process by removing controls and thus linking domestic financial markets tightly with international markets. There are two significant risks in doing so: First, it would increase the liquidity to which borrowers in individual countries have access, thereby greatly magnifying the effects of any turnaround in market sentiment. Second, it would increase systemic risk through contagion from one market to another. The benefits of removing capital controls, however, remain to be demonstrated.

The greatest concern I have about canonizing capital-account convertibility is that it would leave economic policy in the typical "emerging market" hostage to the whims and fancies of two dozen or so thirty-something country analysts in London, Frankfurt, and New York. A finance minister whose top priority is to keep foreign investors happy will pay less attention to developmental goals. We would have to have blind faith in the efficiency and rationality of international capital markets to believe that the goals of foreign investors and of economic development will regularly coincide.

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AN INDIAN APPROACH TO CAPITAL-ACCOUNT CONVERTIBILITY

Savak S. Tarapore

Issues of capital-account convertibility and the proposed amendment to the International Monetary Fund's Articles of Agreement have been the subjects of considerable debate. Although the industrial countries were allowed a long interval before moving from current- to capitalaccount convertibility, the developing countries are today faced with a world of vastly increased international capital flows. The trend toward globalization and the move by a large number of developing countries to accept current-account convertibility has made capital controls in the developing countries completely porous. The question now is how to traverse the path to capital-account convertibility. The recent Southeast Asian crisis has added yet another twist to the issue, and its cautionary example for countries liberalizing their capital accounts is sometimes wrongly taken to imply that countries should not liberalize their capital accounts. Economists in India have recognized the obvious benefits of capital inflows, but they are fearful of capital outflows, which they think would cause an immiserization of growth. Although the more enlightened Indian policymakers recognize the need to move to capitalaccount convertibility, the vast number of economists and administrators in India are cynical and often quite vigorously oppose the move.

1 Capital Controls in India and the Reserve Bank's Committee

India has had a history of extremely tight controls on both current and capital payments, and it is thus of interest to see how the country now views capital-account convertibility. India accepted Article VIII status requiring current-account convertibility in August 1994. Since then, it has increasingly pondered which path it should take to capital-account convertibility. It was against this backdrop that the Reserve Bank of India set up a committee under this author's chairmanship to chalk out the road map and time frame for achieving capital-account convertibility. The committee's report (Report, 1997) is perhaps the most comprehensive document on capital-account convertibility produced in a

developing country. It may, therefore, be apposite to devote some attention to the issues it raises.

It should be noted that capital-account convertibility already exists in India for foreigners and nonresident Indians who have brought funds into the country; hindrances for them are largely bureaucratic. Indian residents, however, face extremely tight capital controls, and although there has been some relaxation for the corporate sector, it is no exaggeration to say that the capital controls for resident individuals are thoroughly barbaric.

2 The Committee's Recommendations

The report of the Committee on Capital Account Convertibility is in many senses unique. It first undertook a ten-country comparative study, which led it to conclude that India is ready for a cautious and phased move to capital-account convertibility. India's macroeconomic conditions, that is, the macroeconomic requirements for embarking on capital-account liberalization, are such that India would be starting from a position of relative strength. Its adjustment would therefore be less harsh than that of countries in weaker positions.

Three Years, Three Preconditions

The committee's report set out a three-year program for meeting certain essential preconditions for capital-account convertibility and, contingent on the successful attainment of those preconditions, a concurrent three-year phased program for introducing measures leading toward capital-account convertibility. The report is novel in that it emphasizes the simultaneity of the preconditions and liberalization measures and indicates that the pace of liberalization could be slower or faster than the three-year program, depending on the success or failure in achieving the preconditions. As the committee envisaged it, the firm establishment of the preconditions needs to be viewed as a process, rather than as a one-time result required before liberalization can begin. Contemporaneous with the attainment of these milestones, the report recommends the implementation of a cluster of measures, the sequencing and timing of which would need to be modulated depending on the success or failure in achieving the preconditions.

The committee recognized that there should be only a few essential preconditions for capital-account convertibility. Accordingly, it prescribed three requirements that need to be met over a three-year period:

- a reduction in the gross fiscal deficit of the central government from 5 percent of gross domestic product (GDP) to 3.5 percent;
- an inflation rate not to exceed an average of 3 to 5 percent over the three years;
- a reduction in the cash-reserve ratio of the banks from an average effective rate of slightly more than 9 percent to 3 percent and a reduction of the *gross* nonperforming assets of the banking system from about 17 percent to 5 percent.

It was recognized that the most difficult condition to meet would be the reduction in the nonperforming assets of the banking system. Indeed, it is said that whether or not India can make a successful transition to capital-account convertibility depends on the effectiveness with which the financial sector can undertake this specific adjustment.

When the report was released in early June 1997, it was heavily criticized. It was accused of using the preconditions as a ruse for not moving to capital-account convertibility. With the gathering storm in Southeast Asia, however, critics are realizing that the Indian report has identified all the precautions, particularly in the financial sector, that experts are now advocating in the aftermath of the Southeast Asian crisis. At a recent seminar on capital-account convertibility in Washington, D.C., Stanley Fischer (1998) approvingly referred to the Indian strategy of approaching capital-account convertibility only after a proper strengthening of the financial system.

Four Attendant Variables

The committee also cited four attendant variables, which the recent turbulence in Southeast Asia has shown to be remarkably pertinent to achieving the committee's objectives:

The current-account deficit. The committee derived a way to identify a sustainable level of a current-account deficit by relating it to the ratio of the current receipts to GDP and the need for the debt-service ratio to trend downward. The current-account deficit should be allowed to rise only if the ratio of current receipts to GDP is rising. The formulation used by the committee thus provides for changes in India's interface with the international economy.

The REER monitoring band. The committee recognized that an increase in capital inflows could cause a large appreciation of the rupee. Sooner or later, the market would conclude that the appreciation was unsustainable, and outflows would gather momentum, possibly triggering

a sudden, uncontrollable spiral of depreciation. Such volatility would obviously be undesirable. In the absence of a better indicator than the real effective exchange rate (REER), which the authorities can regulate and the market can understand, the committee recommended that, although relying on the REER, it would be desirable to devise a system by which any necessary correction in the REER could be brought about smoothly, so as to avoid excessive volatility in the exchange rate. As part of a transparent exchange-rate policy, the committee recommended that (1) a neutral, or base-period, REER should be announced, (2) an REER monitoring band should be declared, (3) the actual REER should be published contemporaneously with the reserves, and (4) changes in the neutral REER should be made public. The committee recommended a band of ± 5 percent around the neutral REER. The greater transparency would enhance the efficacy of exchange-rate policy by encouraging orderly behavior, and the monitoring band would anchor the expectations of market participants by indicating when the Reserve Bank of India ordinarily would or would not intervene. The monitoring band would thus give a clear corridor for market activity and would relieve the authorities of the necessity of intervening each time there was a small movement in the exchange rate.

There has been considerable criticism of the monitoring-band concept, but much of it can be attributed to a lack of understanding of the basic issues. Some critics argue that exchange-rate policy would operate in an excessively predictable manner, thereby inviting speculative forces to operate. This is a *non sequitur*. The exchange rate under such a system would sustain the competitiveness of the economy, so that speculators operating against the regime would inevitably get scalded. At a World Bank seminar on Indian financial-sector reform in December 1997, John Williamson made an impassioned plea to the several key Indian policymakers in attendance that they shed their reluctance to accept the REER monitoring band, which would be a sustainable policy to operate. The main reason for the authorities' reluctance to implement this policy is that, at the present time, the REER still shows a sizable appreciation. A policy declaration, as advocated by the committee, would require a nominal depreciation against the U.S. dollar, a decision the authorities would find unacceptable. What they fail to recognize, however, is that market forces will inevitably require such an adjustment, and they would therefore be well advised to bring about the necessary exchange rate on their own and to use the monitoring band to ensure a soft landing. My assessment is that the authorities

attach great importance to a viable and sustainable exchange rate and would gladly implement such a policy, if they could do so without an explicit declaration.

Foreign-exchange reserves. The committee gave close attention to the adequacy of foreign-exchange reserves. In addition to the standard norms relating reserves to imports and debt-service payments, the committee recommended that the adequacy of reserves should be measured in relation to short-term debt and portfolio flows and also to the volume of domestic currency in circulation. The committee was of the view that short-term debt and portfolio flows should not exceed 60 percent of reserves. Although the latest official data released indicate that this ratio was 75 percent in June 1997, my rough calculations suggest that, by March 1998, it was probably about 100 percent. Short-term debt has a tendency to rise sharply and become unsustainable, and I have therefore suggested a modified version of the Tobin tax, in the form of a tax on trade credit irrespective of maturity. This would discourage short-term borrowing abroad.

The committee advocated that the ratio of net foreign assets to domestic currency should be closely monitored. A high ratio of net foreign assets to currency is an important indicator of prudent management, because a high ratio ensures against any problems on the external front. The committee recommended a statutory ratio of 40 percent (until 1956, there was such a statutory ratio) and stated that, as an operational guideline, the authorities should try to keep the ratio at its current level of 70 percent. Critics have misinterpreted this recommendation as an endorsement of a currency-board system. It is not. What is envisaged is merely a Plimsoll line that would trigger policy action. Allowing the ratio to fall below 40 percent would be totally reckless and a sure way of bringing on a crisis, because portfolio funds and nonresident deposits would exit. The 40 percent floor cannot be allowed to be pierced; indeed, confidence in the system would be enhanced if the 40 percent minimum were statutorily prescribed.

The financial system. The committee emphasized the need to strengthen the financial system. Once the capital account is liberalized, the financial system will come under intense pressure. It is therefore essential to prepare the financial system in the context of the move to capital-account convertibility. In India, the financial sector is very vulnerable. This is a matter that is being reviewed by the Committee on Banking Sector Reforms recently set up by the Government of India with Mr. M. Narasimhan as chairman and the author as a member.

3 Why Embrace Capital-Account Convertibility?

Critics have argued that, if the move to capital-account convertibility requires all these adjustments, India might just as well eschew capital-account convertibility and continue to operate as it does now. They argue, further, that, by opening up capital outflows, India would be transferring its savings abroad, to the detriment of the country. They cite the Southeast Asian crisis as proving that India would be far better off without capital-account convertibility. Nothing could be further from the truth.

It must be recognized that, with the introduction of current-account convertibility, capital controls become porous and totally ineffective. In an increasingly integrated world, moreover, a country cannot remain isolated. If countries do not plan for an orderly integration into the world economy, the world will integrate with them in a manner that gives them no control over events. Thus, the question is not whether a country should or should not move to capital-account convertibility but whether an orderly or a disorderly transition is desired.

The Advantages

Although countries understandably have fears about plunging into capital-account convertibility, there are a number of distinct advantages: (1) there would be more capital available to the country, and the cost of capital would come down; (2) just as there are gains from trade, there are advantages to the free movement of capital, which is, in a sense, the freedom to trade in financial assets. A country's residents can benefit from holding financial assets abroad, just as foreigners benefit from holding financial assets in the residents' country—if, after all, the world sees an advantage to trading in financial assets, why should developing countries not also benefit from such transactions? (3) the spreads of banks and nonbank financial institutions would come down as a result of increased competition, rendering the financial system more efficient; (4) tax levels would move closer to international levels, thereby reducing evasion and capital flight; (5) the cost of government borrowing would fall in response to lower interest rates, thereby reducing the fiscal deficit; and (6) it would become very difficult for a country to follow unwise macroeconomic policies, because, under capital-account convertibility, markets would peremptorily punish imprudence.

A Warning from Southeast Asia?

Does the time frame for achieving capital-account convertibility need to be reassessed in light of the Southeast Asian turmoil? We in India have a lot to learn from the Southeast Asian experience, but the one conclusion we do not want to reach is that we should reject capital-account convertibility because certain other countries have had problems with their economies. The difficulties in Southeast Asia are not attributable to capital-account convertibility, and India will not make itself immune to the region's problems by rejecting capital-account convertibility. The Southeast Asian countries made a number of mistakes, however, that should be avoided. They ignored the overheating of their economies, trying to maintain rates of growth above potential and running current-account deficits that were unsustainable. They permitted unrestricted corporate borrowing abroad and allowed for a shortening of the external-debt maturity structure in an effort to sustain that level of borrowing. At the same time, moreover, they tried to peg their currencies to the dollar.

It would be extremely unwise for us in India to believe that our financial system is immune to problems of the kind faced by the financial sectors in other countries. We should not impose the tyranny of the status quo, however, merely because some economies have had problems. Underlying all this is the simple dictum that sound macroeconomic policies will bring rewards and imprudent policies will invite punishment. Far from fearing such punishment, we should view it as an automatic discipline and the best insurance against reckless policies.

4 The IMF Amendment

At the meeting of the IMF Interim Committee in April 1997, it was decided, in principle, to amend the IMF's Articles of Agreement to make the promotion of capital-account liberalization a specific purpose of the IMF and to give it jurisdiction over capital movements. The Group of Twenty-Four (the developing countries) stressed, however, that for capital-account liberalization to gather momentum, there must be assurance that IMF assistance would be available to members facing volatile capital flows. The G–24 also warned that capital-account liberalization should not be made a condition of access to IMF resources.

It may sound curious that in countries such as India, there was a broad ground swell of support for capital-account convertibility when the amendment was first proposed a year ago. This is clearly illustrated by a statement made by the then governor of the Reserve Bank of India, Dr. C. Rangarajan (1997, para. 9):

There is a proposal to amend the Articles of Agreement to incorporate capital account convertibility as one of the obligations of the Fund membership. Mr. Chairman, as you know, the Government of India has already

announced certain steps toward capital-account convertibility. Thus, purely from the Indian perspective, we welcome the move toward capital-account convertibility. However, several staff studies have shown that there are important preconditions for introducing capital-account convertibility. Given the differences among countries with regard to progress made toward structural reform and stabilization, it may be unwise to put all the members in a strait-jacket where they lose their independence to take corrective action in times of crisis. This is particularly so when the ability of the Fund to come to the rescue of its members in case of a balance of payments crisis is somewhat limited.

Some months later, in September 1997, the Hong Kong communiqué of the Interim Committee stressed that capital-account liberalization should proceed in an orderly way, with adequate transition periods to avoid premature actions that might lead to reversals.

Pronouncements by eminent persons such as John Eatwell (1996) and Lawrence Summers (1998), cautioning the developing countries against moving too rapidly to capital-account convertibility, without fulfilling the prerequisites, have led to a perceptible drop in the enthusiasm of many developing-country authorities for moving toward capital-account convertibility. Those observers who have expressed caution with respect to this issue have been right to do so, but they may not appreciate the negative impact their statements have had on the earlier advocates of capital-account convertibility in the developing countries. Many in the developing world continue to believe that the Southeast Asian debacle had something to do with capital-account convertibility, and that the countries that did not have capital-account convertibility were protected from the contagion effect of the crisis. Against this backdrop, how should the IMF approach amendment to the Articles of Agreement?

5 An Amendment or a New IMF Article?

Early in the discussion about the move to capital-account convertibility, the analogy was drawn with the process used to achieve current-account convertibility, that Article VIII establishes the objective and Article XIV provides the necessary transitional arrangements. The analogy, however, is not quite appropriate. The shift in a country's status from Article XIV to Article VIII with respect to current-account convertibility is, in a sense, irrevocable. If an analogous commitment were required with respect to capital-account convertibility, countries would be excessively cautious and unwilling to declare their formal acceptance. In addition, such a process would generate a caste system akin to that imposed by

Articles VIII and XIV. It would be far better to have a new general Article on capital-account convertibility, under which the IMF would have a formal obligation to monitor members' progress toward achieving capital-account convertibility, would provide assistance to countries to develop optimal methods of liberalization, and would assist countries that experience periods of turbulence as they move toward capitalaccount convertibility. The new Article could usefully provide for a move away from the minutiae of capital controls on individual transactions. To ensure that countries gradually liberalize their capital account, it could encourage them to abolish capital controls altogether on transactions below a certain level, and it could progressively raise that level. Such a provision would eliminate a battery of controls without jeopardizing macroeconomic stability. Given the curious fact that the rigors of capital controls fall mainly on individuals in many developing countries, such reasonable limits for capital transfers by individuals would greatly reduce the use of the parallel market. Relaxing controls where they are most rigorous, therefore, would not be likely to cause macroeconomic problems. Moreover, the load on the exchange-control authorities would be greatly reduced, and a reduction in the harshness of microeconomic controls would greatly enhance overall welfare.

6 Conclusion

The need for strengthening the financial system to deal with increased competition is the most important prerequisite for capital-account convertibility, and failure to make the necessary adjustments could jeopardize the entire process toward capital-account liberalization. The proposed new IMF Article should therefore explicitly provide for both technical assistance and financial support for countries undergoing the transition. A sudden reduction in capital inflows or an increase in capital outflows would justify support from the IMF, provided the member country had been following prudent macroeconomic policies. Combining capital-account-liberalization measures with realistic preconditions and a safety net should things go wrong would assist IMF members in moving more quickly and consistently toward capital-account convertibility.

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