

The evolution of credit in Chile

Kevin Cowan and Manuel Marfán¹

Introduction

In the last quarter of 2008, Chile began to experience relatively mild shocks to external financial conditions and minor tensions in bank funding conditions. However, economic activity was under stress, with large negative shocks to external demand and expectations regarding future output, together with rising uncertainty regarding future growth. This shift in perceptions generated a simultaneous shock to the supply of and demand for credit by firms and households. The result was a large reduction in domestic spending, particularly in inventories, and a significant slowdown in net credit flows. The latter was not restricted to bank lending – it also affected net flows of non-bank credit to households.

A similar credit slowdown took place in Chile in the period following the Asian financial crisis in the late 1990s. However, there are a number of differences between the two episodes. While net flows of household loans to GDP fell by less in the current episode, net bank credit to firms contracted more. This contraction was partly offset by increased bond issuance, which partly offset reduced bank credit flows to non-financial companies.

The evolution of credit in Chile raises a number of questions. The first is to understand the extent to which the shift in credit supply was the optimal reaction of lenders to the deterioration of short-term forecasts and increasing uncertainty or the result of incentives associated with financial regulation that may have amplified the contraction. The second is to determine the extent to which coordination failures can be overcome by macroprudential regulation and traditional macro policy vis-à-vis direct public sector participation in the banking sector. In this respect, the Chilean case is interesting as the state bank (Banco del Estado) played an active anticyclical role in the current economic slowdown.

Funding conditions for Chilean banks

Following the initial tensions in money markets in early October 2008, Chilean banks have enjoyed relatively favourable financing conditions in local currency (pesos) due to the combination of falling policy rates, enhanced liquidity support from the Central Bank of Chile – which extended the maturity of its repo operations and expanded eligible collateral – and a “flight” to the safety/liquidity of bank deposits by local investors, most notably money market mutual funds. Borrowing rates at all maturities have dropped due to falling policy rates and funding spreads (Figure 1).

There have been no major changes to the structure of bank liabilities over the last year. The maturity of deposits decreased transitorily in October 2008, subsequently returning to pre-crisis maturities. In recent months, the relative importance of sight deposits has increased as time deposits have contracted somewhat. Banks were able to issue senior and subordinated debt during 2009 at spreads over central bank paper similar to historic averages.

¹ Central Bank of Chile.

In October 2008, Chilean banks began to face a shock to the supply of external funding, which manifested itself in higher borrowing spreads over Libor, rising from close to 10 basis points (bp) to a maximum of 150 bp (Figure 2).² Compared to other emerging economies, the supply shock was relatively mild, at least in terms of the increase in spreads on public debt (Figure 3).³ In recent months, the spreads on cross-border bank lending have fallen, although they remain above pre-crisis levels, and the dispersion of spreads across banks remains above those observed prior to October 2008.⁴

Credit conditions and credit flows in the Chilean economy

The main development in the Chilean banking system has been the tightening of credit conditions. Banks significantly tightened lending conditions in October 2008, gradually normalising them by mid-2009. According to the Bank Lending Conditions Survey carried out by the Central Bank of Chile, this has led to higher spreads on loans, higher collateral requirements and smaller loans. The survey also reports a similar trend in demand perceptions (Figure 4).

The survey data on spreads is corroborated by the evolution of effective spreads between bank borrowing and lending rates (Figure 5). Although spreads fell relatively quickly during the first quarter of 2009, the level reached in the fourth quarter of 2008 was high compared to previous episodes of economic slowdowns, including the period following the Asian financial crisis in 1998, during which the economy experienced a similar drop in growth rates (Figures 6 and 7).

Credit risk, measured by the index of non-performing loans (NPLs), increased after September 2008 but to a lower level compared to the months following the Asian crisis. The index for commercial loans increased less than during the Asian crisis, while the index for consumer loans reached a level similar to the one in 1999. Housing loans have shown an upward trend since the end of 2006 (Figure 8).⁵

As a result of the combination of tightening credit conditions and falling demand from consumers and firms, net credit flows dropped considerably. Net flows of bank consumer loans fell to –0.1% in September 2009 from an average of 1.3% of GDP in September 2007. The slowdown in bank residential mortgage financing was slightly milder, with bank mortgage lending flows decreasing from almost 2% of GDP in September 2007 to 1.3% two years later.

Non-bank household loans experienced a similar slowdown to bank loans in 2009, although the net flow of non-bank consumer credit remained above that of bank loans (Figure 9).⁶

Data is not available to make a comparison of all sources of household debt in the current international financial crisis with the period following the Asian financial crisis. However, it is possible to focus on the net flow of credit from banks and *financieras* – financial institutions that were relevant until the late 1990s in the Chilean credit market but were later absorbed by

² During this period, the term of cross-border borrowing shortened from 13 to six months.

³ A similar pattern can be observed using credit default swaps (CDS).

⁴ During 2009, Chilean banks switched their counterparties for cross-border debt, moving away from banks that had been reducing their cross-border loans.

⁵ NPLs for housing exclude the Banco del Estado (the state-owned bank), which has seen a large increase in NPLs on loans associated with low-income housing programmes.

⁶ Non-bank credit granted by retailers and other non-bank financial intermediaries is a significant source of financing for households in Chile, making up 50% of total consumer loans and 10% of mortgage lending.

banks. The drop in the flow of consumer credit from banks and *financieras* following the Asian financial crisis was more pronounced than the drop in bank credit following the subprime crisis, despite a similar fall in GDP growth. Indeed, in late 1999, net consumer credit was falling at a rate of -1.5% of GDP (Figure 10).⁷

The total net flow of credit to firms contracted substantially after the fourth quarter of 2008, falling to 6% in September 2009 from close to 10% of GDP in mid-2007. The net flow of credit to firms from domestic banks experienced the largest decline, dropping to almost zero in September 2009 from close to 6% of GDP in mid-2007, a significantly larger drop than in late 1998 and early 1999. Loans from non-resident banks to Chilean firms also experienced a mild contraction in 2009 to 2% of GDP (Figure 11).

Bond financing, particularly bonds issued in domestic markets, increased during 2009, partially offsetting the reduction in bank credit. Compared to the levels of September 2007, the higher bond issuance (2.5% of GDP) compensated for more than half of the fall in total bank credit flows (4.5% of GDP). This pattern of increased domestic bond financing in a context of restrictive credit policies by banks – both domestic and foreign – also took place, although to a lesser extent, in the late 1990s.

A simple calculation illustrates the potential crowding out effects of the contraction in external credit on firms that only have access to domestic bank financing. Consider the case that large internationally active firms substitute external financing for domestic credit, either bank or bonds. In the 2008 episode, net external bank credit flows fell by close to 1.5% of GDP but were more than completely offset by increased domestic and foreign bond issuance (close to 2.5% of GDP).

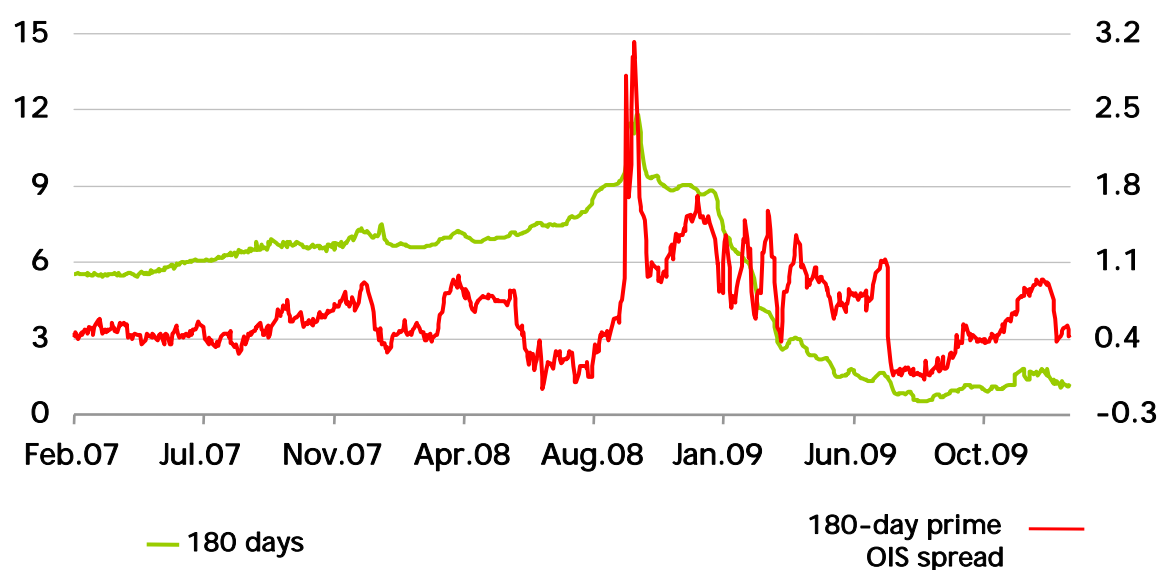
In Chile, the key distinction over the last 15 months has not been between foreign and local banks but between public and private banks. Comparable local and foreign banks have behaved in similar terms over the last year, although the slowdown in loans from foreign-owned banks started sooner than for their local counterparts (Figure 12).

The behaviour of the state-owned bank, on the other hand, is markedly more anticyclical than that of private banks (Figure 13). This same pattern has occurred following previous slowdowns in the Chilean economy (eg in 1991 and 1999).

Within an international context, the growth of bank credit in Chile after October 2008 was higher than in the average economy in Latin America, emerging Europe and the group of OECD countries most affected by the subprime crisis but lower than in the average economy in emerging Asia and the remaining OECD countries. On the other hand, the fall in the rate of credit growth in Chile vis-à-vis the 2005–07 period was smaller than in any other region, with the exception of the OECD countries least affected by the subprime crisis (Table 1). Recent research carried out by the Central Bank of Chile shows that the smaller slowdown in Chile can be explained by the relatively lower credit expansion in the country during the period prior to September 2007 and the relatively more aggressive monetary policy response. By contrast, a higher than average drop in trading partners' GDP growth and a higher degree of financial integration reduced credit growth in Chile relative to the sample mean.

⁷ Note that this contraction was not only due to shrinking net loans from the financial companies (*financieras*) – which faced a complex solvency situation in the late 1990s – but also to falling net credit from banks.

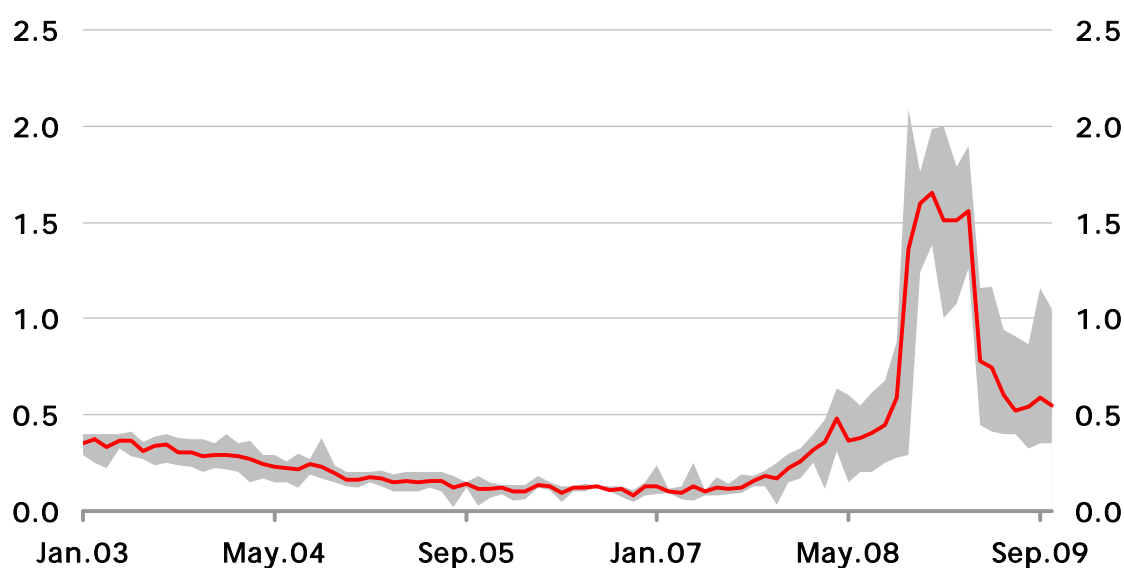
Figure 1
Bank borrowing rates and the borrowing-OIS spread (*)
 (in per cent)



(*) Rates on time deposits traded in secondary markets and the prime-borrowing OIS spread. Five-day moving average.

Sources: Central Bank of Chile; Santiago Stock Exchange.

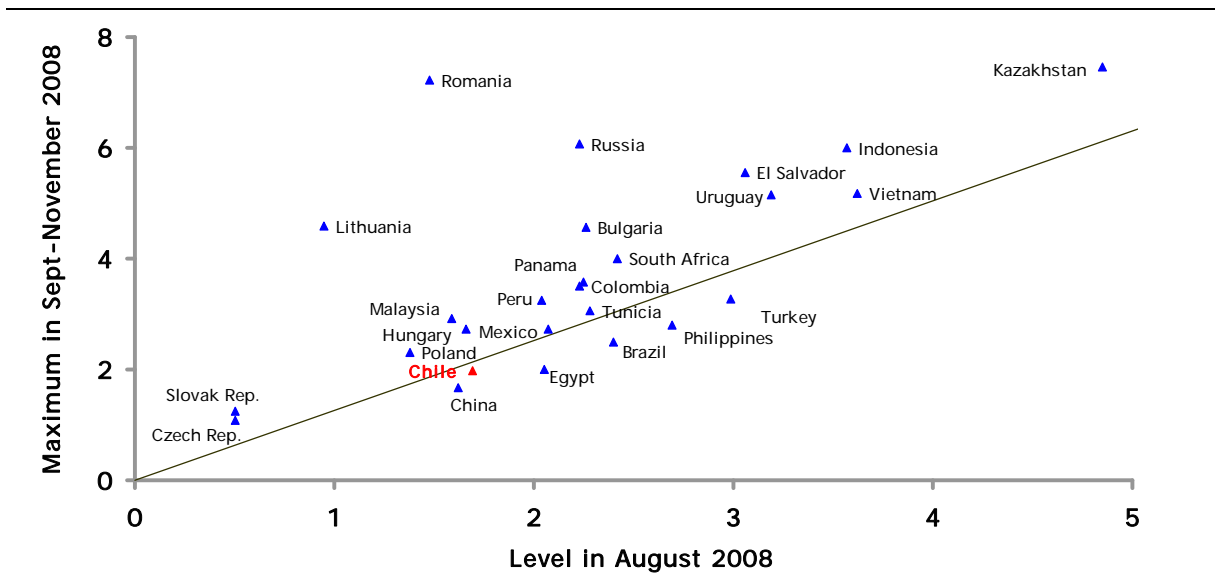
Figure 2
Spread on short-term external financing for resident banks
 (monthly average, in per cent) (*)



(*) Floating rate loans from unrelated banks. The grey area represents the interval between the fifth and 95th percentiles of the sample each month.

Source: Central Bank of Chile.

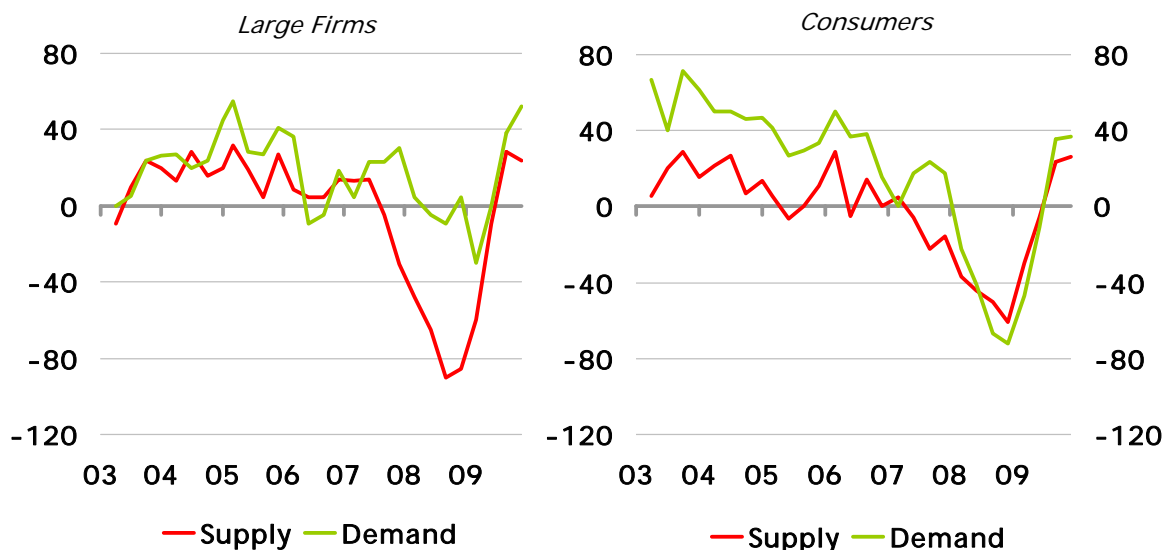
Figure 3
Change in sovereign spreads
 (in per cent) (*)



(*) Measured through the EMBI spread. A similar pattern is observed using CDS.

Source: Bloomberg.

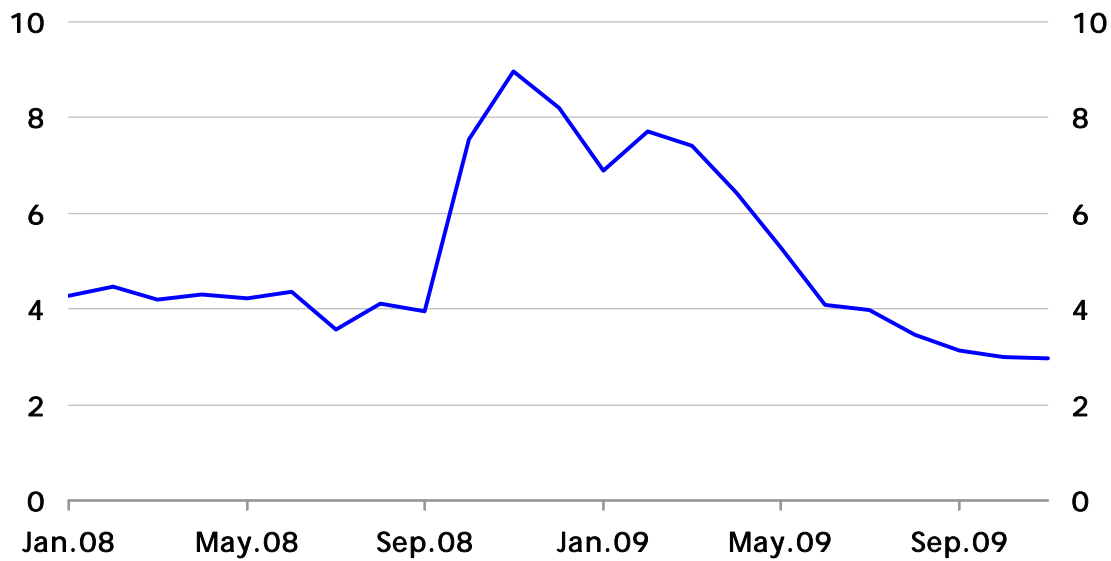
Figure 4
Bank Lending Conditions Survey
 (net percentage of survey responses) (*)



(*) Negative values indicate a weaker perception of demand and less flexible supply conditions.

Source: Central Bank of Chile.

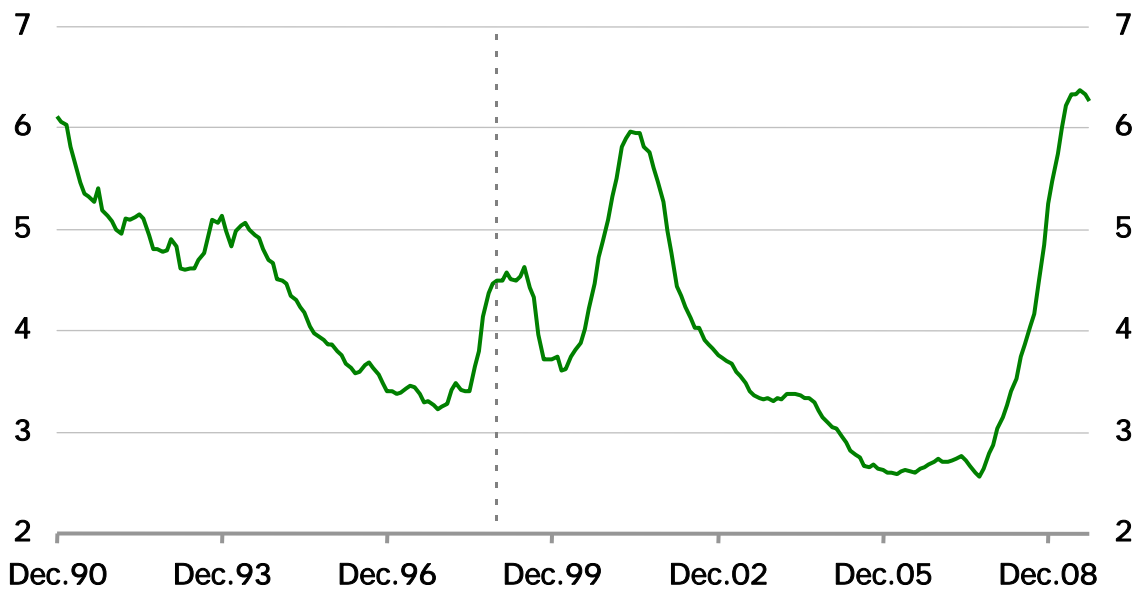
Figure 5
Lending-borrowing spread
 (in per cent) (*)



(*) Spreads between 30–89-day commercial loan lending and borrowing rates.

Source: Central Bank of Chile.

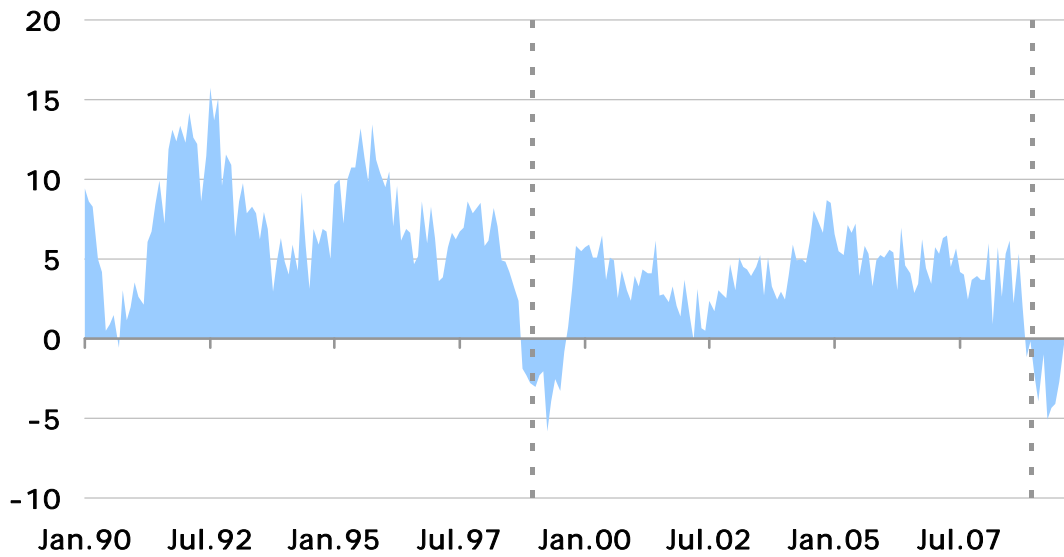
Figure 6
Historic lending-borrowing spread
 (in per cent) (*)



(*) Spreads between 30–89-day lending rates and bank borrowing rates. Twelve-month moving average. Dotted lines mark December 1998 and December 2008.

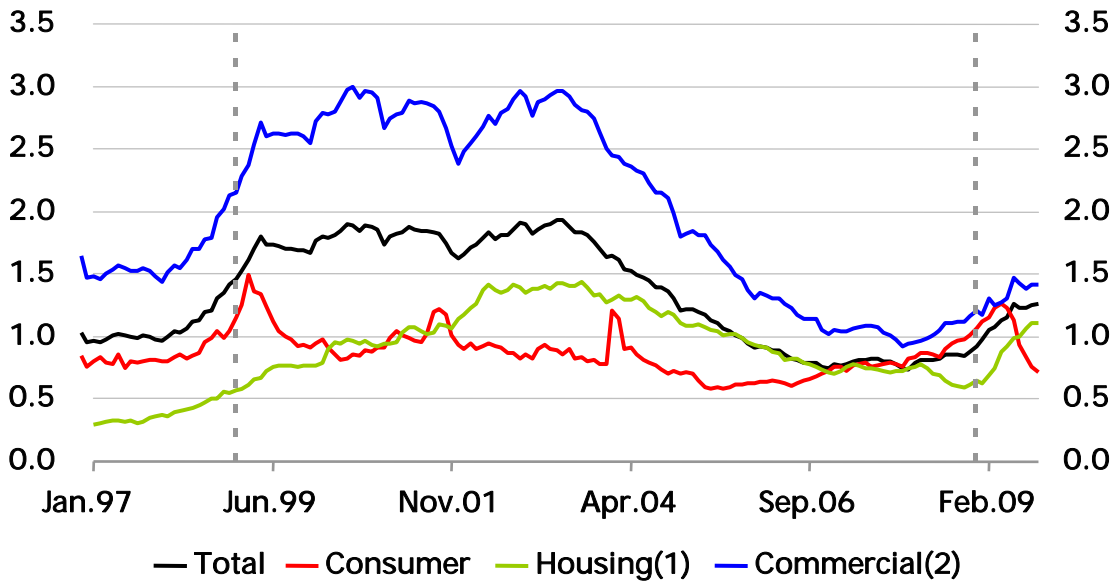
Source: Central Bank of Chile.

Figure 7
Monthly Index of Economic Activity (IMACEC)
 (real annual variation, in per cent)



Source: Central Bank of Chile.

Figure 8
Non-performing loans
 (percentage of loans)



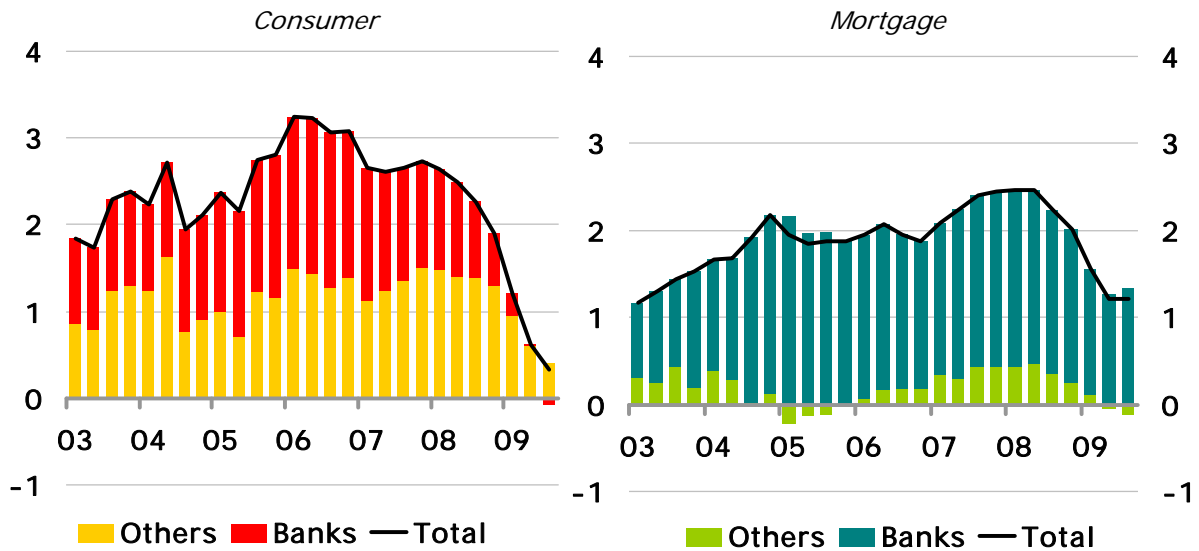
1. Excludes the Banco del Estado.

2. Excludes foreign trade operations.

Source: Central Bank of Chile based on data from the SBIF.

Figure 9

Net credit flows to households (*)
(annualised, percentage of nominal GDP)

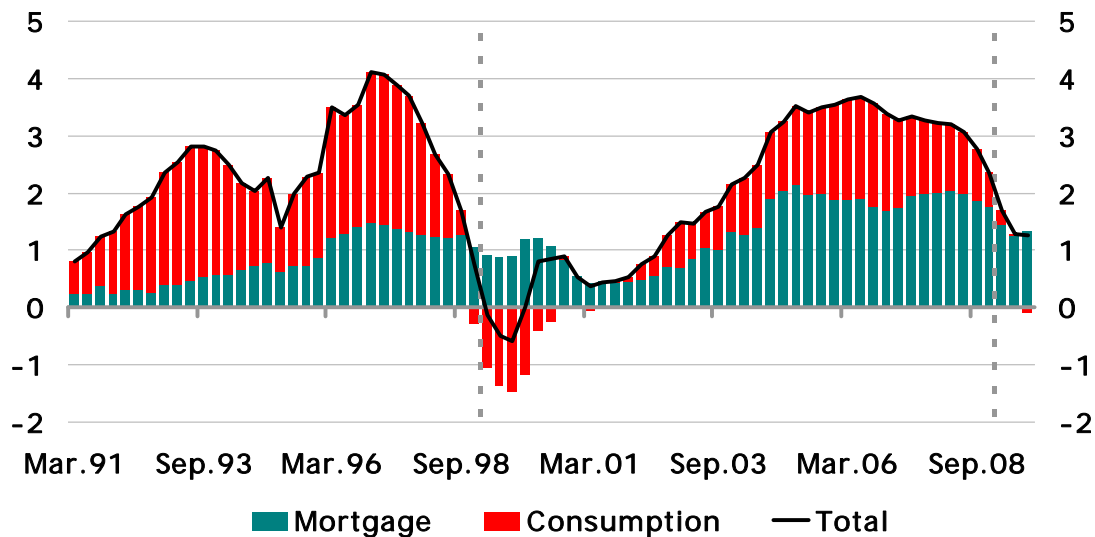


(*) Annual change in the stock of debt, net of CPI adjustments in the case of housing loans, over annual nominal GDP.

Source: Central Bank of Chile.

Figure 10

Net credit flows from banks and financial companies (*financieras*) to households
(annualised, percentage of nominal GDP) (*)



(*) Annual change in the stock of debt, net of CPI adjustments in the case of housing loans, over annual nominal GDP.

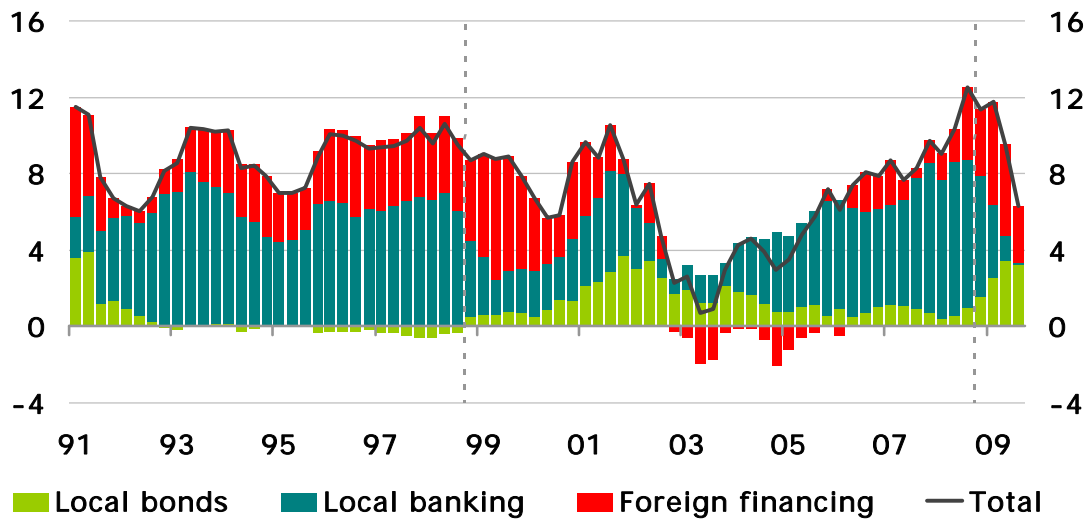
Source: Central Bank of Chile.

Note: relates to the consumer, not consumption.

Figure 11

Net credit flows to firms

(annualised, percentage of nominal GDP) (*)



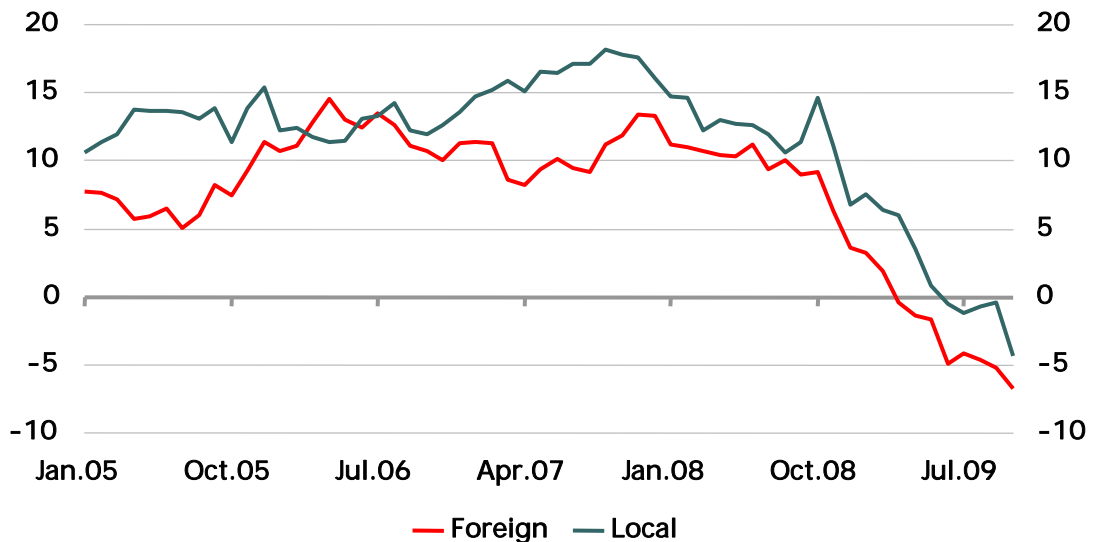
(*) For domestic debt, net flows are the annual change in the stock of debt, net of CPI adjustments in the case of bonds, over annual nominal GDP. For foreign debt, net flows are cumulative annual flows from balance of payment statistics, converted to local currency at market exchange rates, over annual nominal GDP.

Source: Central Bank of Chile.

Figure 12

Credit from foreign and local banks (*)

(real annual change in credit, in per cent)



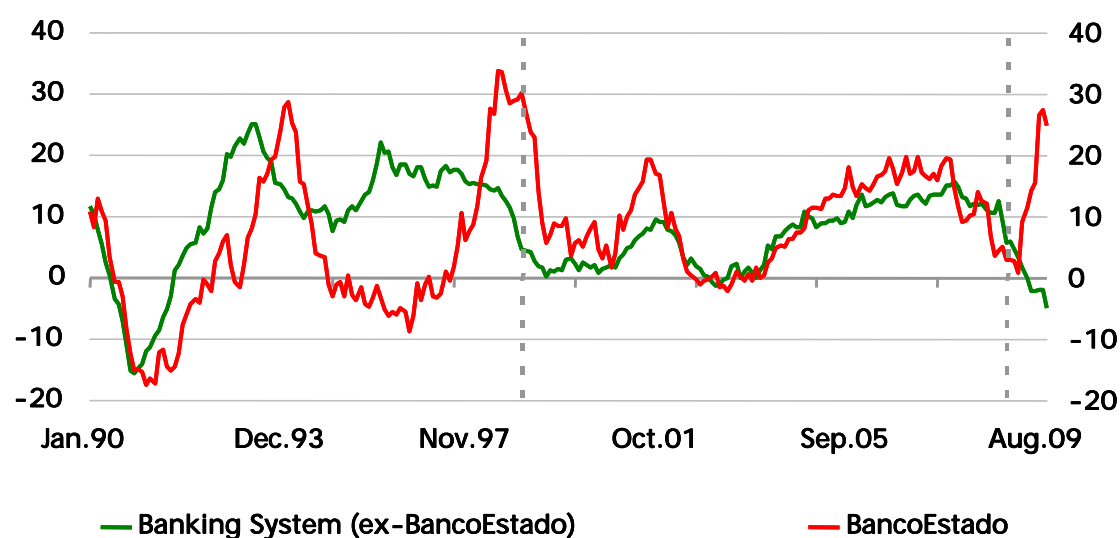
(*) Commercial loans. Foreign banks are those banks with more than 50% foreign ownership in November 2009. Foreign banks involved mainly in treasury operations and foreign trade are excluded from the sample.

Source: Central Bank of Chile.

Figure 13

Credit from private and public banks (*)

(real annual change in credit, in per cent)



(*) Commercial loans.

Source: Central Bank of Chile.

Table 1

Real growth of banking credit (1)

(monthly average, in per cent)

| | July 2005– June 2007 | July 2007– September 2008 | October 2008– May 2009 |
|---------------------------------------|-------------------------|------------------------------|---------------------------|
| OECD without capital injection (2)(3) | 1.00 | 0.77 | 0.80 |
| OECD with capital injection (2)(4) | 0.89 | 0.69 | 0.18 |
| Emerging Asia (5) | 1.68 | 0.38 | 0.86 |
| Emerging Europe (5) | 2.14 | 1.42 | 0.11 |
| Latin America (5) | 1.22 | 0.95 | 0.27 |
| Chile | 0.99 | 0.67 | 0.39 |

(1) Seasonally adjusted series. Values for each group refer to the averages of the member countries, excluding those for which data are not available.

(2) Capital injections from the government to the banking system.

(3) Czech Republic, Finland, Japan, Poland, Portugal and Spain.

(4) Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Sweden, Switzerland, and the United Kingdom. Excludes Mexico and Turkey.

(5) Emerging and developing economies, as defined by the IMF, in that region.

Source: Central Bank of Chile based on IMF data.