Managing Foreign Capital Flows IN Chile

MARTIN KHOR & LEAN KA-MIN

Chile has adopted measures to prevent excessive capital movements (especially short-term capital inflows) that could damage the economy, build up foreign debts, channel funds into unproductive investments, and risk a debt crisis. At the same time, the policy is to curb national expenditure, keep inflation in check, maintain relative price stability, and promote export-led growth.

This possible model for other developing countries is described by Martin Khor, economist, author, lecturer and UN consultant, who is Director of the Third World Network (TWN), a grouping of non-governmental organizations, and by co-author Lean Ka-Min, who is a researcher with TWN.

INTRODUCTION

After the foreign-exchange drought of the 1980s debt crisis, external capital started streaming into several Latin American nations by the end of the decade. But this capital surge was not without its own set of problems in terms of its impact on these developing economies. While the problems posed by large foreign capital inflows are more or less the same for the recipient economies, measures to cope with the capital influx can run the gamut from a predominantly laissez-faire approach to the imposition of quantitative limits. This report examines the Chilean response to the capital surge, which can be considered to occupy a position somewhere between these two extremes.

Among Latin American economies, Chile is a favoured destination for foreign capital. As a share of Gross Domestic Product (GDP), total capital inflows into Chile averaged 6.2 per cent over the 1990-94 period. Arguably, just as important a consideration as the volume of capital flows is the composition of these flows. In this respect, while foreign direct investment (FDI) constitutes the single largest type of inflow into the Chilean economy, a significant portion of foreign capital has entered it in the form of shorter-term funds (Agosin & Ffrench-Davis, 1996).

The latter can essentially be divided into portfolio capital and short-term credits. Portfolio capital, in turn, comprises purchases of debt and equity securities such as stocks, bonds and money-market instruments. It is channelled mainly through foreign mutual funds and through offerings of shares of Chilean companies on the New York Stock Exchange via American Depository Receipts (ADRs) (Ffrench-Davis et al., 1995). Such investments are typically motivated by the prospect of short-term capital gains and are prone to bandwagon effects, be it in taking positions or in liquidating them (Agosin & Ffrench-Davis, 1996). As such, portfolio investments can hardly be considered as the most stable form of capital flow.

Portfolio investments and short-term bank lending look for quick capital gains, are prone to bandwagon effects, and are volatile and unstable.

Volatility also characterizes short-term bank lending, which is based on interest-rate arbitrage — buying low in one market and selling high in another. Such flows will come in only if and when the domestic interest rate exceeds the international rate by a margin sufficient to cover the expected depreciation of the recipient country's currency and the country-specific risk premium. When this condition ceases to hold, the funds can just as suddenly depart for more remunerative climes.

Chile has been exposed to the potential of such volatility. Foreign funds made a beeline for Chile from the late 1980s onwards. It therefore had to confront the problems associated with large capital inflows.

A major problem is that massive inflows of foreign capital within a short period of time bid up domestic asset prices beyond levels justified by the underlying economic fundamentals. This, in turn, through the positive wealth effect generated, leads to unsustainable increases in consumption and investment. Furthermore, a foreign capital surge entails real exchange rate appreciation as demand for the recipient country's currency rises.

It should be noted that much of the short-term capital flowing in is not actually channelled into real, productive investment but rather into speculative activities. Not only are these activities, by their nature, volatile and unpredictable, but they also do not contribute towards the recipient country's long-term economic development.

These speculative inflows often "produce their own gravediggers" as the resultant real exchange rate appreciation and increase in domestic demand cause a widening current account deficit. Along with the rise in external indebtedness, this situation adversely affects foreign capital's perception of the economy's general creditworthiness.

Consequently, when an event triggers a change of investor opinion, foreign funds scramble for the exits, and the outflow is exacerbated by the herd mentality that characterizes international financial market players.

Many short-term capital inflows are not channelled into productive investment and long-term economic development, but into unpredictable speculation.

To make matters worse, these market agents are not always very sensitive to this risk and, as such, react only when it is too late, when the conditions have deteriorated to the extent that forced external adjustment of some magnitude becomes necessary (Le Fort & Budnevich, 1997). The overshooting of asset prices, aggregate demand, and the real exchange rate now occurs in the opposite direction, with potentially devastating effects on the domestic economy as the currency plunges alongside asset prices, with a resultant increase in the external debt overhang looming over the economy.

Such capital surges can further undermine domestic macroeconomic stability by throwing in doubt the feasibility of monetary policy. In the event of high inflation, tight monetary policy, which entails an increase in interest rates to curb excessive spending in the economy, would normally be called for. However, in an environment of unregulated capital flows, this interest-rate rise would lead to the influx of foreign funds attracted by the lucrative returns and greater potential for interest arbitrage. The capital surge, if left unchecked, can wreak damage upon the domestic economy. In short, the use of monetary policy to achieve such an important macroeconomic policy objective as price stability is more or less thwarted due to its impact on external capital flows.

The capital inflow has a chain of effects — the real exchange rate appreciation, which in turn has a negative impact on the recipient economy's competitiveness in international trade and, hence, its current account balance. This can be countered through intervention of the central bank in the foreign-exchange market, namely by buying foreign exchange. However, such intervention also serves to raise the domestic money supply, bringing about inflation. Once again, the conflict between the objectives of price stability and external balance manifests itself.

A possible solution to this policy dilemma could be in the form of sterilized intervention, where the central bank offsets the inflationary effect of the foreign-exchange-market intervention by selling government securities on the open market. Consequently, the central bank ends up holding assets that yield the international rate of return, and that

depreciate in real terms while having to issue liabilities that pay the higher domestic rate and that maintain their real value (Le Fort & Budnevich, 1997). Thus, this measure cannot be sustained on a long-term basis, owing to the losses incurred by the central bank.

Another undesirable consequence of massive capital inflows to developing countries lies in how they heighten the vulnerability of the domestic financial system, which may not be all that well-developed to begin with. Due to the unpredictable nature of short-term capital flows and their being channelled into speculative uses — partly as a result of inadequate prudential supervision within the domestic financial sector — there is increased deposit volatility as well as foreign-exchange risk (Helleiner, 1997).

Moreover, the problem of moral hazard — arising from the tendency of economic agents to "perceive the existence of publicly provided insurance to liabilities of financial institutions and institutional investors, whether or not it has been explicitly offered" — further contributes to the assumption of greater risks (Le Fort & Budnevich, 1997). When the speculative bubble bursts, the financial sector will be in danger of going under, being saddled with a considerable stock of non-performing loans.

It is evident, therefore, that capital surges, while bringing in much-needed funds from abroad that can go some way towards financing a country's short-term economic development, can also wreak havoc on the domestic economy. Considering the shortcomings associated with foreign-exchange-market intervention, be it of the sterilized variety or otherwise, some form of regulation of these capital flows appears necessary to sift out the less desirable components of foreign capital while continuing to encourage the entry of long-term productive investments. In this regard, it might be instructive to examine the capital controls in place in Chile, to which we now turn.

Massive capital inflows to developing countries heighten the vulnerability of the domestic financial system, which may not be well-developed to begin with.

EXPERIENCE OF THE 1990S AND ITS MAIN FEATURES

In 1978-81, Chile experienced a period of large capital inflows. This period ended with the debt and economic crises. In 1982-87, there was instead a shortage of foreign exchange resulting from the debt crisis. From the late 1980s, there has been a return of foreign capital — a capital surge which brought with it a range of potential problems.

To deal with this, the authorities have adopted a number of measures. They had three main aims: to partially insulate the domestic economy from the impacts of

capital inflows, to prevent too much appreciation of the currency (so as to protect the competitiveness of exports), and to maintain freedom and space for the implementation of domestic monetary policy.

Four basic instruments were used to neutralize any effects that the influx of short-term capital could have on the aims of Chile's export-driven growth strategy. These instruments are: (a) the application of taxes and reserve requirements to capital inflows; (b) an exchange-rate policy based on "dirty" floating of the exchange rate in relation to a reference value pegged to a basket of currencies; (c) open-market operations to sterilise the monetary effects of exchange-rate dealings; and (d) the prudent supervision of financial markets. These measures succeeded in moderating the exchange rate appreciation caused by the new capital inflows. Even so, there was a 15 per cent revaluation of the real exchange rate (Ffrench-Davis et al., 1995).

The first of the measures mentioned above has been rather unique, and this article will focus on it. It should be remembered, however, that in Chile, taxes and reserve requirements on capital inflows were accompanied by the other three measures, and thus a full understanding of Chile's strategy in regulating capital inflows would require a study of all the measures.

The Chilean system of reserve requirements and taxes is based on separating out the different types of capital inflows, including FDI, external loans and credits, and portfolio investment. It then imposes specific rates of reserves, and/or taxes, and/or a minimum-stay requirement on one or more of these inflows. The system has a bias in favour of longer-term and direct foreign investment, and it imposes higher costs on short-term inflows.

For FDI, the only important restriction is a minimum-stay requirement, under which such investment must be maintained in the domestic economy for at least one year. This applies only to the principal. Profits are generally not subject to this requirement, except from investment performed through debt conversion (Le Fort & Budnevich, 1997). The reason for not imposing a reserve requirement or tax is that the Chilean authorities would like to attract FDI, which is considered desirable in terms of its contribution to the economy's productive capacity, and the transfer of technology and management skills it engenders.

Other forms of capital inflows have been subjected to different rates of reserve requirements for different periods, and taxes introduced at different dates. The rates have also been varied as circumstances change, thus enabling policies to be flexible in accordance with changes in needs.

In June 1991, the authorities imposed a stamp tax on external loans at an annual rate of 1.2 per cent on operations of up to one year. This had earlier been in operation but applied only to domestic credit

(Agosin and Ffrench-Davis, 1996).

Also in June 1991, external credits were subjected to a non-interest-bearing reserve requirement of 20 per cent. The reserves had to be maintained with the central bank for a minimum of 90 days and a maximum of one year. This meant that the impact fell mainly on short-term flows (Agosin and Ffrench-Davis, 1996).

In July 1991, an alternative to the reserve requirement was allowed for medium-term credits. In lieu of maintaining part of the funds with the central bank, medium-term borrowers may pay to the central bank an amount equivalent to the financial cost of the reserve requirement. This cost is calculated by applying the London Inter-Bank Offered Rate (LIBOR) plus a specified spread to the amount of the reserve requirement. The margin above LIBOR was fixed at 2.5 per cent as at July 1991.

According to Agosin and Ffrench-Davis (1996): "The reserve requirement, the option of paying its financial cost and the tax on foreign credits all have a zero marginal cost for lending that exceeds one year, and are particularly onerous for lending at very short maturities."

In 1992, the authorities wanted to increase domestic interest rates in order to maintain macroeconomic stability. As they did not want to attract increased capital inflows when implementing this policy, in May 1992 they decided to raise the reserve requirement on external credits to 30 per cent. In October, the central bank increased to one year the period for which time deposits in foreign currency had to be maintained, regardless of the maturity of the loan. At the same time, the spread charged over LIBOR in the option of paying the financial cost of the reserve requirement was raised from 2.5 to 4 per cent.

In the middle of 1995, there were further pressures towards currency appreciation. To stem these pressures, in July 1995, the central bank extended the 30 per cent reserve requirement to foreign financial investments into the country, particularly for purchases of Chilean stocks by foreigners (through American Depository Receipts –ADRs).

Thus, by the second half of 1995, there was in place a 30 per cent reserve requirement on almost all forms of foreign capital inflows. Its coverage included external loans and bonds issued abroad, external credit lines used to finance trade operations, foreign-currency deposits and portfolio investment. The exception was FDI, which was only subjected to a one-year stay requirement.

On top of these, limits were placed on certain portfolio capital inflows such as bonds and ADRs, which represent the acquisition of shares of domestic companies by foreigners. These instruments can only be issued if the amount to be raised comes to at least US$25 million. Furthermore, issuers must meet a classification of long-term debt risk of BBB or better for non-financial companies and BBB+ or better for banking institutions (Le Fort & Budnevich, 1997).

In the first half of 1998, the situation regarding capital flows changed. From the middle of 1997, some East Asian countries had suffered from a deepening financial and economic crisis. This had a significant effect on Chile as an important part of its exports are to the Asian region. From the latter part of 1997, the Chilean peso dropped against the US dollar. Thus, from a situation where there were pressures for revaluation, there now developed a reverse situation of pressures towards depreciation.

In response, in June 1998, the financial authorities reduced the reserve requirement for capital inflows from 30 per cent to 10 per cent. This reduction shows that the policy can be implemented flexibly to suit changing conditions. In a period of excessive inflows, the ratio can be maintained at a higher level, or raised; and in a period where greater inflows are desired, the ratio can be reduced.

These measures all serve to increase the cost of external financing and particularly to discourage excessive inflows of funds that have a short-term orientation — the ones which are the most volatile and potentially damaging. Given that the reserve requirement involves a one-year deposit regardless of the duration of the investment, the shorter the term of the inflow, the greater is the implied cost.

In terms of revenue, the Chilean authorities receive a stamp tax on foreign loans, interest paid by borrowers of foreign funds in lieu of meeting reserve requirements, and the central bank's earnings on the interest-free reserve requirements. Up to 1994, the estimated revenues were US$355 million, comprising tax on foreign loans, $110 million; interest in lieu of reserves, $121 million; and interest earned, $124 million.

Implementation of the capital-market regulations is the responsibility of the Chilean monetary authorities. The administration of the reserve requirement is handled by the central bank, Banco Central de Chile, in which the reserve requirement funds have to be deposited. Details of the system of capital-account regulations in place in Chile can be found in a paper by two officials of the Banco Central — its Deputy Director of Research, and its International Director and Manager of Financial Analysis (Le Fort & Budnevich, 1997). The Banco Central is also responsible for interventions in the foreign-exchange market as well as sterilized interventions in order to stabilize the real exchange rate under the managed-float system (see below).

PROBLEMS ENCOUNTERED AND HOW THEY WERE OVERCOME

Until recently, the basic problem in implementing the above measures was that they were not adequate to stem the capital surge, and therefore regulations had to be strengthened in the ways described above.

Apart from direct regulations imposed on foreign capital inflows, exchange rate

policy has also been employed by Chile. The aim has been to discourage short-term speculative flows by introducing a greater element of uncertainty into the equation. Chile operates a managed floating exchange rate system within a band, and the flexible interventions of the central bank in the foreign-exchange market, coupled with monetary sterilization operations, to help in moderating the effects of the capital inflows on the real exchange rate.

For example, in early 1991, the exchange rate of the Chilean peso was moderately revalued on three occasions and then, in compensation, devalued in the following months. Such a measure introduced exchange-rate "noise" as the real devaluations within each move made it more costly for short-term funds to enter the country (Ffrench-Davis et al., 1995).

Also, in 1992, the official benchmark rate's peg to the US dollar was replaced with a peg to a basket of currencies comprising the dollar, the Deutschmark and the yen. This was in order to deter interest-rate arbitrage, given the daily instability of the international prices among these three currencies (Ffrench-Davis et al., 1995).

However, the Chilean monetary authorities were recently confronted with a problem of a diametrically opposite nature as a result of the ongoing East Asian financial crisis. Instead of being inundated with a capital deluge, the Chilean economy this time around had found foreign capital increasingly hard to come by and had to cope with a falling peso (Mark, 1998). Chile, which has developed close trading links with many Asian "tiger" economies, saw demand (as well as prices) for its exports founder as these economies were hit by depreciating currencies and torpid, or even negative, growth. This unfavourable trade situation was exacerbated when Japan, the biggest Asian buyer of Chilean exports and Chile's second-largest trading partner, also became afflicted with the economic malaise.

In response to this, as already noted above, the reserve requirement ratio was reduced in June 1998, from 30 per cent to 10 per cent in order to encourage more capital inflows into the Chilean economy and thus support the peso (Gonzalez, 1998).

EFFECTS OF THE MEASURES TAKEN

A major aim of Chile's capital-market regulations has been to discourage excessive inflows of certain forms of capital, whilst retaining the flows of long-term direct investment. As noted by Le Fort and Budnevich (1997): "The effectiveness of the reserve requirement can be also seen from the change of the composition of net capital inflows. Increasingly, external financing has been moving from debt to direct investment and equity-based portfolio investment. This implies a more flexible structure of financing, favouring risk-sharing between domestic and external partners. At the same time, medium- and long-term forms of debt have gained

ground and represent increasing proportions of total debt financing."

Measured in terms of percentage of GDP, FDI and longer-term portfolio investment have grown in importance compared to foreign borrowing. Net foreign investment plus portfolio investment picked up from around 3 per cent and 1.2 per cent of GDP in 1990 and 1991 respectively, to 2.5 per cent and 4 per cent in the two subsequent years. Even in the case of foreign borrowing, the share of medium- and long-term debt has increased relative to that of short-term financing. In 1994, short-term financing was equivalent to 2.4 per cent of GDP, a decline from its 1990 level of 4.6 per cent (Le Fort & Budnevich, 1997).

This movement towards relatively more of the longer-term, more stable inflows can be attributed to the regulations' inherent discriminatory bent against short-term funds. The shorter an inflow would stay, the more costly it becomes to place a portion of the funds in a one-year non-interest-bearing deposit account with the central bank, and to pay a fixed annual stamp tax of 1.2 per cent.

Thus, the aim of checking the inflow of volatile short-term funds without jeopardizing the entry of FDI, seems to have been realized through Chile's imposing its regulations on incoming capital. Given that the internationalization of the Chilean stock exchange is only just beginning, the ability of these regulations to put a damper on funds with a short-term orientation may well become integral to preserving domestic macroeconomic stability in the face of globalized capital.

With respect to using monetary policy as an anti-inflationary tool, the regulations have also proven their worth to policy-makers. A tight-money stance has been maintained without prompting an influx of foreign funds. As a result, inflation has been reduced from almost 30 per cent in 1990 to 9 per cent in 1994, with average short-term real interest rates of 6 per cent per annum — higher than developed-country standards (Le Fort &Budnevich, 1997).

Bearing in mind the potential pitfalls involved in drawing conclusions from a naked-eye inspection of economic data, it is worth noting that in the 1990s, Chile has enjoyed higher or steadier GDP growth than Mexico and Argentina which, in contrast to Chile, have gone down the path of greater capital-account liberalization. While initially the Mexican inflation rate was lower than Chile's, a massive capital flight subsequently befell Mexico, leading to a drastic depreciation of its currency and sending Mexican price levels soaring way above those in Chile (Agosin & Ffrench-Davis, 1996). Although such comparison is hardly a rigorous analysis, it suggests that capital-account regulations shield the economy from wild fluctuations brought about by large-scale short-term capital inflows and outflows, and help maintain a stable economic environment in which government macroeconomic policy can proceed unhampered.

Pursue this comparison further and look at Mexico's cumulative current account deficit, an indicator of financial sustainability. Over the period 1991-94, it was 25.4 per cent of GDP — two-and-a-half times greater than Chile's 10.4 per cent. "Even though the volume of foreign capital inflows in Chile as a share of GDP was quite similar to that in Mexico, Chile effectively used a much smaller amount"; this was a result of the reserve requirement and the stamp tax consuming quite a sizeable proportion of the inflows (Agosin & Ffrench-Davis, 1996).

This issue of a sustainable current account deficit is, in turn, related to the real exchange rate. The extent of currency appreciation should be controlled so as not to adversely affect competitiveness in international trade and to correspond to a sustainable current account deficit. However, empirical evidence strongly suggests the inability of the reserve requirement to affect the real exchange rate in any significant manner in both long- and short-term (Edwards, 1998).

Indeed, the reserve requirement does not prevent speculative attacks arising from expectations of exchange-rate adjustments. This is because its implied financial cost is insufficient to offset the capital gains that can be made from the change in currency value. As a result, "despite the reserve requirement, only exchange rates that are consistent with market expectations can be successfully defended. The equilibrium trend of the exchange rate, even if it represents a significant real appreciation of the currency, cannot be influenced by such policies. An exchange-rate adjustment can be spread more over time, but only to a certain extent" (Le Fort & Budnevich, 1997).

However, whether the reserve requirement is effective should not be judged by a goal it was not meant to achieve — defense of a fundamentally unsustainable exchange rate. The more modest objective of the reserve requirement is to prevent wild fluctuations around the rate's equilibrium trend so as to avoid the drastic and painful adjustments associated with such swings.

Capital-account regulations shield the economy from wild fluctuations and help maintain a stable environment for macroeconomic policy to proceed unhampered.

It did contribute to real exchange rate stability. There was no unduly large, potentially destabilizing capital inflow into Chile, such as could lead to initial overshooting of the exchange rate in the direction of appreciation. In view of the positive interest-rate differential with respect to the industrialized economies, a capital surge might well have materialized if there had been no such controls and if no costs had been imposed on capital inflows (especially short-term ones).

But Le Fort & Budnevich (1997) go

on to assert: "The fact that the appreciating trend of the Chilean currency has continued at about the same rate after the introduction of a reserve requirement is not an indication of the ineffectiveness of this tool. The reserve requirement allows for maintaining an interest-rate differential in favour of the emerging economy without having to generate an expectation of currency depreciation to fulfill the arbitrage condition. That is to say, the reserve requirement is successful if a once-and-for-all currency appreciation followed by a depreciating trend is avoided. An appreciating trend could be the result of financial pressures rather than a trend in the equilibrium exchange rate; and rather than indicating weaknesses of the reserve requirement itself, such a sustained trend shows the strength of the existing capital-account regulations, including the reserve requirement.... One should expect from such measures no more than a contribution to efforts aimed at keeping the current account deficit within reasonable bounds and at sustainable levels, while domestic macroeconomic targets of growth and price stability are attained."

Thus, viewed in the light of its designated objectives, the Chilean reserve requirement (and the capital-account regulations as a whole) can claim a significant degree of success.

Moreover, the regulations do bring in some revenues to the State — US$355 million since the scheme started, up to 1994, as already noted. The amount is not very large, and Agosin and Ffrench-Davis (1996) conclude that these policies should therefore be judged by their prudential and regulatory value, rather than as revenue earners.

Nevertheless, such measures do have their downside as well. For one, the cost of capital to domestic economic agents will have increased for three reasons. They now have to borrow more than is required for their intended use in order to comply with the reserve requirement (or, in lieu of that, pay the financial-cost equivalent). The stamp tax is an added item of expenditure. In addition, borrowers whose foreign loans are for less than a year incur an opportunity cost by having to maintain their interest-free deposit with the central bank for the full one year.

This imposes a heavier burden on domestic economic agents. Also, it actually has a distorting effect on the financial market. Large firms, which have access to international finance and know how to circumvent the regulations, are likely to remain relatively unscathed. However, small and medium-size firms are left to bear the brunt of the more onerous domestic borrowing rates (Edwards, 1998).

By effectively limiting the integration of the domestic system into global financial markets, Chile's capital-account regulations also limit portfolio diversification by domestic economic agents. If such investors could have a wide range of assets in their portfolios, from both the domestic sector and abroad, they would minimize their risk. They would be less

subject to the vagaries of a single domestic economy. The resulting increase in domestic income stability could compensate for the national income volatility arising from the variability of individual export prices which affects open economies (Le Fort & Budnevich, 1997).

It should be evident that these regulations interfere with the free running of the capital market. Consequently, questions of inefficient resource allocation will arise. However, the markets themselves, unlike their textbook incarnations, are far from being efficient. For example, imperfect information, bandwagon effects and a myopic orientation towards short-term capital gains characterize the operations of portfolio investors. Furthermore, looking at the speculative uses of much short-term capital in emerging markets (in the real-estate sector and the stock market, for instance), it becomes clear that, in many respects, the financial markets have become divorced from the real production economy.

Hellyer (1998) points out that the volume of foreign-exchange transactions in the global financial system, amounting to around US$1 trillion a day at present, has increased fourteen-fold since the 1970s while world trade has little more than doubled. He goes on to declare: "[The world financial system] is in cyberspace and programmed to ignore the real needs of the vast majority of the world's population still in need of food, clothing and shelter." Unfortunately, though, when the entire fragile financial edifice collapses, the real economy — and the real people in it — do suffer, as the experience of the Latin American and Mexican crises and the ongoing East Asian crisis amply demonstrates.

In such a volatile environment, the need for at least some form of capital-market regulation, such as Chile's, can best be appreciated. The regulations were meant to stem the inflow of volatile short-term funds, and largely achieved the goal. Against this background, it may seem inconsistent that the reserve requirement was recently reduced in order to attract more inflows due to the effects of the East Asian crisis on Chilean trade.

The world financial system is in cyberspace and programmed to ignore the real needs of the vast majority of the world's population still in need of food, clothing and shelter.

Rather than discrediting the entire notion and rationale of the reserve-requirement system, however, this move actually points to the flexibility such a regulation affords in managing the capital account. The reason for discouraging excessive short-term inflows to begin with is to avoid the instability and drastic adjustments forced on the domestic economy as a result of swings in the direction and volume of these flows. If a high reserve requirement ratio is used to

prevent undue real exchange rate appreciation, which would eventually be destabilizing, then, by the same token, lowering the ratio to counter an unwanted depreciation which has equally destabilizing consequences is warranted.

As well, it is worth repeating here that the Chilean capital-market regulations do not include "drying up the capital account" as one of their objectives. Of course, it could be contended that, given their demonstrable effectiveness in Chile, if such capital controls had been in operation in the East Asian economies in the first place, the financial crisis might not even have erupted (or, at least, not on such a damaging scale).

Therefore, the value of the Chilean measures lies in there being a set of possible policy measures that governments of developing countries can take to avoid the volatility of short-term capital inflows and outflows, and thus prevent the kinds of major financial crises that have recently afflicted many countries.

SUITABILITY AND POSSIBILITY FOR UPSCALING

A "cleaner" alternative with respect to regulating foreign capital inflows is the Tobin tax, a tax on all international transactions, be they trade-related or capital-market transactions. Like the Chilean regulations, the Tobin tax, which takes the form of a uniform rate, imposes a substantial disincentive on short-term flows, while the cost incurred in relation to long-term flows is almost negligible. "The reason is that payment of a, say, 0.25 per cent tax on a 10-year investment represents a negligible fraction of the principal earnings. By contrast, on an overnight round trip, it would eat up the profits except on investments with extremely high returns" (Dornbusch, 1997).

However, the Tobin tax constitutes an improvement on the current Chilean controls in that the potential for evasion is less. The latter cover only financial transactions and, as such, evasion is possible to the extent that the intended inflows can be channelled through transactions which fall beyond the ambit of the regulations. Such evasive measures may include underinvoicing imports or overinvoicing exports, delaying import payments or accelerating export receipts and bringing in funds through the informal foreign-exchange market (Agosin & Ffrench-Davis, 1996). The Tobin tax, on the other hand, applies to all cross-border flows and not merely to financial transactions.

Of course, because of its comprehensiveness, the tax imposes a cost on trade transactions as well but, again as with the case of long-term financial transactions, this is likely to be negligible for any single goods or services transaction. Furthermore, it is precisely the result of its broad application to all foreign-exchange transactions, and hence its relative simplicity (out of not having to discern between different types of cross-border flows), that the Tobin tax entails fewer administrative burdens and lower costs on the levying authorities, compared to

the imposition of something like Chile's reserve requirement (Dornbusch, 1997).

Finally, even with regard to FDIs, the possibility of instituting measures to regulate their inflow cannot be discounted. After the underinvestment of the debt-crisis years, foreign investors, through a characteristic process of stock adjustment, have headed back to the region — Chile being a prime destination — in order to attain their desired levels of FDI stock. In the process, these large inflows may pose absorption problems for the host economies in terms of possible overheating and the resultant macroeconomic adjustment.

Moreover, FDI flows are themselves not free from volatility. Being the supranational behemoths that their name suggests, transnational corporations regularly engage in "international intrafirm financial transactions to respond quickly to changing national circumstances." They manage liquid funds as well as flows of real goods and services, and they usually do so very effectively. Foreign direct investors can also, when appropriate, borrow from foreign or domestic financial institutions in pursuit of their international financial-flow objectives (Helleiner, 1997).

As a result of these characteristics, some form of regulation of FDI inflows might not be out of place. (Note that these regulations are discussed only in relation to capital volatility and absorption; the issue of regulations that are more directly related to domestic development, such as conditions on domestic content, employment of locals, technology transfer and so on, is beyond the scope of this report.) Agosin & Ffrench-Davis (1996) put forth some possible measures, such as auctioning FDI rights, placing investment applications on an informal queue or selecting among those projects on offer only those deemed most likely to contribute towards domestic development. "All these options entail a much more pragmatic approach to FDI than the uncritical embrace of recent years."

POLICY SIGNIFICANCE AND TRANSFERABILITY TO OTHER COUNTRIES

The Chilean system has significance for developing countries which wish to better manage the interface between external financial forces and domestic macroeconomic and financial objectives. In view of the present financial crisis, which has spread from East Asia to other parts of the world, the Chilean policies assume even greater significance and are now often quoted as examples of prudent management.

The Chilean policy recognizes the need to distinguish between long-term and short-term capital inflows, and the potentially harmful movements of short-term flows, and devises practical mechanisms to reduce their volatility. The main policy significance, therefore, is that the measures help prevent excessive capital movements that could damage the economy, build up foreign debts, channel funds into unproductive investments, and risk large withdrawals of short-term

funds and a consequent debt crisis.

The measures also enable a country to have better control over its financial and macroeonomic policies. As we have seen, a prime objective behind Chile's capital-market regulations is to enable effective implementation of monetary policy. Without constraints on foreign capital inflows, a tight monetary policy needed to control domestic inflation, through its effect of raising interest rates, will not be feasible due to the massive capital influx that will result. In this regard, Chile's regulations can be considered a success. They allow for high interest rates and a positive interest-rate differential with respect to the developed world. The effect is to curb excessive national expenditure and hence keep inflation in check. In turn, this ensures that relative prices generally remain stable and thus do not adversely affect or distort resource allocation and sustainable growth.

By contributing towards a more stable real exchange rate and a more sustainable current account deficit, regulations like Chile's facilitate the pursuance of economic policy that is geared towards export-led growth. Indeed, the growth and diversification of exports has become the engine of growth of the Chilean economy. For example, in 1995, exports grew by 11 per cent in real terms, compared to real GDP growth of 8.5 per cent (Le Fort & Budnevich, 1997).

While the capital-market regulations have played, and continue to play, their part in avoiding the volatility that comes with unfettered financial liberalization, it should also be necessary to strengthen the domestic financial system. This is to enable it to perform its intermediary role more effectively in terms of more efficient resource allocation and reducing the prospect of channelling funds rashly towards activities that would generate speculative bubbles.

Towards this end, more and better prudential supervisory mechanisms need to be put in place, to supplement and

Given the globalized nature of financial capital, and the potential damage it can wreak on a recipient economy, developing countries would do well to study the Chile capital-account regulations, an in particular the reserve requirements and taxes on capital inflows.

go hand-in-hand with the capital-market regulations. As Devlin et al. (1995) put it: "[E]ffective [prudential] regulation will require countries to improve their monitoring systems for external capital flows. This must be done not only at the microlevel for individual financial institutions, but also at the macrolevel to ensure that the volume and composition of flows are consistent with economic stability."

Given the globalized nature of finan-

cial capital, and the potential damage it can wreak on a recipient economy (especially short-term, speculative funds), developing countries would do well to study the Chilean capital-account regulations, and in particular the reserve requirements and taxes on capital inflows. The need for some form of capital control is even more acute for the smaller developing economies (where the absorption problem is heightened) and those with a less-developed domestic financial sector.

The frequency and severity of the financial crises which have recently afflicted several developing economies and regions indicate the danger of letting capital surges go unchecked. Accordingly, the need for measures to regulate the flow and composition of foreign capital comes to the fore. The aim is to preserve stability and sustainability, while going some way towards ensuring that foreign funds, instead of causing a recipient economy to veer off its development path, play their part in facilitating the growth process.

The Chilean policies could well be considered as options to be adapted and implemented in other countries wishing to reduce the impact of their exposure to volatile international financial flows. ■

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