Rodrigo Vergara: The Monetary Policy Report and the Financial Stability Report

Presentation by Mr Rodrigo Vergara, Governor of the Central Bank of Chile, before the Finance Commission of the Honorable Senate of the Republic, Santiago de Chile, 21 December 2015.

* * *

Both Reports can be found at http://www.bcentral.cl/en.

Accompanying figures and tables can be found at the end of the speech.

Introduction

Mr. President of the Finance Commission of the Senate, senator Andrés Zaldívar, senators members of the Commission, ladies and gentlemen,

I appreciate your invitation to present the vision of the Board of the Central Bank of Chile on recent macroeconomic and financial developments, the respective outlook and its implications for monetary and financial policy. This view is contained in detail in our Monetary Policy Report of December 2015 and in our Financial Stability Report for the second half of 2015.

In the past few months, annual CPI inflation evolved in line with September's estimates, although its core component – the CPIEFE – posted a slightly larger increase, reflecting the further depreciation of the peso in the period, with still bounded output gaps and within the historical indexing patterns.

GDP growth for the third quarter matched the projections, while domestic demand was somewhat higher. Thus, the economy continued to grow in the range of 2 to 2.5 percent.

The external scenario has worsened, due to the drop in the terms of trade, particularly the price of copper, sluggish growth of our trading partners, and not-so favorable financial conditions. The policy rate increase in the United States last week is the most significant development of the recent past.

In this context, in the baseline scenario that I will be presenting in a moment, the growth outlook for 2016 is revised downward and the convergence of inflation with the target is pushed back somewhat. This results in the September scenario being intensified, with stronger short-term inflationary pressures that should ease into the medium term.

With this scenario in mind, in September we estimated that, to ensure the convergence of inflation with the target, it would be necessary to withdraw part of the monetary stimulus then in place. We began the process in October and continued it in December, taking the monetary policy interest rate (MPR) to 3.5 percent.

In the baseline scenario I will describe, we considered measured adjustments that would be made at a pace that would depend on incoming information and its implications on the inflation outlook. The monetary policy stance will continue to be expansionary over the whole length of the projection horizon, in line with below-potential output growth and inflation declining to 3 percent.

Let me now turn to our baseline scenario and the main risks we have described in the Reports I am presenting to you today.

Macroeconomic scenario

Last November, the high basis of comparison led annual CPI inflation to 3.9 percent, down from a few months back. However, both our baseline scenario and the market's projections expect it to rise again above 4 percent and to stay in the neighborhood for the larger part of 2016.

Our currency's depreciation has been a significant factor behind the increase in inflation, reflected mainly in the CPIEFE inflation for goods which, after averaging –1.9 percent in 2013, has been somewhat below 5 percent since July this year. Add to this the indirect effect on other prices via indexation to past inflation. Aside from the sustained depreciation of the peso, the persistence of high inflation is also related, as was stressed in September, with the fact that output gaps, despite some increase, are of a smaller magnitude than they have been in other low-growth cycles, making it difficult for non-tradable goods inflation to make a bigger adjustment (figure 1).

The evolution of output gaps is most evident in the labor market, where the unemployment rate remains low and annual growth of total employment hovers around 2 percent, with salaried employment showing faster growth at the margin. While nominal wages have had a gradual moderation since late 2014, they are expanding at about 6 percent annually (figure 2). Meanwhile, fuel prices have dropped and foodstuffs inflation has slowed. The recent adjustment of public sector wages should help to contain wage pressures.

Our baseline scenario estimates that GDP will grow by 2.1 percent in 2015, within the range we foresaw in September. As I said, the performance of the economy in the third quarter was similar to that of previous quarters, so it continued to grow between 2 and 2.5 percent annually. This result revealed a deeper than expected decline of natural resources, particularly mining, due to production downtime associated to the fall in the copper price. The performance of the other sectors was somewhat better, namely construction and some services.

As for domestic demand, it is still growing weakly, although a little more than we foresaw in September. The increase in gross fixed capital formation, where specific factors combine, such as high imports of transport equipment, and stronger residential housing construction, is worth noting. Private consumption kept a growth rate of around 2 percent annually (figure 3).

The performance of domestic demand reflects that business and consumer confidence indicators remain pessimistic, despite the resilience of the labor market and that GDP growth, while slow, has stabilized. The cost of domestic funding is still low by historical standards, partly reflecting the expansionary stance of monetary policy. Nonetheless, with the sole exception of mortgage loans, credit growth in real annual terms is still limited (figure 4).

The baseline scenario assumes that GDP will grow between 2 and 3 percent in 2016, a lower range than forecast in September. This projection continues to estimate that the economy's potential growth (i.e., the non-accelerating-inflation growth rate) lies around 3 percent. Accordingly, we believe that output gaps will exhibit limited growth in 2016 and will begin narrowing towards 2017.

With respect to domestic demand, the persistently low confidence indicators and the downsized public investment plans for 2016 means lowering the growth forecast for gross fixed capital formation. Private consumption is also revised downward, in line with low household expectations and slower than expected non-durable consumption. The labor market has proved resilient, but we expect it to show some deterioration during 2016. All considered, consumption should grow in 2016 more than it did this year. The drop in the copper price and the worsened financing conditions would also discourage investment. About its construction component, the momentum coming from the upcoming entry into force of the VAT will fade gradually. Measured as a percentage of GDP, in both nominal and real terms, gross fixed capital formation will change little from 2015, at 21.9 and 23.5 percent, respectively.

The worsening of the external scenario, as I will detail later, has a significant effect on the larger current account deficit of 2015 and 2016: 1.7 and 2.6 percent of GDP, respectively (0.7

and 1.5 percent in September). This owes mainly to the decline in the terms of trade. Add a larger than expected increase in capital goods imports this year, particularly of transport equipment (table 1).

This projection assumes that fiscal policy will continue to contribute to expenditure growth, although not so intensely as in 2015. In particular, fiscal spending will evolve in accordance with the fiscal rule and the consolidation objectives set forth by the Administration, which has pledged to reduce the structural deficit by about one quarter of a point of GDP per year.

The worsened external scenario relevant for Chile is the main factor behind the downward revision to 2016 growth. This phenomenon is shared by all emerging and commodity-exporting economies, mainly because of the substantial drop in the terms of trade and less favorable external funding conditions.

Commodity prices fell again in recent months, influenced by the steady appreciation of the dollar and slower global growth. In the case of copper, one must add prospects that the Chinese economy's recomposition by sectors will continue to erode the demand for the metal. Thus, at the statistical cutoff date for this Monetary Policy Report, copper was trading at under 210 cents per pound, accumulating a drop of nearly 30 percent in the year. This, combined with a discouraging short-term outlook, has prompted a significant reduction in our copper price forecast for 2016 and 2017. We now estimate that it will trade at an average of 225 dollar cents per pound, compared with the almost 250 cents we anticipated in September.

The price of oil has also dropped in recent months, to less than 40 dollars per barrel as of the closing of our Monetary Policy Report, around 30 percent with respect to the beginning of the year. In this case, the global factors that have affected commodity prices are compounded with supply conditions that have had a major impact on prices over the last year and a half. Considering all these factors, the outlook for the price of crude oil in the next two years has been also reduced significantly, to an average of 46 dollars per WTI barrel and 48 dollars the Brent. In September we were projecting prices of 53 and 58 dollars for the two oils.

For some months now, external financial conditions have been less favorable for the Chilean economy. The preamble to the US monetary policy rate adjustment caused significant volatility in financial markets. However, the increase of last week had a cool reaction of the markets. In Latin America the mix of worsened economic prospects and idiosyncratic factors has fueled the rise in risk premiums, but in Chile this rise has been smaller (figure 5).

Moreover, the projected growth of our trading partners in the period 2016–2017 has been downscaled marginally compared to what we expected in September. The developed world, particularly the United States, shows a sustained recovery. Meanwhile, the emerging world has slowed further. In China, fears of a deeper slowdown and turmoil in financial markets have eased, but the Chinese economy has decelerated, with some weakness in the manufacturing sector. Latin America faces a complex situation, particularly Brazil which is going through its worst recession in decades. The loss of its investment grade last week reveals the difficulties of this economy. In Argentina, the new authorities are facing great challenges. Inflation in Latin America, in contrast with the rest of the world, has increased, limiting the room for looser monetary policies (table 2).

In our baseline scenario, annual headline inflation stays above 4 percent for most of 2016, ending the year inside the tolerance range and hitting the target near the end of the projection horizon, now the fourth quarter of 2017. It is worth saying that inflation expectations remain anchored to the target over that horizon (figure 6).

This Monetary Policy Report's inflation forecast assumes that, over the policy horizon, output gaps will widen in the short term but will remain bounded, and the real exchange rate will appreciate slightly.

The Board already began withdrawing part of the monetary stimulus as announced in September, taking the MPR to 3.5 percent. The baseline scenario uses as a methodological assumption that the policy rate trajectory will be as inferred from the various expectations indicators at the statistical cutoff date for this Report (figure 7). Accordingly, monetary policy will continue to be expansionary, consistent with a context where growth remains below potential for some time and inflation converges with the target within the projection horizon. Thus, the monetary policy rate in real terms will stay near zero for quite a while, placing itself as one of the most expansionary in the group of emerging economies (figure 8).

The baseline scenario reflects those events believed to be the most likely to occur with the information at hand at the closing of the Reports. There are risks, however, that, if materialized, could reshape the macroeconomic outlook and thus alter the course of monetary policy.

About the external scenario, it is still early to know how the policy rate increase in the United States will affect the global economy. A first look shows that the markets have taken it calmly, stock prices rose and the dollar lost some value against the other currencies. Of course the way this process will unfold is an important source of risk, especially because of existing differences between what market expectations suggest and Fed's statement about how fast and how far it will raise the rate. Plus there is divergence in the monetary policy among the developed countries and its potential effects on the global value of the dollar. To the extent that this continues, the pressures for a more appreciated dollar will persist, affecting commodity prices and our own currency.

In China, an abrupt adjustment is now less likely, but doubts remain about how its economy will contribute to the recovery of global activity and commodity prices, especially now that they are rebalancing growth toward consumption and services. Finally, the complex situation in Brazil and the need for further tightening in some Latin American economies continue to pose a major risk. A worsening of the economic outlook in the region would affect external demand and possibly financing conditions facing Chile.

If any of these risks comes true, it is quite possible that the reaction of the exchange rate will push inflation up in the short term, although its medium-term effects are less obvious, considering that activity will probably suffer too.

At home, inflation has remained high for quite some time, which could affect the velocity of its convergence, because of both its effects through indexation and the formation of expectations. All in a context where margins are still bounded and capacity gaps are small. Meanwhile, the drop in the oil price and the reduced external inflation might take some steam off inflationary pressures.

Into the medium term, there are risks that could result in activity performing worse than assumed in our baseline scenario, widening capacity gaps and easing inflationary pressures. On one hand, although the labor market has remained resilient, a significant adjustment that may slow down wage growth, increase unemployment and affect expenditure cannot be ruled out. Confidence may not recover as expected, driving the economy to grow less. In any case, we do not rule out either that the economy could grow more than forecast, if confidence indicators recover more rapidly. This could also occur if the drop in fuel prices has a greater impact on our national income.

After assessing these risks, we estimate that the balance of risks is unbiased for inflation and downward biased for output.

Now let me turn to our Financial Stability Report (IEF).

The Financial Stability Report

Our Financial Stability Report discloses, twice every year (in June and December), the recent macroeconomic and financial developments that could affect the financial stability of the Chilean economy.

Events abroad are also important in terms of their implications for financial stability and, as I said, the external conditions facing Chile have deteriorated throughout the second half of the year. For one thing, the downturn of the Brazilian economy has taken its toll on the valuation of Chilean firms' investments there. In addition, the first policy rate hike in the United States might trigger a decompression of risk premiums, including the term premiums of foreign interest rates, causing exchange rate fluctuations and increasing domestic long-term interest rates.

About our local economy, the Report underscores the low level of both short-term and long-term interest rates. In this scenario, please note that the volumes managed in mutual debt funds remain high, which could be reversed in case of an abrupt event of increases in long rates. This risk scenario couples with the reduced relative liquidity of the instruments that make up these portfolios.

We have been insistent in the last few Reports about the financial situation of local firms. Our examination of incoming data reveals a weakening of the sector. On one hand, the debt to GDP ratio, which hovered near 114 percent since the end of 2014, rose to 121 percent in the third quarter of 2015. Although a large part of this increase results from the valuation effect deriving from the peso depreciation, its level is high from a historical perspective. Moreover, the increase accumulated in the past seven years is high by emerging economies' standards (figure 9). On the other hand, although the financial indicators of SVS-listed firms have not changed much since our last Report, debt is high and profitability is low, historically (figure 10). Anyway, various indicators show that the balance sheet exposure of these firms to exchange rate risks has remained low.

Turning to the real-estate sector, housing sales remain dynamic and prices are on an upward trend, albeit with some moderation lately (figure 11). Advance purchases associated with the upcoming tax reform explain the strength of the sector to an important extent. Actually, most of the properties sold are either off-plan or in construction phase. The low interest rates on mortgage loans also explain part of this dynamism. The growth in housing prices has been reflected in the dynamics of mortgage loans, which are rising nearly 10 percent annually in real terms, due mainly to an increase in the average debt and, to a lesser extent, to an increase in the number of debtors. Notably, although many lending indicators remain stable, such as the loan to value ratio and the debt to income ratio, the share of households with more than one mortgage has increased: from 20 to 25 percent in the last five years.

As for office space, the vacancy rate continues to grow. It is worth noting that the new square meters available have been reflected in more vacant office space, at more than 10 percent now. Therefore, the rents have dropped, a tendency that is expected to continue in the coming quarters (figure 12).

About the financial situation of households, aggregate indicators (i.e. borrowing and financial burden) show slight changes lately. At June 2015, household debt amounted to 61.6 percent of income, 0.8 percentage points more than at end-of-2014, remaining on an upward trend. The financial burden remained stable, closing at 14.7 percent. The latest Survey of Household Finances showed an increase in the financial burden of medium- to upper-income households with respect to 2011 (figure 13).

This occurs in a context where household default indicators remain stable. However, credits from family clearing houses (which represent a low fraction of household debt, at 3.4 percent) continue to increase nonperformance. This situation, coupled with flawed management, drove one of these institutions to default on its financial and social commitments, triggering intervention by the supervising entity and starting a restructuring process. These events motivated an increase in the premiums on the debt issued by these institutions, but their effects on the rest of the financial system have been limited. Still, we believe that steps must be taken to boost the convergence of the supervision models of these houses, among others, in order to enhance their corporate governance and their credit risk management, to reduce the probability of new instability episodes.

In the banking system, credit activity is growing moderately, except for mortgage loans. Corporate and consumer loans continue to grow slowly. On one hand, the slowdown of the commercial portfolio is consistent with the economy's cycle, which coincides with the reduction in demand revealed by the Bank Credit Surveys of the past few months. On the other hand, the consumer portfolio shows zero growth in the lower amount segments, usually associated with lower-income debtors. In the mortgage category, the greater expansion of debt comes from loans of more than five thousand UF, partly explained by the housing price dynamics.

Bank financial indicators show the sector losing strength. At the third quarter of 2015, ROE dropped to 15 percent, largely because of reduced interest rate spreads. This reflects the shift in portfolio composition from higher-yield segments (consumer and commercial) to mortgage.

The capital adequacy ratio (CAR) continued to decline, to slightly below 13 percent as of August 2015, consolidating a fall of just over one percentage point in the last four years (figure 14). This has occurred in a context where international banks have tended to increase their capitalization levels to strengthen their capacity to respond to episodes of financial stress, in line with the new international regulations (Basel III), or as a voluntary way of building resilience. Although Chile, with capitalization levels of around 14.3 percent in 2009, was around the median of OECD economies, its place today is in the lower part of the distribution (figure 15).

In view of these developments and considering that the amendments to the General Banking Law announced this year by the Ministry of Finance will include a review of the solvency requirements, making them gradually converge to the new Basel III capital standards, it is important that the banks strengthen their capital levels, for example by adjusting their profit reinvestment policies.

The stress tests that we perform for each Financial Stability Report indicate that our capital levels are adequate to absorb the occurrence of a severe stress scenario. This scenario has similar characteristics to the one evaluated in the previous FSR, as it considers a fall in GDP in the short term and slower growth in the medium term. Output would stand at –4.5 percent annually during the most critical quarter and would then converge to a growth rate of 1.4 percent by the end of 2017. This is intended to replicate past financial fragility episodes of importance.

The results of these stress tests show that the banking system's position is adequate to deal with a severe stress scenario. They mark a downturn from the past FSR, mainly because of a lower level of initial capitalization and profitability, affected by reduced operating margins consistent with the evolution of the business cycle (figure 16).

Let me close with some final thoughts.

Final thoughts

The economic situation has become more complex, especially in emerging markets. The terms of trade have fallen more than expected and financial conditions have tightened. In addition, despite that the economic recovery of developed countries has consolidated, the situation in some key emerging trading partners has worsened.

The difficulties now facing emerging economies stem from the major changes observed in the global economy, especially the end of the commodity price boom. One must recognize, however, that the impact of these changes on each economy hinges on how well each one prepared to face them during the good years. Many countries incubated weaknesses that are now hampering their adjustment processes: high current-account deficits, fiscal mismatches and increased corporate debt – part of which is denominated in foreign currency and not properly hedged – , are some of the elements that make the adjustment more complex and risky.

Of course, there are also strengths. In particular, many emerging economies and countries in the region have better monetary policy frameworks in place to confront these challenges. Independent central banks with clearly defined objectives, flexible exchange rates, and an appropriate level of reserves, are key lines of defense.

Chile stands out in these issues. Our net public debt is nearly zero, because we saved during the copper price bonanza. Our financial system is a well regulated one and shows no significant weaknesses. The actions of the Central Bank have provided room for a significant adjustment of relative prices and, although at the expense of higher inflation, expectations have remained well anchored, a clear signal of the market credibility of our commitment to keep inflation low and stable.

But we must not be self-complacent. Quite the opposite: we must strengthen these elements that have traditionally been our main lines of defense against shocks from abroad.

Within this framework, our Financial Stability Report shows that it is highly necessary for the private sector to maintain a strong financial position in order to confront tougher conditions. Therefore, both the fragility we detect in the firms' financial situation and the reduced capitalization of banks are elements that must be monitored carefully, even if at this moment they are not problems by themselves.

And about fiscal policy, the effort that the government and Congress have set for 2016 is most appreciated, i.e. substantially slowing down spending growth, in line with the reduction in income associated with the lower copper price and slower economic growth. More importantly, we see it as recognition of the need for a fiscal consolidation process that takes into account the budget constraints that this more complex macro scenario will bring in the near future.

With respect to monetary policy, our policy framework plays a fundamental role in smoothing the business cycle. The basic idea is that if fiscal policy is methodical and predictable, in line with the fiscal rule, it provides greater space for a countercyclical monetary policy. In this sense, the first line of defense when facing shocks is monetary policy. That is precisely the role that we have played these years, in which we lowered the policy rate, helping to contain the drop in demand and allowing the peso to depreciate.

But monetary policy has its limits too, which we must respect if we do not want this essential pillar of price stability to weaken. This is why, after having higher and more persistent inflation levels than we had foreseen, we have decided to withdraw part of the monetary impulse, with the objective of bringing inflation to the target within a two-year horizon. Monetary policy will remain expansionary, with the real rate below its neutral level for a prolonged period of time. With that, we are certain that we will continue to contribute to the recovery of growth and hold unemployment within boundaries. But, at the same time, we will also ensure the achievement of price stability.

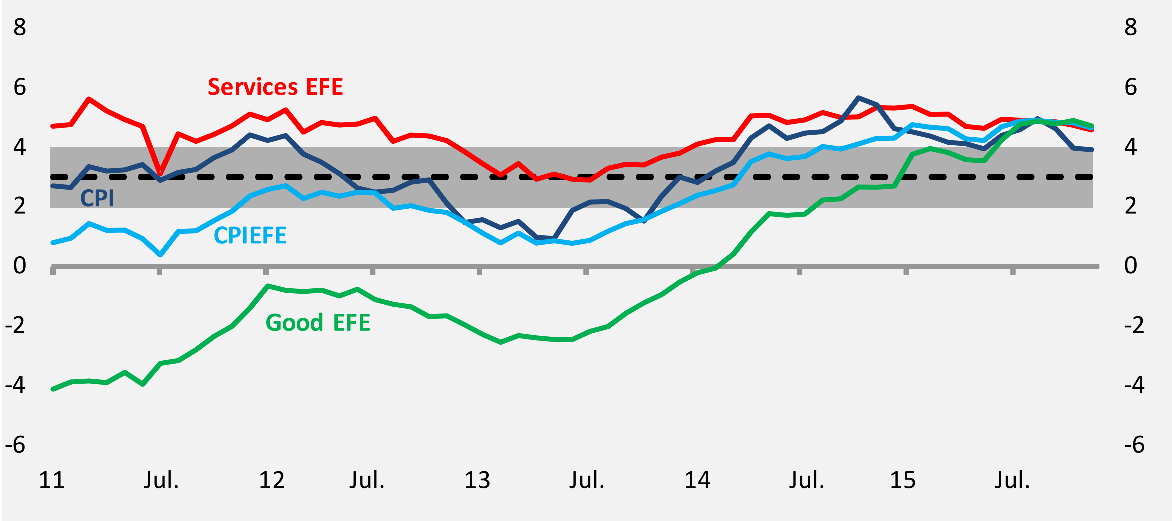
I would like to conclude by emphasizing that, despite the pessimistic atmosphere associated with the developments in the world economy, plus the cases of collusion and other legal issues and, I will say it, the stress that has pervaded some important local discussions, from a macro standpoint the conditions to resume strong growth are present. However, we must be ready to confront a more complex scenario. This means that every aspect that I have mentioned has to improve. As for monetary policy and our role as financial regulator, we will continue to work to pursue the objectives that we have been entrusted, namely to safeguard price stability and ensure the normal functioning of internal and external payments.

Thank you.

Figure 1

Inflation indicators (*)

(annual change, percent)



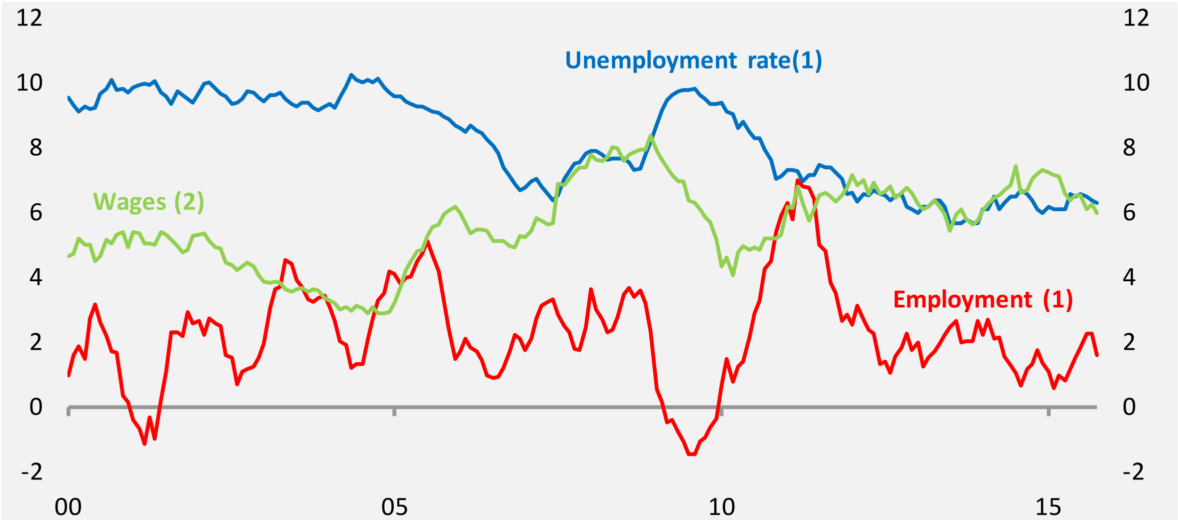
(*) As from January 2014, the new indexes with annual base 2013=100 are used, so they are not strictly comparable with earlier figures.

Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure 2

Labor market

(percent; annual change, percent)



(1) Spliced series using monthly variation in February 2010.

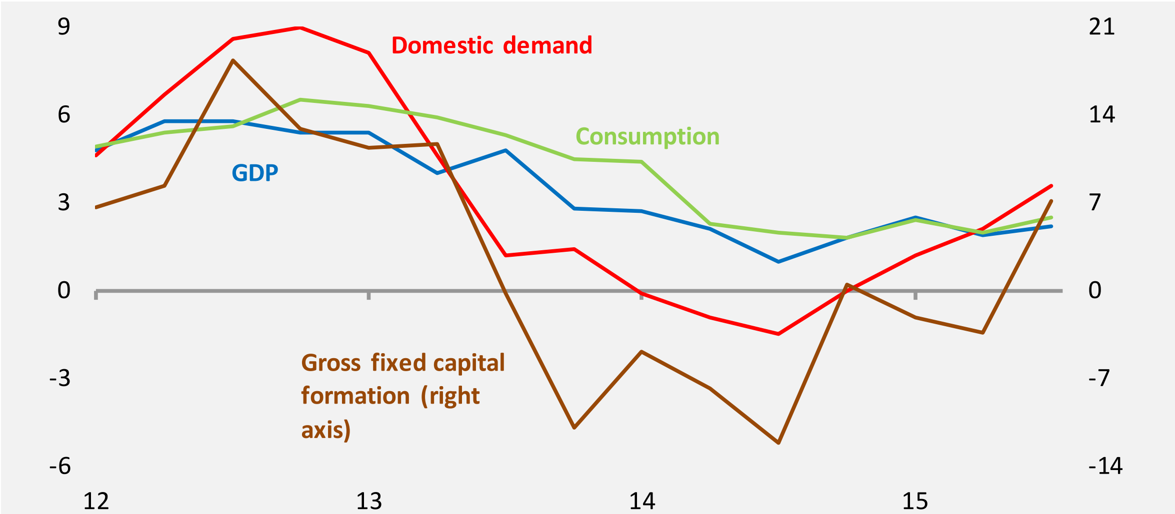
(2) For nominal wages, average ULC and IREM were used. Spliced series using monthly variation in February 2010.

Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure 3

GDP, domestic demand and components

(annual change, percent)



Source: Central Bank of Chile.

Table 1

Domestic scenario

(annual change, percent)

	2013	2014	2015 (f) Jun.15 MP Report	Sep.15 MP Report	Dec.15 MP Report	2016 (f) Sep.15 MP Report	2016 (f) Dec.15 MP Report
GDP	4.2	1.9	2,25-3,25	2,0-2,5	2.1	2,5-3,5	2,0-3,0
Domestic demand	3.7	-0.6	2.6	2.0	2.3	3.1	2.6
Domestic demand (w/o inventory change)	4.6	0.5	2.2	1.4	2.0	3.0	2.5
Gross fixed capital formation	2.1	-6.1	0.7	-1.2	0.7	1.9	1.7
Total consumption	5.5	2.5	2.7	2.1	2.4	3.3	2.7
Goods and services exports	3.4	0.7	1.3	-1.7	-1.7	1.2	1.0
Goods and services imports	1.7	-7.0	1.1	-2.3	-1.4	2.2	1.6
Current account (% of GDP)	-3.7	-1.2	-0.4	-0.7	-1.7	-1.5	-2.6
Gross national savings (% of GDP)	20.6	20.3	21.0	20.8	20.0	20.0	19.1
Nominal gross fixed capital formation (% of GDP)	23.8	22.0	21.6	21.5	22.0	21.5	21.9

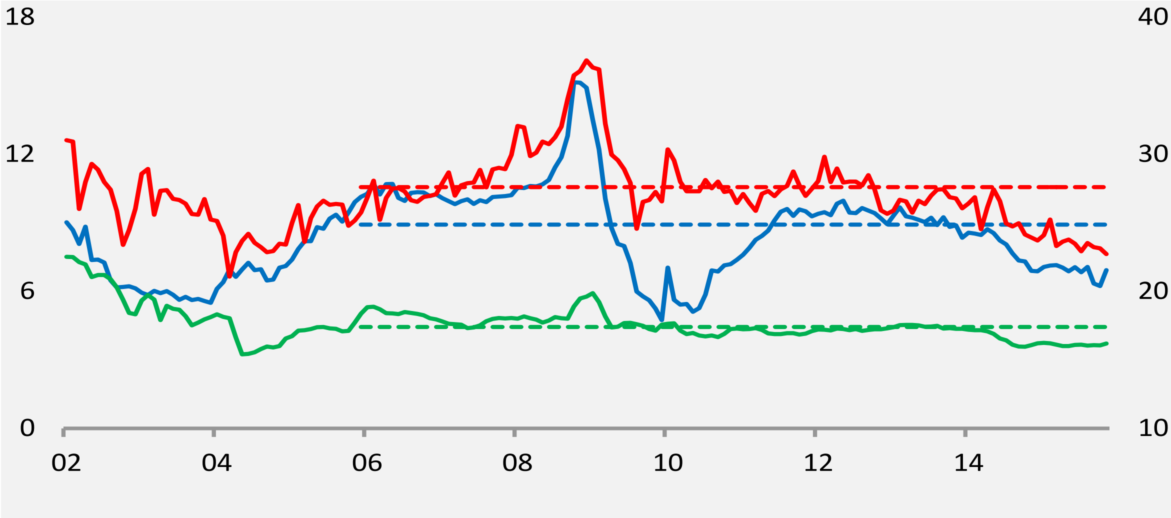
(f) Forecast.

Source: Central Bank of Chile.

Figure 4

Lending interest rates (1) (2)

(percent)



(1) Weighted average rates for all operations performed each month.

(2) Dashed horizontal lines show ten-year average for each series.

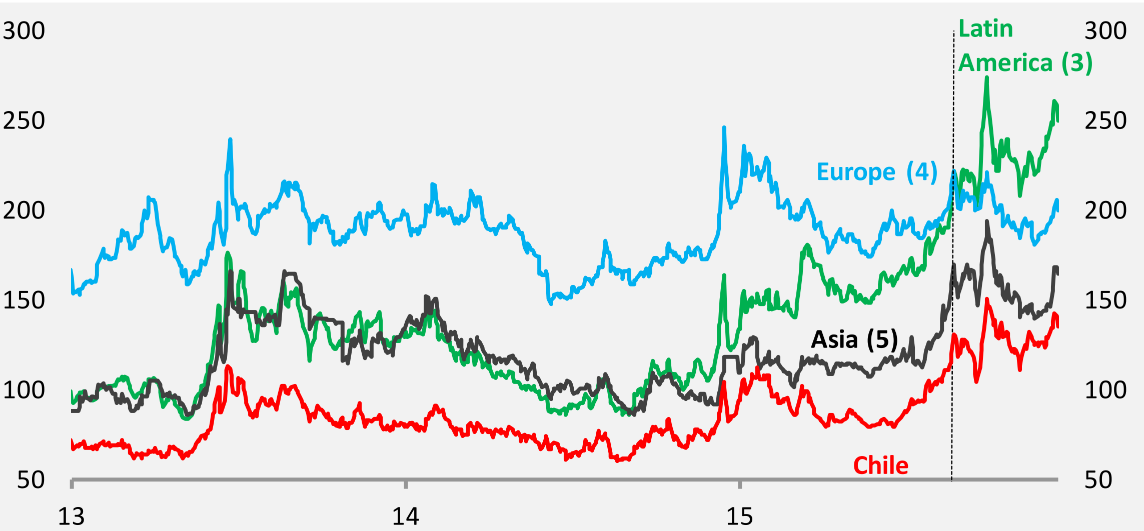
(3) Interest rates on credits in UFs.

Source: Central Bank of Chile based on SBIF data.

Figure 5

Sovereign risk premiums in emerging economies (1) (2)

(basis points)



(1) The dotted vertical line marks the statistical cutoff date for the September 2015 MP Report.

(2) Measured by 5-year CDS premiums. Simple average of countries in each region. (3) Includes Brazil, Colombia, Mexico, Panama and Peru. (4) Includes Bulgaria, Croatia, the Czech Republic, Hungary and Turkey. (5) Includes China, Indonesia, Malaysia, the Philippines and Thailand.

Source: Bloomberg.

Table 2

International baseline scenario assumptions

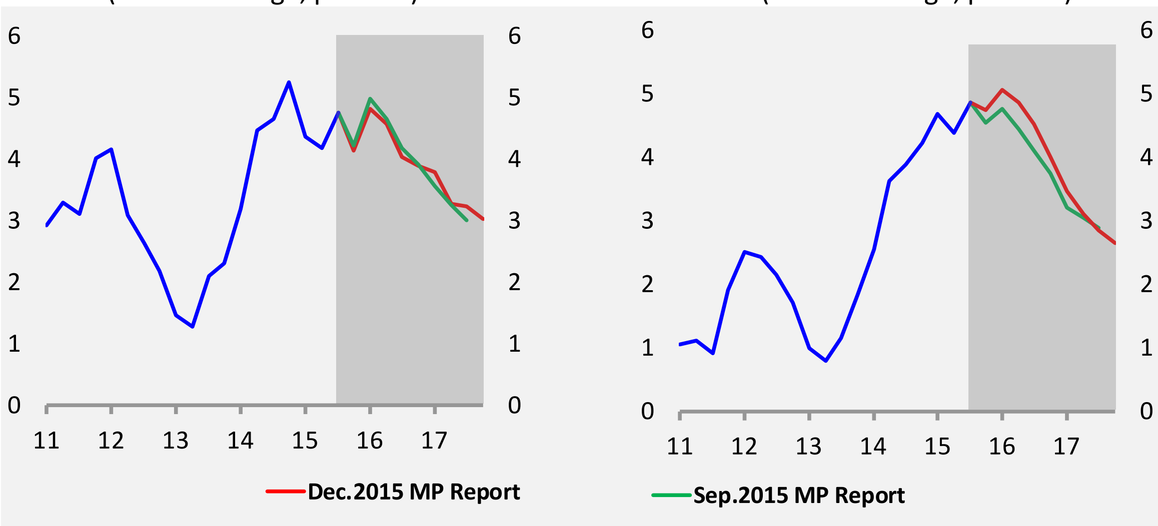
	2014	2015 (f) Jun.15 MP Report	Sep.15 MP Report	Dec.15 MP Report	2016 (f) Jun.15 MP Report	Sep.15 MP Report	Dec.15 MP Report	2017 (f) Sep.15 MP Report	Dec.15 MP Report
Growth				(annual change, percent)					
Trading partners' GDP	3.4	3.3	3.1	3.0	3.7	3.4	3.2	3.4	3.3
World GDP at PPP	3.4	3.4	3.2	3.1	3.7	3.5	3.4	3.5	3.5
United States	2.4	2.5	2.4	2.4	2.9	2.8	2.6	2.8	2.8
Eurozone	0.9	1.5	1.5	1.5	2.0	1.9	1.7	1.9	1.8
Japan	-0.1	1.0	1.0	0.6	1.4	1.4	1.2	0.5	0.5
China	7.3	6.9	6.7	6.9	6.5	6.4	6.4	6.1	6.1
India	7.3	7.5	7.5	7.5	7.8	7.8	7.8	7.5	7.5
Rest of Asia (Excl. Japan, China and India)	4.0	4.2	3.7	3.4	4.5	4.0	3.7	4.2	4.0
Latin America (excl. Chile)	1.0	0.2	-0.1	-0.6	1.8	1.0	0.4	1.4	1.5
				(levels)					
LME copper price (US$cent/lb)	311	280	255	249	290	245	220	250	230
Oil price (Brent y WTI avg) (US$/barrel)	96	60	52	51	67	53	44	58	50
				(annual change, percent)					
Terms of trade	-1.4	1.3	-3.0	-4.2	-0.2	-1.0	-3.8	-0.4	1.7

(f) Forecast.

Sources: Central Bank of Chile, based on a sample of investment banks, Bloomberg, Consensus Forecasts, the IMF and statistics bureaus of respective countries.

Figure 6

CPI inflation (*) (annual change, percent) **CPIEFE inflation (*)** (annual change, percent)



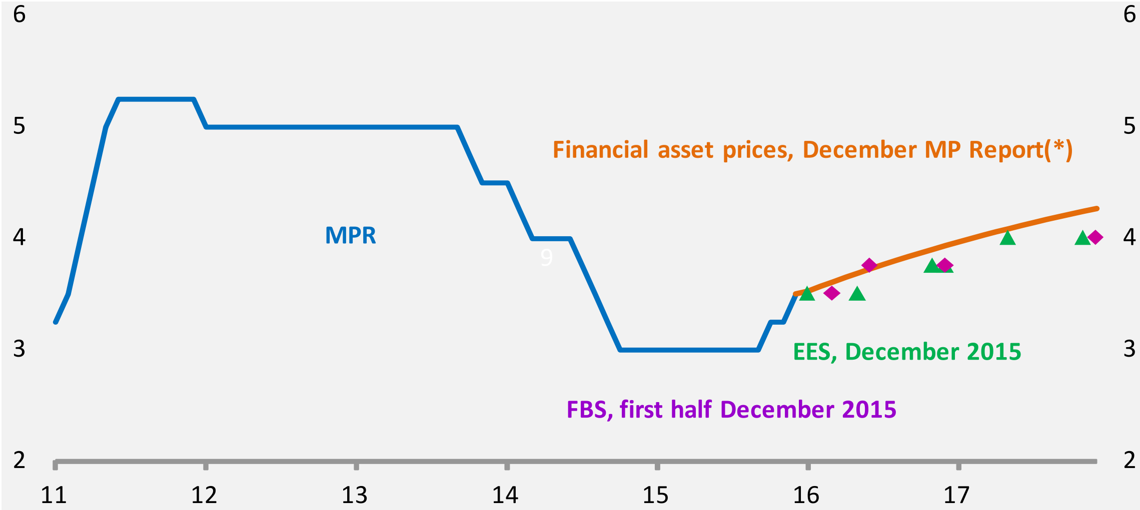
(*) Gray area shows forecast, as from the fourth quarter of 2015.

Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure 7

MPR and expectations

(percent)

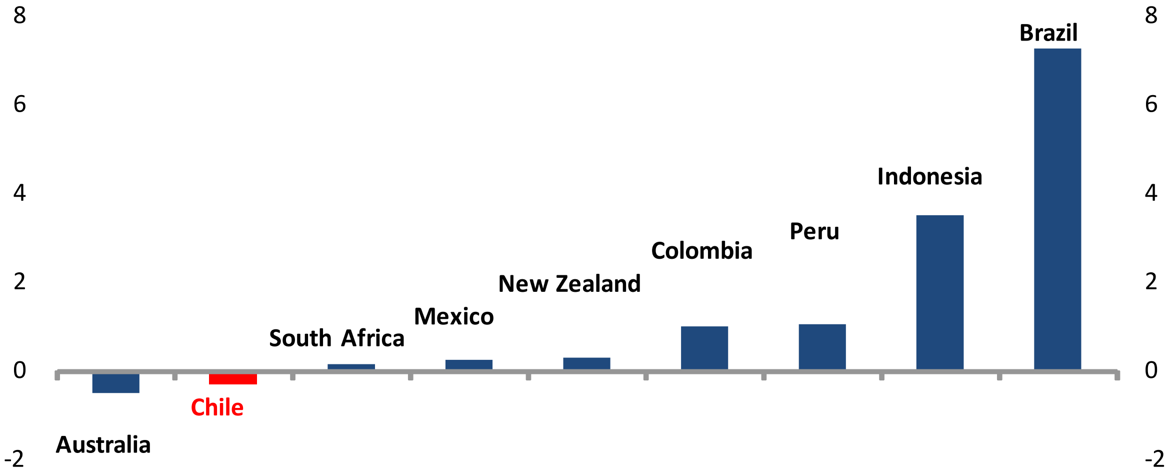


(*) Built using swap contract interest rates up to 10 years.
Source: Central Bank of Chile.

Figure8

Real MPR (*)

(9ercent)

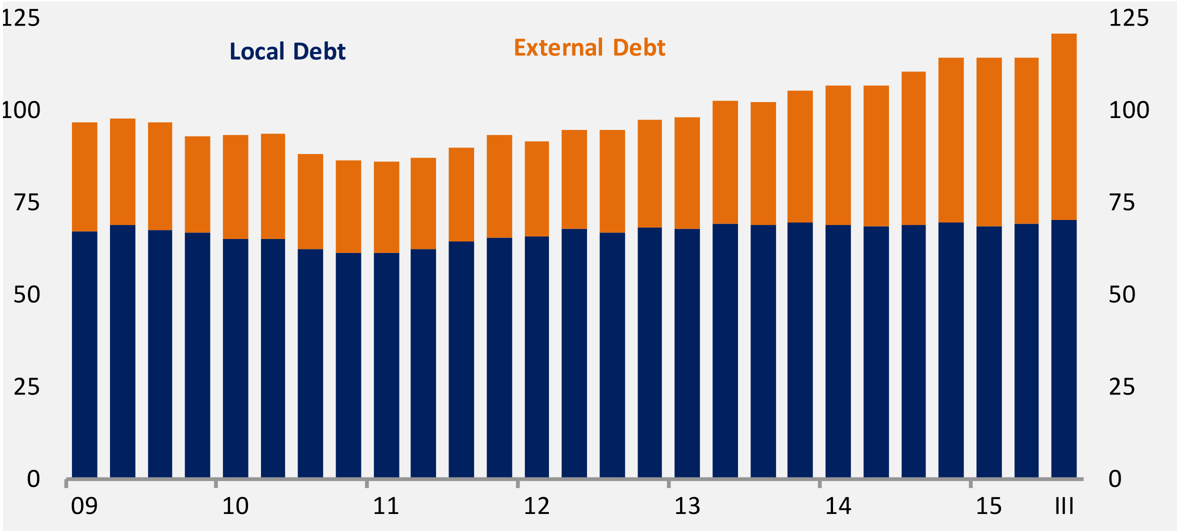


(*) Calculated as the current MPR minus inflation expected at December 2016.
Sources: Central Bank of Chile and central banks of respective countries.

Figure 9

Total corporate debt (*)

(percent of GDP)



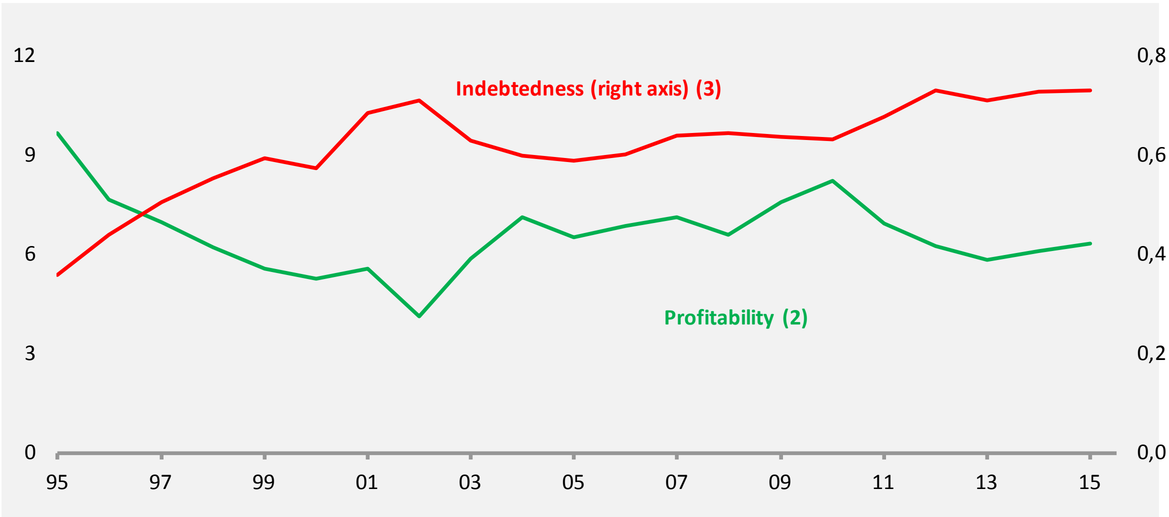
(*) Excludes banks. Based on firm-level administrative information.

Source: Central Bank of Chile based on Achef, SBIF and SVS data.

Figure 10

Corporate financial indicators (1)

(percent; times)



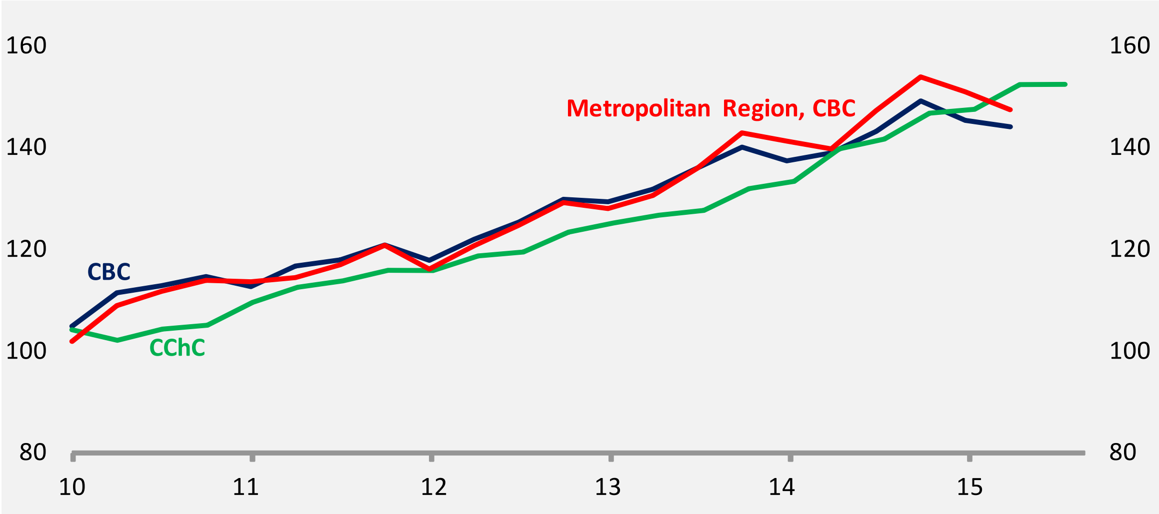
(1) Data at December of each year, except 2015 which uses information up to September.

(2) Accumulated profits in twelve months before financial expenses plus taxes over total assets.

(3) Debt to equity ratio.

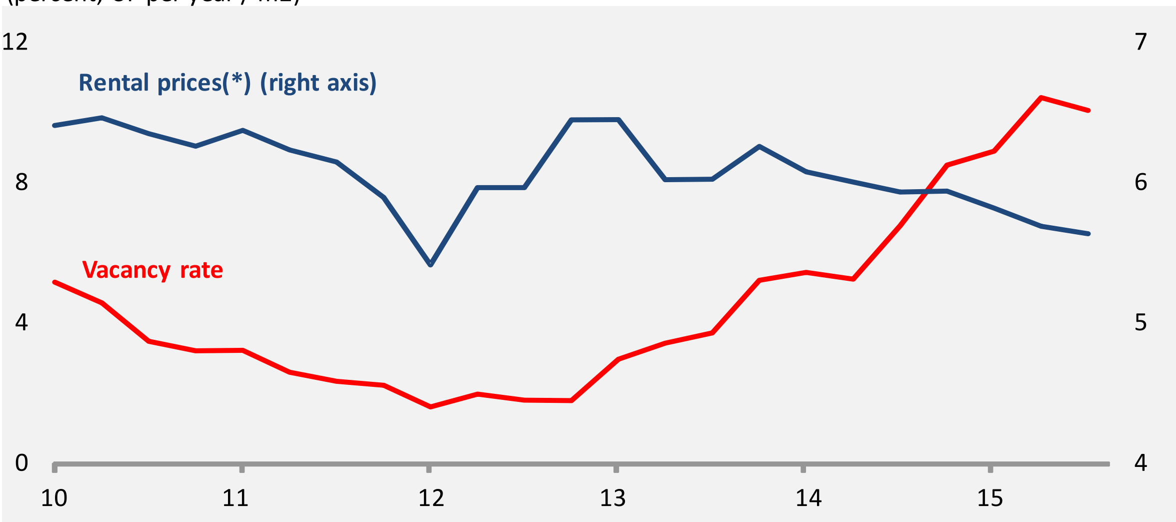
Source: Central Bank of Chile based on SVS data.

Figure 11
Housing price indicators (*)
(index, base 2008=100)



(*) CBC indicator calculated by the Central Bank of Chile using stratified methodology. CChC indicator calculated by the Chilean Chamber of Construction using hedonic methodology.
Sources: Central Bank of Chile and Chilean Chamber of Construction (CChC).

Figure 12
Vacancy rates and rental prices
(percent; UF per year / m2)

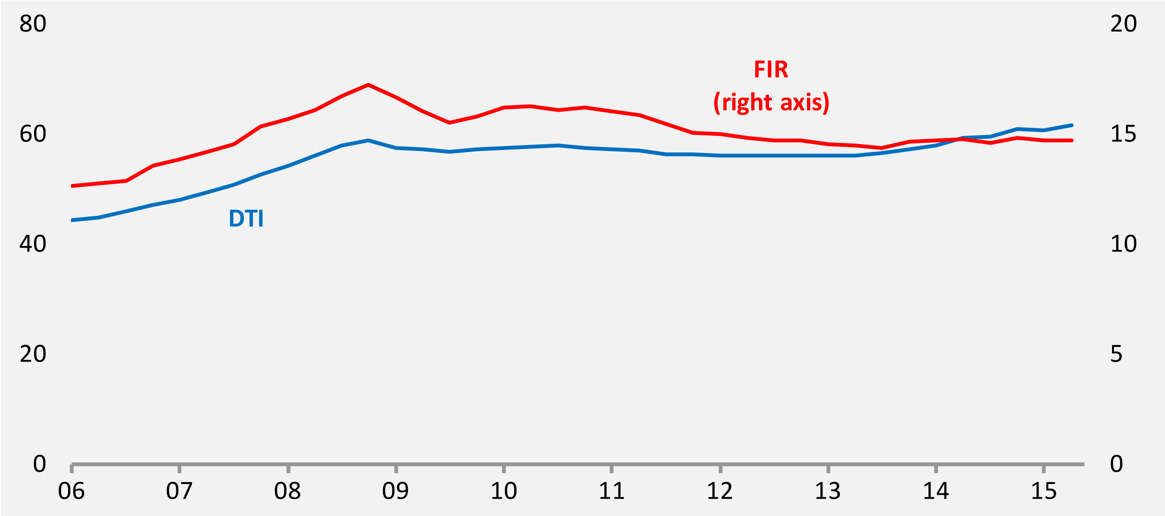


(*) Values for class A and class B, weighted by surface.
Source: CBRE.

Figure 13

Household indebtedness (DTI) and financial burden (FIR)

(percent of disposable income)

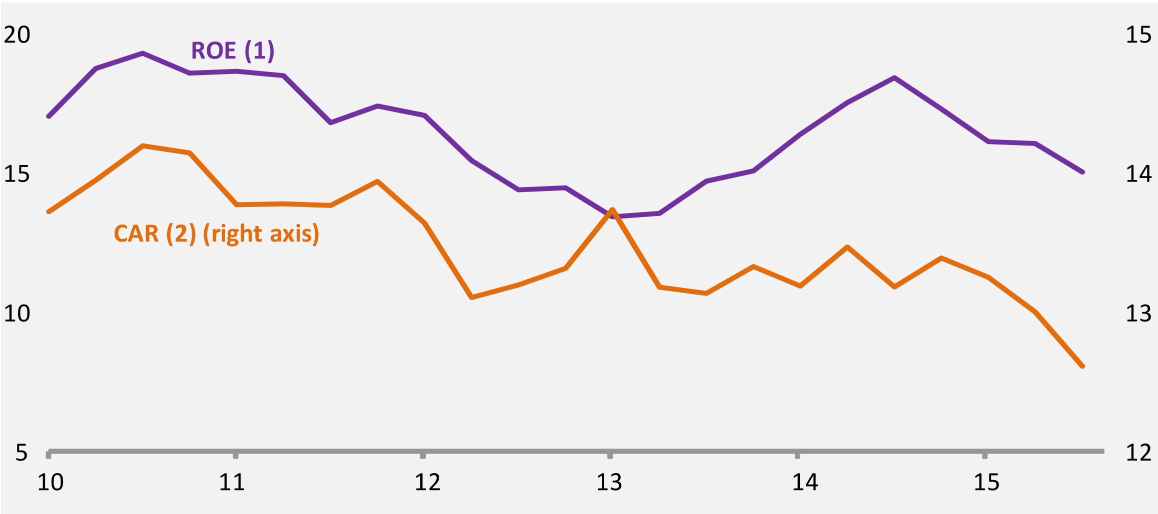


Source: Central Bank of Chile based on SBIF, SuSeSo and SVS data.

Figure 14

Return on equity (ROE) and solvency (CAR) of the banking system

(percent)



(1) Profit over basic capital.

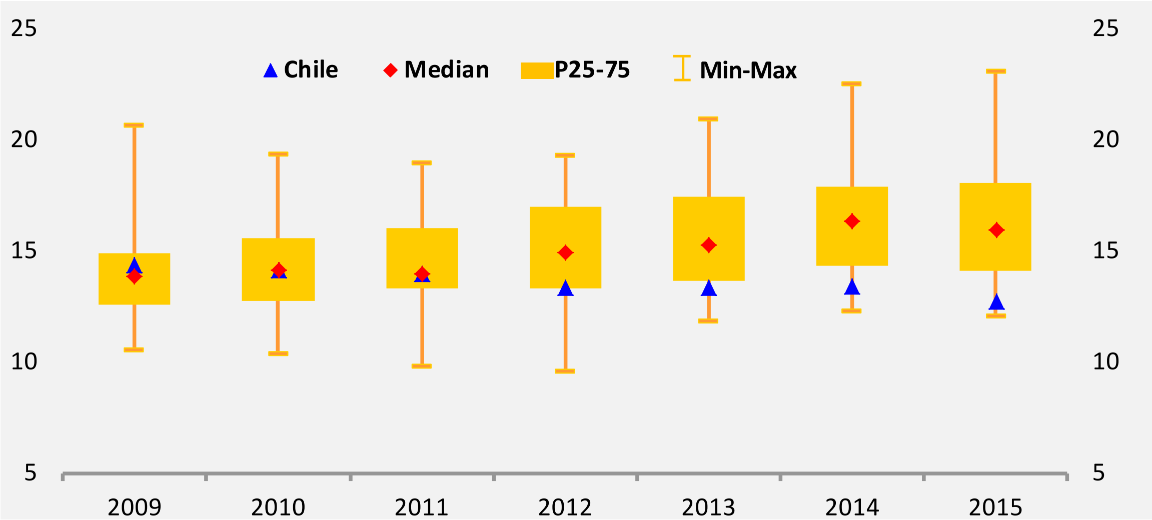
(2) Effective equity over risk-weighted assets.

Source: Central Bank of Chile based on SBIF data.

Figure 15

Cross-country CAR comparison (*)

(percent)



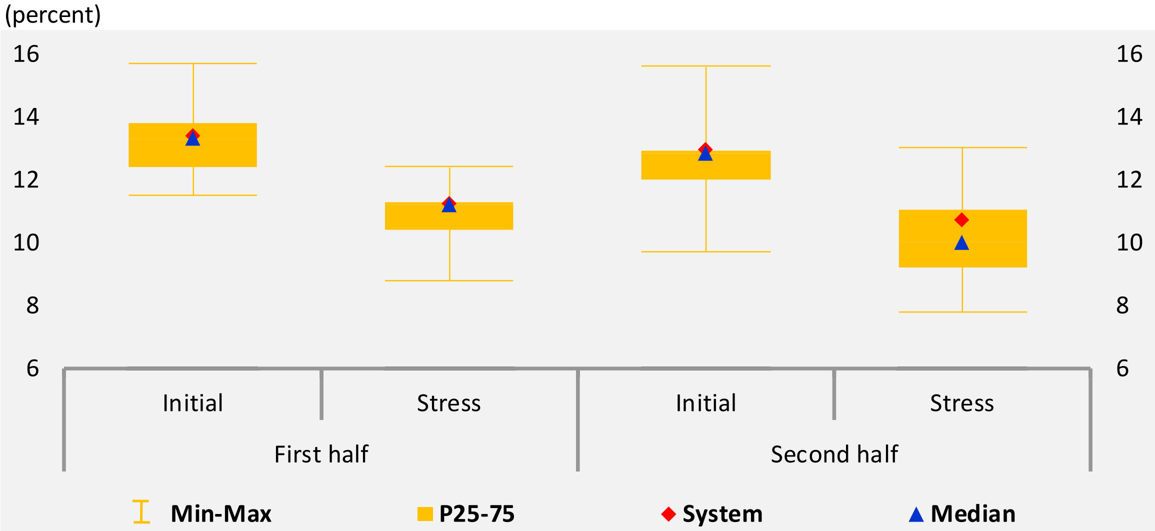
(*) Effective equity over risk-weighted assets.

Source: Central Bank of Chile based on SBIF and IMF data.

Figure 16

Impact of stress tests on CAR (1) (2) (3)

(percent)



(1) Figures are weighted by the basic capital of each institution.

(2) Estimates do not consider Treasury banking, foreign trade or consumption that has quit the system.

(3) Min = 1st percentile; Max = 90th percentile.

Source: Central Bank of Chile based on SBIF data.