



# The U.S. Financial Crisis: Lessons From Chile

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## Summary

Chile experienced a banking crisis from 1981-84 that in relative terms had a cost comparable in size to that perhaps facing the United States today. The Chilean Central Bank acted quickly and decisively in three ways to restore faith in the credit markets. It restructured firm and household loans, purchased nonperforming loans temporarily, and facilitated the sale or liquidation of insolvent financial institutions. These three measures increased liquidity in the credit markets and restored the balance sheets of the viable financial institutions. The Central Bank required banks to repurchase the nonperforming loans when provision for their loss could be made and prohibited distribution of profits until they had all been retired. Although the private sector remained engaged throughout the resolution of this crisis, the fiscal costs were, nonetheless, very high.

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The U.S. Congress is contemplating a \$700 billion government assistance package to arrest the financial crisis in the United States. President Bush argued that failure to enact legislation quickly could result in a wholesale failure of the U.S. financial sector. As discussion of the Administration's plan unfolded, however, questions in Congress arose over issues of magnitude and management of the "bailout," the need for oversight, and the possibility that less costly and perhaps more effective alternatives might be available.

In this light, Chile's response to its 1981-84 systemic banking crisis has been held up as one example. The cost was comparable relative to the size of its economy to that facing the U.S. Government today. In 1985, Central Bank losses to rescue financially distressed financial institutions were estimated to be 7.8% of GDP<sup>1</sup> (equivalent to approximately \$1 trillion in the United States today). The policy options Chile chose had similarities as well as differences from those contemplated in the United States today. Their relevance is debatable, but they do highlight an approach that succeeded in eventually stabilizing and returning the Chilean banking sector to health, while keeping the credit markets functioning throughout the crisis.

## Comparing Financial Crises

The seeds of the Chilean financial crisis were much different than those in the United States. Nonetheless, in both cases, the financial sector became the primary problem, with policy makers concerned over the prospect of a system-wide collapse. Chile's problems originated from large macroeconomic imbalances, deepening balance of payments problems, dubious domestic policies, and the 1981-82 global recession that ultimately led to financial sector distress. Although most of these are not elements of the U.S. crisis, there are a number of similar threads woven throughout both cases.

Broadly speaking, both countries had adopted a strong laissez-faire orientation to their economies and had gone through a period of financial sector deregulation in the years immediately prior to the crisis. A group of scholars characterized Chile's orientation toward the financial sector as the "radical liberalization of the domestic financial markets" and "the belief in the 'automatic adjustment' mechanism, by which the market was expected to produce a quick adjustment to new recessionary conditions without interference by the authorities."<sup>2</sup>

In both cases, given the backdrop of financial sector deregulation, a number of similar economic events occurred that ultimately led to a financial crisis. First, real interest rates were very low, giving rise to a large expansion of short-term domestic credit. With credit expansion came the rise in debt service, all resting on a shaky assumption that short-term rates would not change. In both cases, but for different reasons, rates did rise, causing households and firms to fall behind in payments and, in many cases, to default on the loans.<sup>3</sup> The provision for loan losses was inadequate causing financial institutions to restrict credit. Soon, many found themselves in

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<sup>1</sup> Bosworth, Barry P., Rudiger Dornbusch, and Raúl Labán, eds. *The Chilean Economy: Policy Lessons and Challenges*. Washington, D.C. The Brookings Institution. 1994. p. 41.

<sup>2</sup> *Ibid.*, p. 8 and 339.

<sup>3</sup> In the case of Chile, longer maturities were not widely available so debt had to be rolled over regularly. In the United States, various types of adjustable-rate mortgages given to high-risk borrowers eventually led to massive defaults when interest rates and payments ballooned. The financial problem facing U.S. institutions was compounded by the highly complex and arguably poorly understood securitization of these mortgages.

financial trouble or insolvent, resulting in the financial crisis. Chile's response may prove useful as policy makers evaluate options.

## **The Chilean Banking Crisis of 1981-84**

Following the coup against socialist President Salvador Allende in 1973, General Augusto Pinochet immediately re-privatized the banking system. Banking regulation and supervision were liberalized. Macroeconomic conditions and loose credit gave way to the economic "euphoria of 1980-81." The exuberance included substantial increases in asset prices (reminiscent of a bubble) and strong wealth effects that led to vastly increased borrowing. The banking system readily encouraged such borrowing, using foreign capital, that because of exchange rate controls and other reasons, provided a negative real interest rate. From 1979 to 1981, the stock of bank credit to businesses and households nearly doubled to 45% of GDP. This trend came to a sudden halt with the 1981-82 global recession.<sup>4</sup>

The financial sector found itself suddenly in a highly compromised position. Weak bank regulations had allowed the financial sector to take on tremendous amounts of debt without adequate capitalization. Debt was not evaluated by risk characteristics. Most debt was commercial loans, but banks also carried some portion of consumer and mortgage debt. As firms and households became increasingly financially stressed, and as asset prices plummeted, the solvency of national banks became questionable. Two issues would later be identified: the ability of borrowers to make debt payments, and more importantly, the reluctance of borrowers to do so given there was a broadly-held assumption that the government would intervene. By November 1981, the first national banks and financial institutions that were subsidiaries of conglomerates failed and had to be taken over by regulatory authorities.<sup>5</sup>

Most debt was short term and banks were in no position to restructure because they had no access to long-term funds. Instead, they rolled over short-term loans, capitalized the interest due, and raised interest rates. This plan was described by one economist as an unsustainable "Ponzi" scheme, and indeed was a critical factor in bringing down many banks as their balance sheets rapidly deteriorated. From 1980 to 1983, past-due loans rose from 1.1% to 8.4% of total loans outstanding. The sense of crisis further deepened because many of the financial institutions were subsidiaries of conglomerates that also had control over large pension funds, which were heavily invested in bank time deposits and bank mortgage bonds. In the end, although the roots of the banking crisis were different than those in the United States, the Chilean government faced the possibility of a complete failure of the financial sector as credit markets contracted.<sup>6</sup>

## **The Government Response**

The Central Bank of Chile took control of the crisis by enacting three major policies intended to maintain liquidity in the financial system, assist borrowers, and strengthen lender balance sheets.

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<sup>4</sup> Ibid., p. 38 and Barandiarán, Edgardo and Leonardo Hernández. *Origins and Resolution of a Banking Crisis: Chile 1982-86*. Santiago: Central Bank of Chile. Working Paper No. 57. December 1999. pp. 13-14.

<sup>5</sup> Barandiarán and Hernández, op. cit., pp. 20-22.

<sup>6</sup> Ibid., pp. 15-18 and 21-23 and Bosworth, Dornbusch, and Labán, op. cit., p. 339.

These were: 1) debt restructuring for commercial and household borrowers; 2) purchases of nonperforming loans from financial institutions; and 3) the expeditious sale, merger, or liquidation of distressed institutions.<sup>7</sup>

## **Debt Restructuring**

From the outset of the rescue plan, the Chilean Central Bank considered providing relief to both debtors and lenders. There were two rationales. First, as a matter of equity, there was a sense that households as well as firms should be helped. Second, to maintain a functioning credit market, both borrowers and lenders needed to be involved. The Central Bank decided to restructure commercial, consumer, and mortgage loans. The goal was to extend the loan maturities at a “reasonable” interest rate. The debtor was not forgiven the loan, rather banks were given the means to extend the maturities of the loans to keep the debtor repaying and the credit system functioning. Restrictions were in place. Eligible firms had to produce either a good or service, eliminating investment banks that held stock in such firms. Only viable businesses were eligible, forcing the bankruptcy procedures into play where unavoidable. To keep the program going, the loan conditions of each subsequent iteration of the program became easier: longer maturities; lower interest rates; and limited grace periods.<sup>8</sup>

The program allowed Central Banks to lend firms up to 30% of their outstanding debt to the banking system, with the financing arrangement working in one of two ways. At first, the Central Bank issued money, lent it to debtors, which used it to pay back the bank loans. Later, the Central bank issued money to buy long term bonds from the banks, which used the proceeds to restructure the commercial loans. Variations of this process were applied to consumer and mortgage debtors. In cases where loans were made directly from the Central Bank to the debtor, repayment was expected usually beginning 48 months after the loan was made. The fiscal cost was significant, approximating 1% of GDP in 1984 and 1985.<sup>9</sup>

## **Restoring Bank Balance Sheets**

This program was more controversial and had to be adjusted over time to be effective. The key idea was to postpone recognition of loan losses, not forgive them. It relied on identifying nonperforming loans and giving banks time to provision against them, without risking insolvency. The process has been variously characterized as the Central Bank taking on bad debt through loans, purchases, or swaps. All three concepts play some part of this complex, largely accounting-driven arrangement.

Initially, this program was described as a sale, although there was no exchange of assets. The Central Bank technically offered to “buy” nonperforming loans with non-interest bearing, 10-year

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<sup>7</sup> Barandiarán and Hernández, *op. cit.*, p. 20-23. In addition, because a portion of the debt in Chile was dollar denominated, the government created a preferential exchange rate program to help repay those debts, the value of which had ballooned on the balance sheets of corporate and household debtors because of the 1982 peso devaluation. Because this issue is not germane to the U.S. situation, it is not further discussed. The preferential exchange program nonetheless represented a large subsidy that the government of Chile had to absorb.

<sup>8</sup> *Ibid.*, pp. 25-29.

<sup>9</sup> *Ibid.*, pp. 25-26. There was also a cost in expanding the money supply, but the macroeconomic effects proved limited and are not addressed here.

promissory notes. Banks were required to use future income to provision against these loans and “buy” them back with the repurchase of the promissory notes. In fact, they were prohibited from making dividend payments until they repaid the Central Bank in full. The banks, though, actually kept the loans and administered them, but did not have to account for them on their balance sheets. This arrangement was intended to encourage banks to stop rolling over non-performing loans, recognize the truly bad ones, and eventually retire them from their portfolios. The banks benefitted by remaining solvent and gaining time to rebuild their loan loss reserves so to address nonperforming loans. The credit market was served by banks being able to continue operating with increased funds from released loan-loss reserves.<sup>10</sup>

This program did not work as hoped at first and had to be adjusted. The Central Bank allowed more time for banks to sell nonperforming loans and also permitted a greater portion of their loan portfolios to qualify. It also began to purchase these loans with an interest-bearing promissory note. The banks, however, actually repaid the interest-bearing note at a rate 2 percentage points below that paid by the Central Bank to the banks. This added differential was sufficient incentive for the banks to sell all their bad loans to the Central Bank, beginning a process of identifying good loans and allowing for the eventual retirement of bad loans from the balance sheets (and the banking system). The cost to the Central Bank increased, but by 1985, the portfolio of non-performing loans at the Central Bank began to decline and was eventually eliminated.<sup>11</sup>

## **Restructuring Distressed Banks**

A major goal of government actions was to ensure that bank owners and creditors were not absolved of responsibility to help resolve the crisis, including using their own resources to absorb some of the costs. The government worked closely with all financial institutions to impose new risk-adjusted loan classifications, capital requirements, and provisioning for loan losses, which would be used to repurchase loans sold to the Central Bank. The banks, through the Central Bank purchase of substandard loans, were given time to return to profitability as the primary way to recapitalize, and became part of the systemic solution by continuing to function as part of the credit market.

A number of banks had liabilities that exceeded assets, were undercapitalized, and unprofitable. Their fate was determined based on new standards and they were either allowed to be acquired by other institutions, including foreign banks, or liquidated. The “too big to fail” rule was apparently a consideration in helping keep some institutions solvent. A total of 14 financial institutions were liquidated, 12 during the 1981-83 period. In most cases, bank creditors were made whole by the government on their deposits with liquidated banks. For three financial institutions that were closed in 1983, depositors had to accept a 30% loss on their assets.<sup>12</sup>

## **Possible Lessons from Chile’s Bank Crisis**

The overriding goal of a strategy to correct systemic crisis in the financial sector is to ensure the continued functioning of credit markets. Chile succeeded in accomplishing this goal and restoring

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<sup>10</sup> Ibid., pp. 29-30 and Bosworth, Dornbusch, and Labán, op. cit., pp. 41 and 340.

<sup>11</sup> Ibid.

<sup>12</sup> Barandiarán and Hernández, op. cit., pp. 40-46 and Bosworth, Dornbusch, and Labán, op. cit., p. 402.

a crisis-ridden banking system to health within four years. The single most important lesson of the Chilean experience was that the Central Bank was able to restore faith in the credit markets by maintaining liquidity and bank capital structures through the extension of household and consumer loan maturities, the temporary purchase of substandard loans from the banks, and the prompt sale and liquidation of insolvent institutions. Substandard loans remained off bank balance sheets until the viable institutions could provision for their loss from future profits. Other losses were covered by the government.

In addition, a number of other insights emerged from the Chilean crisis:

- The market could not resolve a system-wide failure, particularly in the case where there was a high expectation of a government bailout.
- The expectation of a bailout became self-fulfilling and increased the cost.
- Appropriate prudential supervision and regulation were critical for restoring health and confidence to the financial system. Observers lamented the *a priori* lack of attention to proper regulation.
- Private institutions that survived shared in the cost and responsibility to resolve the crisis to the apparent long-term benefit of the financial sector.
- The fiscal cost of the three policies discussed above was high. Liquidating insolvent institutions had the highest cost followed by the purchase of non-performing loans and rescheduling of domestic debts. The strategy, however, is widely recognized as having allowed the financial system and economy to return to a path of stability and long-term growth.

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