Managing foreign debt and liquidity risks in Chile

Jorge Marshall*

Introduction

Post-crisis developments in emerging markets support the view that future economic progress will go together with increasing global integration, both in trade and financial markets. This places a serious responsibility on all participants in the international capital markets to design policies that allow emerging economies to integrate smoothly with the rest of the world and increase the efficiency of world capital markets. Thus, the topic of this meeting is very timely and relevant as it points to policies that should be promoted to achieve greater economic and financial integration, but without the abrupt disruptions of recent years.

Since the crises in Mexico in 1994 and in Asia in 1997, many initiatives have been launched to achieve a safer or more resilient international financial system. These proposals are not aimed at having a crisis-proof system, which is impossible. To be useful, nevertheless, these initiatives should address properly identified imperfections (otherwise the medicine may be worse than the disease) and not just be well intended general proposals.

Rather than evaluating these initiatives, the purpose of this paper is to review the Chilean experience in risk management during the 1990s. Even though Chile does not have a fully-fledged policy scheme explicitly targeted to managing liquidity and debt risks, most of the elements of such a policy have been in place, starting from a sound external solvency position, which has been an underlying objective of economic policy throughout these years. Related to this explicit objective, several policy initiatives have had significant effects on debt and liquidity risks, in particular:

- prudential regulation of the capital account
- accumulation of international reserves
- fiscal surplus and stabilisation funds for primary products
- strict banking regulation
- capital market development

One common purpose of all these policies is to preserve external solvency and financial stability, confronting the risks associated with the increased volume and volatility of capital flows. This approach addresses the risks both of abundance and of shortage of external financing.

Prudential regulation of the capital account

Prudential regulation of the capital account considers that in some cases, due to market failures or imperfections (sometimes policy-induced), market-related controls may help to reduce certain risks such as excessive reliance on rolling over short-term debt. The purpose of this prudential regulation is to change the composition of capital inflows and give monetary policy more flexibility to pursue inflation or current account targets. In this respect, Chile has applied two types of policies. First, there is a requirement for most forms of foreign investment to remain in Chile for a minimum period of one year. Second, there is a reserve requirement that places a wedge between domestic and foreign interest rates, and provides a disincentive to short-term capital.

The requirement of a minimum period of one year for foreign capital is a legacy of the debt crisis of the early 1980s, which led to the imposition of this and many other restrictions on capital movements (mainly outflows). Indeed, in the past this requirement was even more stringent – three and 10 years depending on the type of inflow. In the 1990s this limitation was reduced gradually as part of the capital account liberalisation policy. In fact, the country has been on a gradual liberalisation trend with respect to both capital inflows and outflows since the early 1990s – and this movement has been the dominating force behind all capital account regulatory changes.

But in the episodes of large capital inflows this restriction was considered a way to moderate inflows, at least temporarily, rather than affect outflows. However, as the economy becomes more integrated, the efficiency costs of restricting capital flows will tend to exceed the

*Thanks to Carlos Massad, Luis Ahumada, Leonardo Hernandez and participants at the meeting for helpful comments.
associated benefits, especially when it comes to outflows. In fact, past experience shows that capital flight typically takes place before the authorities realise (or acknowledge) that there is a problem, imposing severe costs on the economy.

Regarding the reserve requirement, it has the form of a fractional non-remunerated deposit with the central bank and affects most forms of external financing, including foreign credit and foreign currency deposits, but it has excluded productive equity investment like FDI and primary ADRs. The deposit has to be kept for a year irrespective of the maturity of the foreign inflow. The rate of the deposit was set at 20% in 1991 and increased to 30% in 1993, but it was reduced to zero in September 1998, mainly because of the higher premium of foreign financing towards emerging economies.

The objectives of this policy were, first, to favour equity over debt and long- rather than short-term financing; and second, to increase the effectiveness of monetary policy. The policy allowed a tight monetary policy without causing a large capital account surplus and contained the appreciation of the real exchange rate. It also sought to limit the volatility of flows — and the costs associated with it — by taxing hot money more heavily.

A frequently asked question is whether this unremunerated reserve requirement (URR) has been effective in achieving its objectives. It is worth emphasising that this is one instrument in a broader set of macro (and micro) economic policies. However, in spite of its controversial nature, this prudential control induced a significant change in the composition of capital inflows. Indeed, direct and longer-term portfolio investment grew in importance relative to foreign debt. There was also a change in the composition of foreign borrowing, where medium- and long-term debt increased its share in the total. There is also preliminary evidence, although rather weak, that the reserve requirement reduced the inflows, and, consequently, the excess appreciation and the volatility of the real exchange rate. In this assessment one should bear in mind that capital inflow averaged 7% of GDP in 1990–97 and peaked at around 10% of GDP in 1997. It is also important to note that due to legal limitations the regulation could not be imposed on all flows, thus leaving loopholes that reduced its effectiveness.

Regarding the convenience of using instruments like the Chilean reserve requirement, the following policy lessons are worth stressing:

- The URR at the margin attained the benefits listed above, but this was a temporary effect since market players were very active in uncovering loopholes and designing methods to bypass the regulations.
- These benefits were possible because the central bank was very active in trying to maintain its effectiveness by closing loopholes and constantly increasing the URR coverage. Also, the high enforcement capacity of the central bank and the low degree of corruption achieved this, but nothing guarantees that it will work elsewhere. In other words, it is not certain that a similar type of instrument could work as effectively in other countries.
- The URR is not a costless policy instrument; it leads to higher interest rates, which in turn may lower growth and investment.
- On balance, it was possibly worth using it, but there may be more efficient (less costly) instruments for achieving the same goal (a distribution of liabilities tilted to the long term).

Ongoing work in this area examines the experience of other countries in using different forms of capital controls, and in liberalising different components of the capital account. This inquiry relates to the more general notion that countries should encourage equity rather than debt flows, and long- rather than short-term flows. Additional research and a careful analysis of alternative policy options are needed at this stage to establish stronger conclusions for best practices in this regard.

**International reserves**

One pillar of the liquidity management policy in Chile is the large stock of international reserves held by the central bank, which today stands at about 22% of GDP, 42% of total foreign debt and over 12 months of imports. It is important to note that international reserves have stood at high levels during the entire decade and not only in recent months as a result of the slowdown in economic activity.

Holding a large stock of reserves has been considered a key element of the policies aimed at enhancing the resilience of the economy, and proved to be correct as Chile passed through the financial turmoil of the past two years relatively unscathed. Indeed, in order to achieve this
The central bank spent about 17% of the initial stock of reserves (about US$ 3 billion in total) between end-1997 and the third quarter of 1999. Possibly a smoother transition could have been achieved had the Central Bank spent an even larger share of reserves, although doing so would have meant weakening the fundamentals. Obviously, this course of action appears feasible after many of the risks present at the time faded away, but it was considered too risky during a period of high uncertainty and volatility in international capital markets.

The "large" stock of reserves was accumulated as a result of the efforts to sterilise the large inflows of capital received during the 1990s. This policy was, in turn, aimed at avoiding the overheating caused by the surge in inflows. However, despite proving to be an important buffer against the shocks arising from the Asian, Russian and Brazilian crises in past years, it was an expensive strategy. Rough estimates - based on restrictive assumptions - suggest that the cost of holding a large stock of reserves per year was about half of a percentage point of GDP. But at the time this strategy was designed there were no alternatives, and the costs of the new ones, like the IMF's contingent credit line, have yet to be calculated.

The need to hold a large stock of reserves decreases as we move towards a more integrated economy and the private sector plays a more active role in assessing foreign exchange and other risks. The latter is currently the case as the economy has adopted a floating exchange rate system. In this context, liquidity management has to be redesigned with greater emphasis on prudential regulation, setting adequate standards, and increasing accountability and transparency.

Chile: external sector 1990–99

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<td>Fiscal surplus</td>
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<td>23.0</td>
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<tbody>
<tr>
<td>Banks</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.4</td>
<td>4.0</td>
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<tr>
<td>Pension funds</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
<td>0.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.6</td>
<td>0.8</td>
<td>1.5</td>
<td>2.3</td>
<td>3.6</td>
<td>3.8</td>
<td>4.9</td>
<td>7.2</td>
<td>11.3</td>
<td>19.1</td>
</tr>
<tr>
<td>Total</td>
<td>0.6</td>
<td>0.8</td>
<td>1.5</td>
<td>2.5</td>
<td>4.0</td>
<td>3.9</td>
<td>5.1</td>
<td>7.6</td>
<td>14.9</td>
<td>29.9</td>
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Fiscal policy and central government

An important response to the increase in net capital inflows in the early 1990s was a policy mix that included a steady fiscal surplus, along with greater exchange rate flexibility, a relatively tight monetary policy and (heavy) sterilisation. All of these components were aimed at maintaining the price stabilisation programme and keeping the current account deficit within a sustainable range, so the economy as a whole would become more resilient to shocks.

For the central government this meant a continuous reduction of its external debt, which was the only explicit debt policy. The average fiscal surplus between 1990 and 1999 was 1.4% of GDP, while the external debt of the central government decreased from 39% to 8% of GDP in the same period. Furthermore, accumulated surpluses of the central government and international reserves of the Central Bank were used to advance the payment of external debt during 1995–96. After these prepayments were made, almost all public debt outstanding was with the multilateral financial institutions.

This policy of prepaying public debt was re-examined after the financial crises in emerging markets during 1997 and 1998. Thus, although the public sector did not need new financial resources, the Chilean government placed US$ 500 million of international bonds in 1999. The rationale underpinning this placement was that an economy like Chile, which has an active participation in international financial markets, needed some presence in international bond markets in order to improve the information and the monitoring capacity of international financial institutions. In fact, before this sovereign debt was issued there was no reliable measure of country risk because all other Chilean bonds were corporate, and Chilean debt was treated similarly to other countries’ debt. Preliminary observation of spreads after this placement showed a positive externality in country risk premium for the private sector.

In addition to the rather simple policies on debt and liquidity described above, the central government maintains two stabilisation funds for primary products, namely oil and copper. The function of these funds is to compensate for terms-of-trade shocks, which, in turn, have important effects on both the current account and government budget. Although these funds were not designed for liquidity management purposes, they may be considered substitutes for other instruments, like the issue of liabilities with contingency clauses (ie copper bonds for Chile or oil bonds in the case of Mexico).

Banking sector

The banking crisis of the early 1980s left a clear message for strategies of financial liberalisation. The main lesson of this episode was that capital account opening has to be accompanied by – and preferably preceded by – an overhaul of the country’s capacity to supervise, regulate and manage financial institutions. This sequencing allows the domestic financial system to cope properly with the complexities that go with risk management and free capital movements.

After the crisis, new ideas about prudential regulation and supervision were incorporated into the financial system. The new approach imposed more stringent disclosure requirements on banks, explicitly limited the coverage of deposit insurance to small depositors, and established clear procedures for the closure and liquidation of insolvent institutions. At the same time, the government agency increased its supervisory capacity.

During the 1990s this approach was harmonised with new developments in the banking industry and in international regulatory standards. Important in this respect is the incorporation of the guidelines of the Basel Committee. Also, the Central Bank and the Superintendency of Banks started to implement guidelines to improve the monitoring of diverse sources of risks as banks began embarking on more sophisticated activities.

These new guidelines incorporate standards for interest rate, currency and liquidity mismatches for the banking sector, all of them 3 Among these are derivatives (forwards, swaps) and cross-border lending.

4 Some of these regulatory changes coincided with the Asian crisis, but they were not a reaction to it. The main impact caused by the Asian crisis was a delay in the implementation of some measures.
These guidelines are part of an effort to strengthen the banking system. Having well capitalised banks, accompanied by strong management and supervision, reduces the chances of crisis. In this regard, the Central Bank closely monitors the banking sector and performs sensitivity analyses with regard to sudden changes in the exchange rate, the interest rate, and sudden withdrawals of funds. This is done at the level of each bank and for the system as a whole. However, the exercise is aimed at assessing the potential problems with regard to domestic liquidity (as opposed to external liquidity).

**Capital market development**

For a small and increasingly open economy like Chile, financial integration represents a source of opportunities in terms of risk sharing and also the possibility of financing new investment projects. However, it conveys significant risks in terms of contagion and bandwagon effects, among others. The strategy adopted by the Chilean authorities in order to manage these risks consists of building cushions and strengthening the economy’s resilience to shocks but without phasing out the process of financial integration.

Chilean allocation of resources is highly specialised. Exports remain highly dependent on commodities, mainly copper. As a consequence, the development of the domestic capital market is an important device for reducing risk exposure. In particular, policies have been aimed at increasing the fraction of Chilean assets invested abroad. Thus, the portfolio of Chilean assets will be less concentrated in domestic risk, increasing the resilience of the whole economy.

After having implemented a major pension reform in the early 1980s, which replaced the old pay-as-you-go system with a privately administered capitalisation system, during the 1990s the authorities sought to increase the share of assets held abroad by Chilean institutional investors – pension funds and insurance companies. In addition, the authorities lessened restrictions on capital outflows – outward direct investment and others – in order to induce greater investment abroad by the manufacturing and banking sectors.

For instance, for pension funds the maximum holding of foreign assets permitted in early 1992 was 1.5% of their total portfolio. Later that year,

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5 Also, the banking law in Chile makes no distinction between foreign branches and subsidiaries since banks operate on a solo basis. For example, branches receive the benefits of local regulations concerning deposit insurance just like domestic banks, they are required to have their own capital and therefore are not allowed to consolidate capital with their holding company.
the early stages of the rating industry’s development plus the strategic alliances with international agencies helped the Chilean corporate sector when it began tapping the international capital markets in the early 1990s.

But the list of remaining tasks to increase the resilience of the economy is still long. Among the priorities is the issue of long-term debt denominated in domestic currency in the international capital markets, so that the exchange rate risk can be shared with foreign investors. Similarly, in order to reduce the risk of contagion and bandwagon effects, more timely and effective signals are needed to allow foreign investors to differentiate Chile from other emerging economies. A small step in this direction was taken in recent months by issuing a small amount of sovereign bonds in international capital markets, but a more complete set of signals will be needed in the future, especially as the fiscal accounts return to surplus.

Conclusions

The Chilean experience of the 1990s shows that greater stability is achieved if adverse effects of shocks are spread across several markets and variables. In emerging economies with structural rigidities, imperfect institutions and incomplete markets, it would be a mistake to leave the whole weight of the adjustment to fall on one particular variable (or market). Hence, the need to build buffers across the entire economic system and to strengthen the economy’s fundamentals. For this purpose a stable macroeconomic environment and a sound regulatory and supervisory framework are at the heart of a risk management policy. The former implies building cushions at the macro and micro level that allow the economy to increase its resilience to shocks (ie a large stock of reserves, high capital base for banks, etc). The latter implies putting in place clear and transparent rules and building appropriate institutions.

In this regard, it is important to emphasise that well capitalised banks, accompanied by strong management and supervision, reduce the likelihood of crises. Similar positive effects arise from sustaining a strong fiscal position. But that may not be enough. At the margin and when accompanied by consistent policies, some types of prudential controls may help to avoid certain risks such as excessive reliance on rolling
over short-term debt. Similarly, flexible exchange rates work better when other conditions are in place, such as deep financial markets offering adequate hedging mechanisms, continuous price stability and low indexation.

In sum, the process of financial integration needs to be carefully managed to avoid the excesses caused by not having in place adequate institutions. However, the lack of adequate institutions should not be used as an excuse to slow this process. Rather, it should lead to acceleration of the institutional building that is necessary to achieve a full but safe integration.