

Taming Capital Flows¹
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1. Introduction

There are two extreme views on the question of international capital flows. One is that redeploying capital from rich to poor nations promises to dramatically enhance economic efficiency. Assume following Robert Lucas (1990) that output per person in the United States is 15 times that in India and that production in both countries obeys a Cobb-Douglas production function with a common intercept and an elasticity with respect to the capital/labor ratio of 0.4. Then the marginal product of capital in India is fully 58 times its value in the United States. A little capital mobility then goes a long way; it has the capacity to produce a lot of additional output. Moreover, for those who insist that output per person is lower in India than the United States not simply because India has a less capital per worker but also because its government follows more distorting policies, capital mobility applies pressure for reform. It promises to intensify the pressure for governments to follow sound and stable policies by imposing harsh penalties, in the form of capital flight, on those failing to do so. It promises to align domestic interest rates with world interest rates, just as free trade promises to align domestic prices with prices in the rest of the world.

At the opposite extreme, analysts like Dani Rodrik (1998) and Jagdish Bhagwati (1999) dispute these conclusions chapter and verse. There is no evidence, they insist, that opening an

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emerging market to foreign financial inflows significantly raises its output or rate of growth. If output per person differs, this is not so much because capital/labor ratios differ but because the parameters of the production function — the intercept capturing overall efficiency and also the elasticity with respect to the capital/labor ratio — differ across countries, reflecting differences in cultural context, institutional inheritance, and technological capacity. And even if the marginal product of capital differs in different uses, it cannot not simply be assumed that financial liberalization will result in resources being redeployed from low- to high-marginal-productivity uses, financial markets being riddled with information asymmetries. The analogy between free trade and free capital mobility, in other words, is fundamentally flawed. And to the extent that international capital markets are a source of market discipline, that discipline is arbitrary and erratic. International investors are prone to overlook weaknesses in the domestic policy environment until they are abruptly brought to their attention, at which point markets over-react. Creditors panic, and the country suffers a devastating financial crisis. The punishment, as Guillermo Calvo and Enrique Mendoza (1996) have put it, is disproportionate to the crime.

The policy advice that flows from these positions is straightforward. Throw open the capital account, adherents to the first view advise, the sooner the better, or be prepared to bring up the rear of the Penn World Tables. Liberalize the capital account at your peril, those who subscribe to the second view warn, or run the risk of repeated crises.

Then there is the messy middle. Output per worker differs across countries, its occupants acknowledge, for both sets of reasons elucidated above. A higher capital/labor ratio therefore promises to raise output, but not necessarily to the extent implied by Lucas's identical-technologies logic. To be sure, capital-account liberalization also heightens countries'

vulnerability to crises, but their incidence is neither arbitrary nor capricious. The problem for policy is thus to find an appropriate balance of risks and returns -- that is, to liberalize flows just to the point where the benefits, in terms of additional stimulus to growth, continue to dominate the risks, in the form of susceptibility to financial disruptions. It is to find policies toward the capital account with the capacity to shift the frontier of feasible growth-stability combinations outward. It is not whether or not to live with international capital flows; rather, it is how to tame them.

2. The Messy Middle

Inhabitants of the messy middle find it hard to accept that inward foreign investment is without benefits. Foreign investment was integral to the development of the overseas regions of recent European settlement in the 19th century, when it financed the construction of railways, ports, and urban infrastructure. It came bundled with managerial and technological knowledge. Significantly, the majority of this capital transfer took the form of portfolio investment (Bordo, Eichengreen and Irwin 1999). It is not obvious from this experience, in other words, that while direct investment has benefits, portfolio investment has only costs. 20th-century history points to the same conclusion: all of the now-rich economies have open capital accounts and borrow and lend internationally. Why should sauce for the goose not be sauce for the gander?

Moreover, the notion that international financial liberalization is costly is hard to square with evidence that domestic financial liberalization is efficiency enhancing.² In principle, the case for domestic financial liberalization should carry over to international capital markets. Indeed,

²A comprehensive review of the evidence on this subject is Levine (1997).

capital-account liberalization itself contributes to the process of financial-sector deepening that has proven integral to economic development. By intensifying competition, it undermines rent seeking and monopoly distortions in domestic financial markets.

Rodrik's (1998) evidence to the contrary is widely cited. For a cross-section of developing countries, he finds no correlation between capital account liberalization and growth. But it is not easy to know what to make of the absence of a correlation. It could be, as Rodrik infers, that capital-account liberalization has costs as well as benefits, and that the one just neutralizes the impact of the other on the rate of growth. But it also could be that a significant causal relationship lurking behind Rodrik's zero correlation is masked by omitted variables. Statisticians can fail to find a relationship between capital account liberalization and growth not because none exists but because they have omitted other variables that are negatively associated with growth but positively associated with the decision to open the capital account. Using a different sample and a different specification, Rossi (1999) obtains the opposite result, finding that the presence of controls on capital inflows is associated with significantly slower growth.

But neither is it easy to swallow the opposing view that capital-account liberalization is always and everywhere benign. In the presence of other distortions, removing barriers to capital inflows can reduce welfare (Brecher and Bhagwati 1982), as predicted by the theory of the second best. In particular, government guarantees for domestic banks and other enterprises can lead to excessive inflows into the sectors receiving the guarantees, creating a serious misallocation of resources (McKinnon and Pill 1997).

The large literature on information asymmetries casts particular doubt on the presumption that financial liberalization results in a superior allocation of resources by showing that this

specific distortion can create adverse selection and moral hazard.³ Adverse selection can occur when lenders have imperfect knowledge of borrower quality and borrowers who are bad credit risks have a strong incentive to seek out loans. When incomplete information prevents lenders from being able to evaluate credit quality, they will only be willing to pay a price for a security that reflects the average quality of firms issuing securities, where that price is likely to be less than the fair market value for high-quality firms but above fair market value for low-quality firms. Because owners and managers of high quality firms realize that their securities are undervalued (equivalently, credit costs are excessive), they will not wish to borrow on the market. The only firms that will wish to sell securities will be low quality because they know that the price of their securities is greater than their value. Since high quality firms will issue few securities, many projects with a positive net present value will not be undertaken, while other projects whose net present value is lower than the opportunity cost of funds will in fact be financed. Under these circumstances, a liberalized capital market will not deliver an efficient allocation of resources.

Moral hazard can occur under asymmetric information because borrowers are capable of altering their behavior after the transaction has taken place. Borrowers will wish to invest in relatively risky projects in which they do well if the project succeeds but the lender bears most of the loss if the project fails; lenders, in contrast, will wish to limit the riskiness of the project. Hence, borrowers will attempt to alter their projects in ways that increase their risk after the financial transaction has taken place, and information asymmetries will facilitate their efforts to do so. Under these circumstances, many of the investment projects actually undertaken will be

³The exposition here draws on Eichengreen and Mussa et al. (1998).

excessively risky. Lenders, anticipating this, will be reluctant to make loans, and levels of intermediation and investment will be suboptimal.

Finally and most to the point, information asymmetries can aggravate financial instability and heighten crisis risk. This makes it no coincidence that the 1990s were a decade not just of capital-account liberalization but also of financial crises. In markets with incomplete information, lenders may engage in herding which results in sudden market movements.⁴ Herding can be rational in the presence of information cascades, when agents optimally infer information from the actions of other agents and therefore act alike. It can arise in an environment of incomplete information when incompletely-informed investors infer that a security is of lower (or higher) quality than previously thought from the decisions of other, presumably better informed, investors to sell (or buy) it. It is clear how such behavior can work to amplify price movements and precipitate crises. Insofar as information asymmetries are likely to be particularly severe where geographical and cultural distance is greatest, there is special reason to be wary of this phenomenon in international markets. Calvo and Mendoza (1997) provide a model of this form of herding: their argument is that financial globalization, by increasing the menu of assets available to investors and promoting portfolio diversification, reduces the returns to investing in acquiring information on individual assets and thereby aggravates incomplete-information problems.⁵ It is therefore conducive to herding and volatility.

⁴Devenow and Welch (1996) summarize the literature on models of rational herding.

⁵The same phenomena arise in Bacchetta and Wincoop's (1998) model of international capital flows in the presence of incomplete information and learning. But where Calvo and Mendoza argue that capital market liberalization, to the extent that it occurs simultaneously in many countries, undermines individual incentives to gather information and thereby permanently increases herding behavior, Bacchetta and Wincoop argue that incomplete information is a

Herding can also be rational when the payoffs to an agent adopting an action increase in the number of other agents adopting the same action. Obstfeld (1996) presents a model in which individual currency traders are too small to exhaust the central bank's reserves and force the devaluation of the currency but in which simultaneous sales of that currency by several traders can have that effect. Krugman (1996) shows how this payoff externality can result in herding. There may be particular reason to worry about this phenomenon when small economies are brought face to face with large market participants through the process of capital-account liberalization. To put the same point more concretely, emerging markets may be at risk of being destabilized by herding by a small number of hedge funds conscious of one another's actions.⁶

To be sure, crises have occurred in countries with both open and closed capital accounts. But there is an accumulation of evidence that capital-account liberalization heightens the risk of currency crises (see e.g. Rossi 1999) and that it raises the costs when things go wrong.⁷ "The greater frequency and cost of currency and twin crises," as the World Bank (1999, pp.125-6) dryly puts it, "have been associated with surges in international capital inflows -- especially private-to-private flows -- to developing countries and the growing integration of these

transitional problem associated with recent liberalization (that international investors will have the least information about recently liberalized markets) that should be overcome by the learning that takes place over time.

⁶Eichengreen and Mathieson et al. (1998) find no evidence that hedge funds have an unusual tendency to herd together in currency markets. Our data on hedge funds' positions was, however, limited to five major currencies. To be sure, there are plenty of anecdotes to the contrary from smaller markets (see e.g. Grenville 1999).

⁷In contrast, Rossi (1999) does not report a correlation between capital-account liberalization and banking crises. Credit booms are, however, a reliable leading indicator of banking crises (Caprio, Atiyas and Hanson 1994), and domestic credit booms are often a side effect of capital-account liberalization.

economies with world financial markets." This is not to imply that currency speculators strike randomly. Like an infectious disease, they are likely to pick off the weak and not the strong. But as with any plague, even robust health is no guarantee of survival.

All this suggests that optimal policy is neither to throw open the capital account nor to nail it shut. The question is not whether to liberalize but how to do so in a way that maximizes the benefits and minimizes the costs.

3. National Responses

Emerging markets can hope for multilateral assistance and for reforms of the international financial architecture, but at the end of the day they must fend for themselves. For inhabitants of the messy middle, this means adopting the following guidelines for policy.

Open the capital account only after financial markets have been liberalized and decontrolled. This may seem obvious, the point having been made in the 1980s (see e.g. McKinnon and Mathieson 1981 and Edwards 1984), but it is worth repeating in light of the international community's indifference and even encouragement of premature capital-account opening in the 1990s.

The 1980s version of the argument was that if capital flows are liberalized when domestic interest rates are capped, as has repeatedly been the case in developing countries, then capital account liberalization is a recipe for capital flight (as in Argentina in the early 1980s). The 1990s version points instead to the need to first strengthen the domestic financial sector, remove implicit guarantees, and impose hard budget constraints on domestic financial institutions. If bank capitalization is inadequate, management will have incentives to engage in excessive risk taking

and use the offshore funding available through the capital account to lever up its bets. If banks liabilities are guaranteed by the authorities, on the grounds that widespread bank failures would be devastating to a financial system heavily dominated by banks, foreign investors will not hesitate to provide the requisite funding. A simple explanation for why the resolution costs of banking crises have been larger in the 1990s than in earlier decades and larger in emerging than advanced economies is the coincidence of these domestic financial weaknesses with premature capital-account opening.

Liberalization of the capital account thus should not precede recapitalization of the banking sector, significant strengthening of prudential supervision and regulation, and the removal of blanket guarantees. The danger is that maintaining barriers to capital flows and foreign financial competition will diminish the pressure for restructuring. But recent experience in Asia and elsewhere casts serious doubt on the notion that capital account liberalization which increases the urgency of complementary financial reforms will necessarily deliver meaningful reform before crisis strikes. Crisis itself can breed reform, of course, but at a price.

Liberalize foreign direct investment first. FDI is the form of foreign investment that most plausibly comes packaged with managerial and technological expertise. It is the form of foreign investment least likely to aggravate weaknesses in the domestic banking system. It is less footloose than portfolio capital and less likely to flee in a creditor panic. All this points to the wisdom of liberalizing inward foreign investment early in the capital-account-opening process.

Again, this advice would seem obvious but for the large number of governments that have failed to heed it. As of 1996, 144 of 184 countries surveyed by the IMF still maintained controls on FDI. One element of the Korean crisis was the government's reluctance to allow inward FDI

and its readiness, in the face of foreign pressure, to instead open other components of the capital account. Admittedly, Thailand's lifting of most restrictions on inward FDI in import-competing industries in the 1970s and on export industries in the 1980s did not prevent a serious crisis. But the problem there was that the country also opened the capital account to portfolio flows without strengthening its financial system and rationalizing prudential supervision.

Skeptics like Dooley (1996) question whether FDI is any more stable than other forms of foreign investment. Data on the volatility of flows (see World Bank 1999) do not suggest a strong contrast with portfolio capital. But there is an obvious sense in which a foreign direct investor cannot easily unbolt machines from the factory floor in order to participate in a creditor panic. To be sure, direct investors have a particular incentive to hedge by purchasing other financial assets which they can liquidate in a crisis. They can borrow on domestic markets in order to sell short the domestic financial assets needed to take positions in anticipation of a currency crash. The implication is that the share of inward foreign investment in the form of FDI will offer some protection against financial instability in the early stages of capital account liberalization — that is, before the rest of the capital account has been opened and direct foreign investors, like others, can take positions on securities markets to hedge their exposures. But the more open the capital account, the easier it becomes to arbitrage different instruments, and the less the share of FDI in total capital inflows is likely to matter.

The case for liberalizing FDI early in the process of opening the capital account extends to the banking system. Entry by international banks is a way of upgrading management and its risk-management capacity in particular. The same knowledge spillovers that figure in discussions of other forms of FDI apply to financial sector. Insofar as home-country regulation applies, opening

the banking sector to foreign investment should raise the average quality of prudential supervision. Insofar as international banks are better capitalized, they are likely to engage in excessive risk taking. For all these reasons, permitting early entry by foreign banks can contribute to the upgrading of domestic financial arrangements that should be a precondition for further capital account liberalization (Demirguc-Kunt, Levine and Min 1998).

Two caveats should be noted. First, foreign entry tends to squeeze margins and intensify the pressure on weak domestic intermediaries. If gambling for redemption is a problem, that problem is likely to worsen as entry gets underway. Thus, the stabilizing impact of opening the banking system may be less initially than subsequently. This points again to the need to strengthen the domestic financial system at the start of the process of capital account opening. Second, entry by foreign banks will undermine the effectiveness of measures to limit portfolio flows. International banks with local branches and an ongoing relationship with domestic broker-dealers will find it easier than other international investors — hedge funds, for example — to borrow the domestic securities needed to short the currency, controls or not.

Liberalize stock and bond markets next. Intuitively, foreign investment in securities poses fewer risks than short-term foreign deposits. Because bank deposits are a contractual obligation to repay at par, the withdrawal of foreign deposits can jeopardize the stability of the banking system. When foreign investors liquidate their positions in stock and bond markets, in contrast, their actions simply show up in the prices of securities. In reality, of course, things are not so simple. A stock- or bond-market crash can damage the balance-sheet position of banks and others who themselves hold stocks and bonds. It can make life difficult for entities, including the government, with funding needs and for whom the prices of their liabilities are an important

signal of credit worthiness. But the single most reliable predictor turned up by the copious literature on leading indicators of currency crises is the term structure of portfolio capital inflows (Rodrik and Velasco 1999). This suggests liberalizing foreign access to domestic stock and bond markets before freeing banks to fund themselves abroad.

Unfortunately, securitized markets are almost always and everywhere late to develop. Their informational requirements are formidable. This is why developing countries rely disproportionately on banks for intermediation services, banks having a comparative advantage through their long-term relationships with clients in bridging information gaps. Creating an active stock market requires putting in place a regulatory framework requiring disclosure, discouraging insider trading, and protecting the rights of minority shareholders. This is not easily done in countries with limited administrative capacity, which helps to explain the relative undercapitalization of securities markets in, inter alia, Eastern Europe and the former USSR (Eichengreen and Ruehl 1998). Corporate bond markets develop only once a deep, liquid and reliable market has first grown up in a benchmark asset, typically treasury bonds. And that in turn requires a government with a record of sound and stable macroeconomic and financial policies. Where that record is lacking, banks are captive customers for government bond placements, which is not good for their balance sheets and in return for which they receive other favors, which give rise to the domestic financial-sector problems alluded to above.

Thus, opening domestic securities markets to foreign investors does not mean that they will beat down the doors instead of waiting for access to the banking system.

Liberalize offshore bank borrowing last. Not to repeat, but this is the most fundamental lesson of the Asian crisis and, in a sense, of the entire literature on sequencing capital

account liberalization. It is the message of Korea's crisis, which cannot be understood without reference to the decision to give the banks access to foreign funding before liberalizing other components of the capital account.

Equally, it is important to avoid creating artificial incentives for bank-to-bank lending. Thailand, as already noted, opened other components of the capital account first before giving banks access to offshore funds. But it then created the Bangkok International Banking Facility, under which Thai banks borrowing offshore (and onloaning the proceeds in foreign-currency terms) received favorable tax and licensing treatment. In part this policy is to be understood as an attempt to develop Bangkok as an international financial center. In part it reflects the government's tendency to use the banks as an instrument of industrial policy. Either way it is indicative of policies that are incompatible with capital account liberalization.

Rely on market-friendly instruments for managing the capital account. Advice like the preceding might be taken as encouragement for governments to micro-manage the liberalization process. But efforts to fine tune the capital account carry their own dangers. They threaten to create a burdensome administrative bureaucracy conducive to rent seeking and corruption. The development of financial markets makes it progressively easier for participants to evade the authorities' efforts by relabeling positions and repackaging obligations. Interventions which rely on markets instead of bureaucrats minimize these risks. This is the genius of the Chilean approach to capital-import taxes. A 30 per cent non-interest-bearing deposit for one year on all capital imports falls more heavily on investors with short horizons than on those prepared to stay for the duration. It is transparent and insulated from administrative discretion. There is less scope for evasion than of taxes on some forms of foreign investment but not others.

Admittedly, there is an enormous debate over the effectiveness of these measures. Some warn that avoidance is still a problem. Others observe the lack of evidence that Chile's taxes limited the overall level of foreign borrowing. The second objection can be dismissed on the grounds that the goal was never to limit the level of foreign borrowing but to alter its average maturity, and on the maturity front the evidence is compelling (see Hernandez and Schmidt-Hebbel 1999).⁸ As for the first objection, it is important to recall that such a measure, to effectively lengthen the maturity structure of the debt, need not be evasion free. The last word on this subject should go to Chile's finance minister, who has asked (I paraphrase), "If these capital-import taxes are so easily evaded, then why do we have so many non-interest-bearing foreign deposits at the central bank?"

The same point applies to the outflow side: taxes are more efficient and less damaging to investor confidence than administrative controls. Thus, Malaysia in its wisdom has moved from comprehensive outflow controls to an exit tax on foreign capital satisfying a minimum-stay requirement. But not too much should be expected of outflow controls in times of crisis, given the strong incentives that then exist for avoidance.

Align domestic institutions and policies to the capital account regime. This point will now be obvious, but it is important to draw out its implications. These include adapting exchange-rate and monetary policies to the openness of the capital account. This means

⁸That studies of other countries that have employed similar policies reach analogous conclusions should be reassuring. See for example Cardenas and Barrera (1995) on Colombia. More generally, Calvo and Reinhart (1999) find in a 15 country panel, including Chile, that the presence of capital controls is significantly associated with a lower share of portfolio plus short-term capital flows as a percentage of total flows. That they do not find the same when they look at portfolio flows alone suggests that the impact on short-term flows is doing most of the work.

abandoning pegged-but-adjustable rates, crawling bands, and target zones for an Argentine-style currency board, dollarization or, at the other extreme, a more flexible rate. Pegs and bands create irresistible one-way bets for speculators, which they can fund at low cost when the capital account is open (and when interest rates in the major money centers are as low as they have been in Tokyo in recent years). Eliminating this one-way bet by creating scope for the currency to appreciate as well as to depreciate is no panacea, as the experience of Australia — a country with a floating rate but also a sour experience with hedge funds — serves to remind (Reserve Bank of Australia 1999). Still, eliminating one-way bets should help.

For a more flexible exchange rate not to be unacceptably volatile, supporting reforms will have to be put in place. Fiscal policy must be sound and stable; otherwise the currency will be destabilized by unpleasant fiscal and monetary arithmetic, as in Brazil in 1998. This requires institutional reform that creates confidence about future fiscal policies, not just one-off tax increases and spending cuts. A large literature has demonstrated that more hierarchical fiscal institutions that vest agenda-setting and veto power in the hands of the finance minister or prime minister outperform decentralized systems that allow spending ministries and subcentral governments to free ride (Alesina and Perotti 1994, von Hagen and Harden 1994). A more freely floating exchange rate also means buttressing the independence of the central bank to insulate it from pressure to manipulate monetary policy to political ends. To gain market confidence so that capital flows in stabilizing directions, the central bank needs to articulate a clear and coherent monetary rule such as inflation targeting.

These are of course many of the same prerequisites for a currency board. Fiscal institutions and policies must be strengthened to eliminate the fiscal-dominance problem. Bank

regulation must be strengthened. The analog to central bank independence is enshrining the currency board in a statute or constitutional amendment.

This is an ambitious agenda. It points again to the scope of the reforms that must be put in place for capital account liberalization to be a happy experience.

A caveat on building reserves. Martin Feldstein (1999) has encouraged emerging markets to accumulate reserves as insurance against the disruptive domestic financial effects abrupt capital outflows. Alan Greenspan (1999) has similarly suggested that countries hold foreign exchange reserves equal to all the short-term debt scheduled to fall due over the next 12 months. They point to the success of countries with substantial reserves (Taiwan for example) in withstanding the Asian crisis.

There are reasons to question this advice. First, even large reserves a la Taiwan are small relative to the liquidity of the markets. A confidence crisis can cause investors to try to transfer abroad not only short-term foreign liabilities but the whole of M2. Converting these claims into foreign currency is likely to be impossibly expensive for a government or central bank seeking to support a currency peg.

Moreover, as suggested by Dooley (1997), large reserves can provide dangerous encouragement to the carry trade. Normally, interest rates are lower in the major money centers than in an emerging market that has recently stabilized and opened its capital account, encouraging foreign investors to funnel money into the country. The larger reserves, the more confidence investors will have that they will be able to get out without suffering losses when sentiment turns and the banking system comes under pressure. Hence, the greater will be bank-to-bank lending, and the higher will be the social costs of a banking crisis.

Holding reserves against short-term external liabilities is expensive, since U.S. treasury bonds bear lower interest rates than Thai or Korean bank deposits. As Grenville (1999, p.6) has put it, Greenspan's advice "raises the issue of why this short-term debt was useful in the first place, if the proceeds of the short-term borrowing have to be stacked away in reserves (at a lower rate of return than the cost of borrowing)." The implication is straightforward: if short-term foreign borrowing comes with risks that are expensive to insure against, wouldn't it be better to avoid it in the first place?

4. International Responses

Problems of capital mobility and capital account liberalization can also be addressed at the international level. The Asian crisis directed attention to the urgency of the task and spawned a large literature on "strengthening the international financial architecture." It is important to be clear about what can be expected of this endeavor. There is not going to be radical reform resulting in dramatic changes in the international financial landscape. Global markets will not lead to global government in our lifetime. There is no appetite for the creation of new supranational institutions and agencies with the power to supersede national regulatory authorities. Proposals like Eatwell and Taylor's (1999) for a World Financial Authority are useful for clarifying one's thinking about the nature of the problem, but the entity they envisage is not going to materialize tomorrow.

This is not to dismiss the feasibility of international responses, which to my mind come under two headings.

Giving Sanction. International initiatives can encourage the approach to capital account

liberalization described above. They can give sanction to the retention of controls by countries that have not yet upgraded their domestic financial systems and put in place the other prerequisites for capital account liberalization. They can avoid encouraging precipitous liberalization, as the Interim Committee of the IMF came close to doing in the mid-1990s. They can encourage the use of Chilean-style inflow taxes and more flexible exchange rates by countries opening their capital accounts. They can make clear that the IMF and the international community will no longer extend assistance to governments seeking to prop up shaky currency pegs.

In fact, significant steps have already been taken in this direction. The Interim Committee and IMF Board have stepped back from the kind of strong statements favoring rapid capital account liberalization released at, inter alia, the Bank-Fund annual meetings in 1997. An amendment to the IMF's Articles of Agreement that would have committed countries to a rapid transition to full capital account convertibility is no longer in the cards. A series of G22 reports has acknowledged the dangers of precipitous liberalization and cautiously endorsed Chilean-style taxes and more flexible exchange rates for emerging-market economies.⁹ The U.S. government has lent its support to this approach. The new U.S. position was signaled by Secretary Rubin in his April 21, 1999 speech, in which he displayed new toughness on the need for greater exchange rate flexibility (the headline in the next day's *Financial Times* was "US Urges End to IMF Funds to Back Pegged Currencies"), and new sympathy for the use of capital-import taxes ("Mr. Rubin also went further than previously in accepting that a Chilean-style tax on short-term capital inflows could be appropriate," the *Financial Times* correspondent also wrote).

⁹See G22 (1998a,b,c).

This is progress. But more is required. The U.S. Treasury needs to overcome the “Wall Street complex” that prevents it from coming out more strongly in favor of Chilean-style inflows taxes. Among other things, this will make clear that U.S. pressure to open protected banking markets is motivated by the desire to stabilize national financial systems and not by the desire to advance the interests of the American banking industry. The IMF needs to make clearer its support for the adoption of more flexible exchange rates. This requires it to embrace inflation targeting or another alternative as a monetary-policy operating strategy.

Finally, the assertion that international assistance will no longer be provided to prop up shaky currency pegs needs to be made credible by developing other ways of resolving financial problems. At present, the temptation to provide support to avert a devaluation is irresistible because the alternatives are unpalatable. A developing country that devalues often finds it impossible, sans aid, to keep current on its interest and amortization of foreign-currency-denominated debts. But suspensions and restructurings are prohibitively messy and painful, given current contractual provisions. This creates an argument for introducing renegotiation-friendly provisions into loan contracts as a way of facilitating orderly workouts. These ideas are controversial; the critics warn that the addition of so-called “collective action” clauses to loan contracts may make it more difficult for less credit-worthy sovereigns to borrow. Be that as it may, in the absence of such initiatives it simply is not credible to assume that the IMF can stand aside when currency and financial problems arise.

Applying Peer Pressure. In addition, the international community can exert peer pressure for reforms that will minimize the risks of capital account liberalization. This is the logic behind the current push for codes of conduct and international standards in areas like monetary

and fiscal policy, prudential supervision, securities-market regulation, auditing and accounting, bankruptcy and insolvency procedures, and corporate governance. These initiatives can be seen as efforts to define minimally acceptable standards for financial practice and regulation for all countries seeking to be active on international financial markets.

The Basle Committee of Banking Supervisors, whose 1988 Capital Accord established a minimum (weighted) capital requirement of 8 per cent for international banks, pioneered this approach. By applying peer pressure and creating a focal point, it encouraged countries to strengthen capital standards for their internationally-active banks. At the same time, the 1988 Accord points up the limitations of the standard-setting approach. Given an arbitrary set of standards, banks responded by pushing assets and liabilities with high weights off balance sheet through securitization. And nothing has compelled countries like Japan, where capital has not been written down to reflect the extent of nonperforming loans, to conform with the spirit as opposed to the letter of the Accord.

Analogous problems threaten to undermine the effectiveness of international standards in other areas. The International Accounting Standards Committee (IASC) can promulgate standards for minimally acceptable accounting practice, but it cannot force countries to comply. It is not yet clear who will monitor performance or what sanctions will be imposed in the event of noncompliance. Given the extent of disagreement over the features of an acceptable bankruptcy code or set of corporate governance arrangements, there is the danger that such standards will degenerate into a lowest common denominator and destroy the incentive to do better.

For international standards not to be counterproductive, the monitoring and sanctioning problems will have to be addressed. The IMF needs to monitor compliance in its Article IV

surveillance and program reviews. It should condition its loans on steps to comply. (This would have the additional advantage of creating an internationally-agreed-to basis for the Fund's conditionality, diffusing the objection that its microeconomic and structural interventions are arbitrary and capricious.) It can make compliance with standards a prerequisite for qualifying for its recently-established Contingent Credit Lines.

The Basle Committee, for its part, can key capital requirements to compliance with the relevant standards. The proposal to revise the Capital Accord to base those requirements on credit ratings provided by Moody's, Standard & Poor and IBCA-Fitch can be seen as a step in this direction. But given the rating agencies' spotty record, it would be safer for regulators to diversify their sources of private-sector expertise. They could encourage the relevant self-organizing private-sector bodies to issue compliance ratings for each of the relevant standards — the IASC for accounting, International Organization of Supreme Audit Institutions for auditing, Committee J of the International Bar Association for bankruptcy, the International Corporate Governance Network for corporate governance, and so forth — and key capital requirements to their determinations.

5. Conclusion

For occupants of the messy middle, capital account liberalization is neither panacea nor plague. What it is, is unavoidable. Domestic financial liberalization makes it that much more difficult to stop capital flows at the border. So long as domestic financial transactions were tightly controlled, it was easy to regulate international transactions. Now that domestic financial liberalization has become irreversible, controlling the international transactions of banks and

nonbank intermediaries is much less straightforward.

Changes in information and communications technologies similarly make it more difficult to operate effective controls. Securitization and the proliferation of derivative instruments undermine any effort to impose selective controls meant to apply to some types of capital flows but not others. Consequently, any attempt to halt flows at the border must become increasingly comprehensive, onerous and, one fears, distortionary.

The fundamental issue, then, is how best to cope with this brave new world of capital mobility. Several decades of experience with currency and financial crises have shown that the best way of learning to swim is not by jumping into the deep end of the pool. This means not freeing capital flows before progress has been made in liberalizing domestic financial markets and strengthening prudential supervision. It means liberalizing foreign direct investment first, access to stock and bond markets second, and offshore bank funding last. It means putting in place exchange rate, monetary and fiscal policies that do not destabilize the capital account. It means reforming monetary and fiscal institutions to assure the markets of the capacity to deliver desirable monetary and fiscal outcomes not just now but in the future.

This perspective suggests that less-developed countries are well advised to follow different policies toward the capital account than their more developed counterparts until they join the ranks of the latter, at which point they can and should remove their remaining restrictions on capital flows. Holding-period taxes a la Chile should be retained as a form of prudential supervision, for example, until banks' risk management practices and regulatory oversight have been upgraded, at which point the country in question can join the club of financially-developed countries open to international capital flows.

This leaves the question of whether countries whose domestic financial markets are small relative to global markets -- or even relative to the position-taking capacity of a small number of hedge funds -- need to follow fundamentally different policies than their larger counterparts not just over the transition but in the steady state. Do they need to retain Chilean-style holding-period taxes indefinitely, not just over the transition? Should they contemplate more radical alternatives like dollarization? As Marx, that sage observer of financial capitalism, would have put it, the question is whether the developed countries really offer the developing a vision of their future.

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Figure 1

