



BCRP-CEMLA-ECB-FRBNY Conference on Financial Intermediation, Credit and Monetary Policy Policy Round Table

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Issues for discussion

- Risk of future synchronization of monetary policy normalization among major economies, and its effect on both financial intermediation and credit.
- Responses to the volatility caused by both major central banks' monetary policy normalization, and policy options in advanced and emerging economies.



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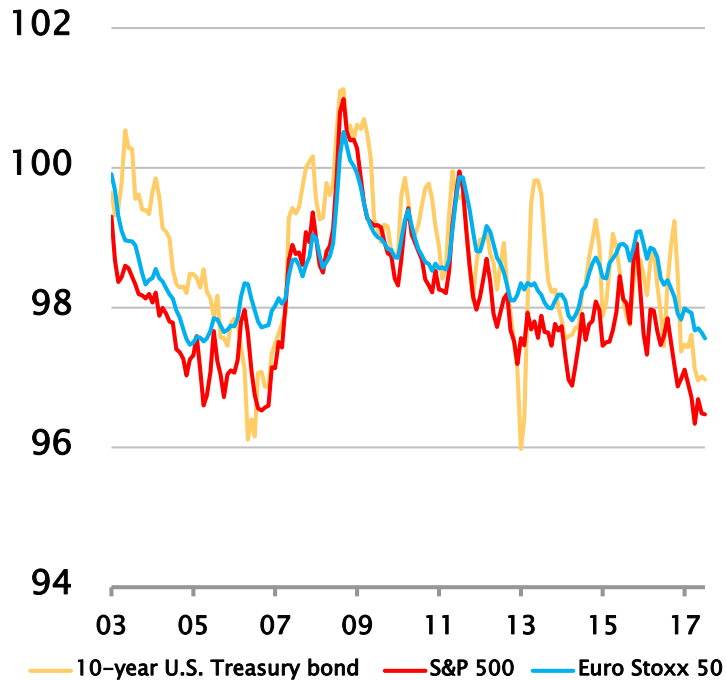
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Excess of liquidity, along with low levels of risk aversion, reduced external and local interest rates

Risk Aversion Measures (*)

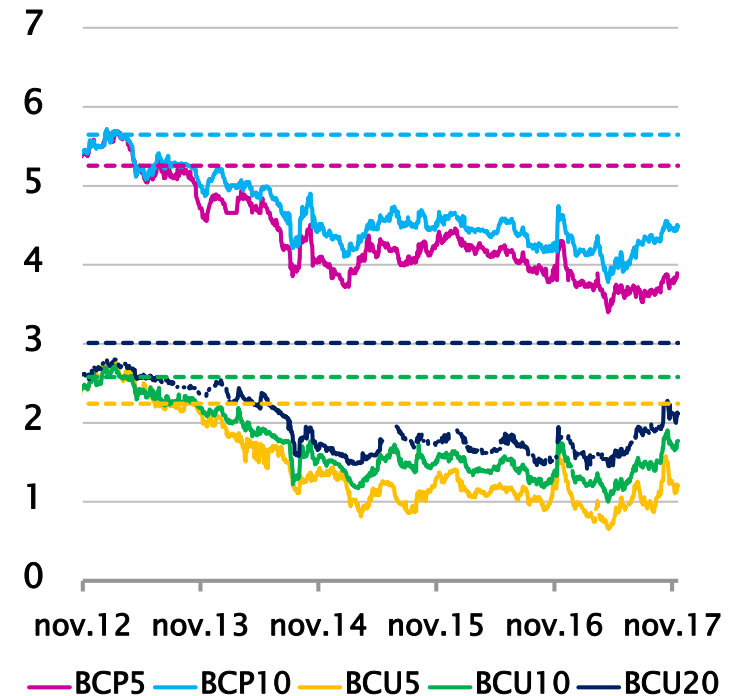
(index: Feb.03=100, 3-month moving average)



(*) For more details on methodology, see Barker et al. (2016).
Source: Central Bank of Chile, based on data from Bloomberg.

Long-Term Sovereign Bond Rates (*)

(percent)



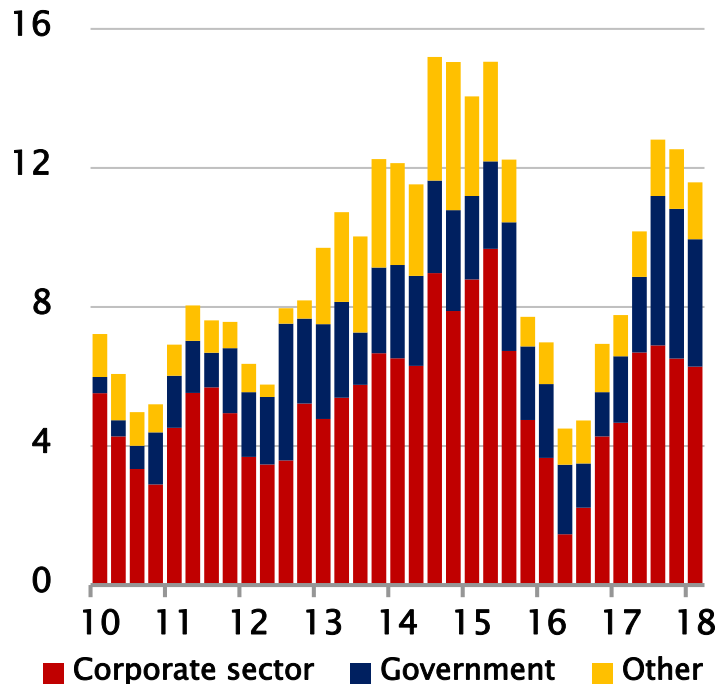
(*) Horizontal lines: 2004-2016 average of the respective series.
Source: Central Bank of Chile.



That low-cost environment (LCE) allows some local firms to refinance their debt into more favorable terms

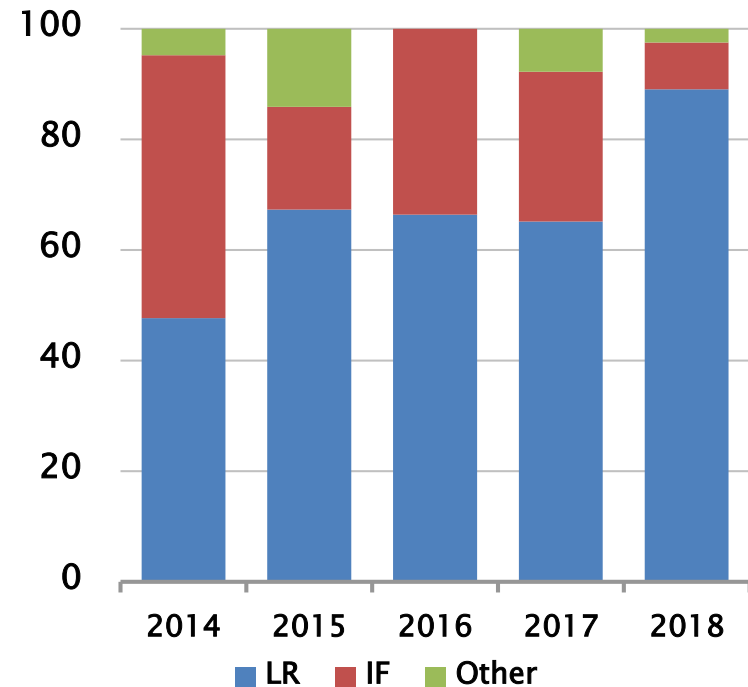
Gross Bond Issuance by Nonbank Firms (*)

(US\$ billion, 12-month moving sum)



Corporate Bond Issuance: Use of Resources (*)

(percent)



(*) Other includes local and overseas issues by firms in the financial services and mining sectors that report to the FMC, as well as issues by nonreporting firms.

Source: Central Bank of Chile, based on data from FMC.

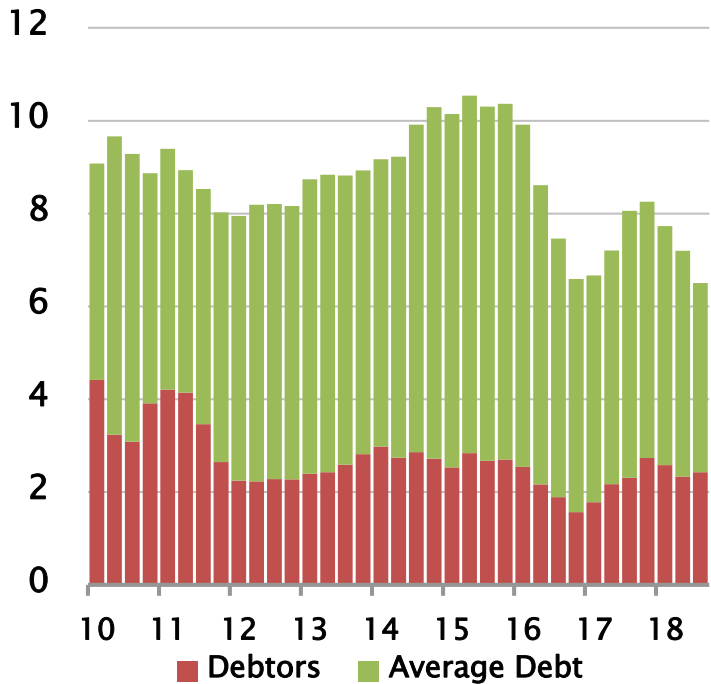
(*) Self-assessment reported by the FMC and in bond prospectuses. LR: Liability refinancing. IF: Investment financing.

Source: Central Bank of Chile, based on data from BCS.

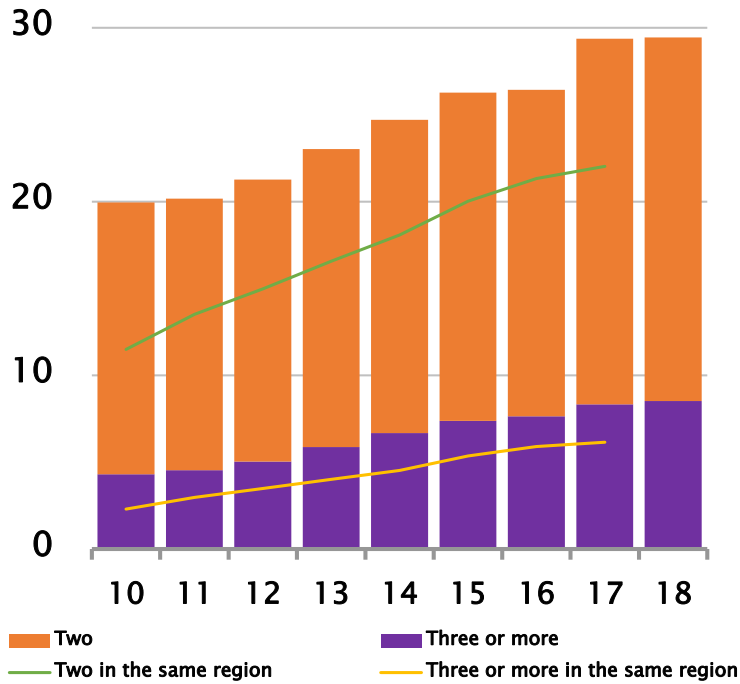


Also, it makes the housing market attractive to leveraged investors

Bank Mortgage Debt (*)
(real anual change, percent)



Number of Mortgage loans and Mortgage Transactions per Debtor (*)
(percent of total)



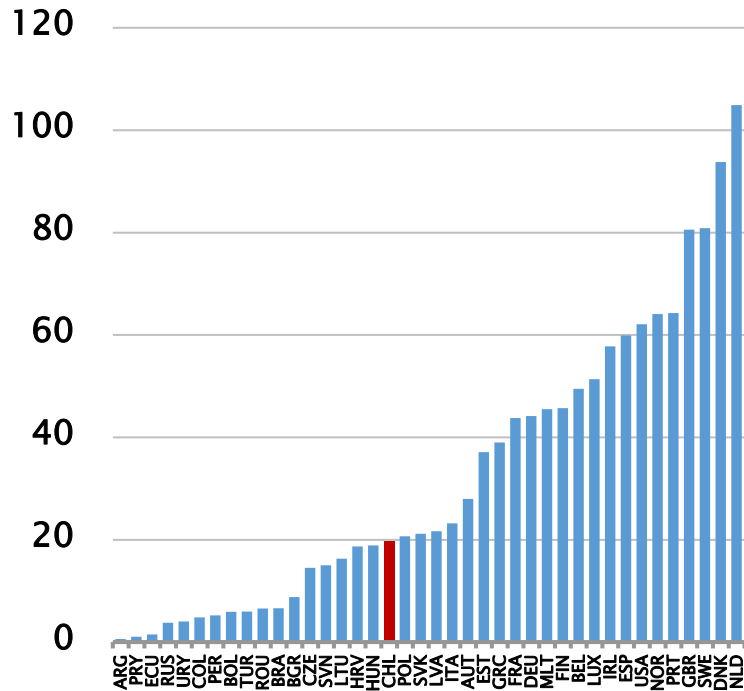
(*) Preliminary data for third quarter 2018.
Source: Central Bank of Chile, based on data from the SBIF.

(*) Bars graph data on the number of bank mortgage loans weighted by debt (SBIF). Lines graph the number of mortgage transactions in a given region weighted by debt (IRS).

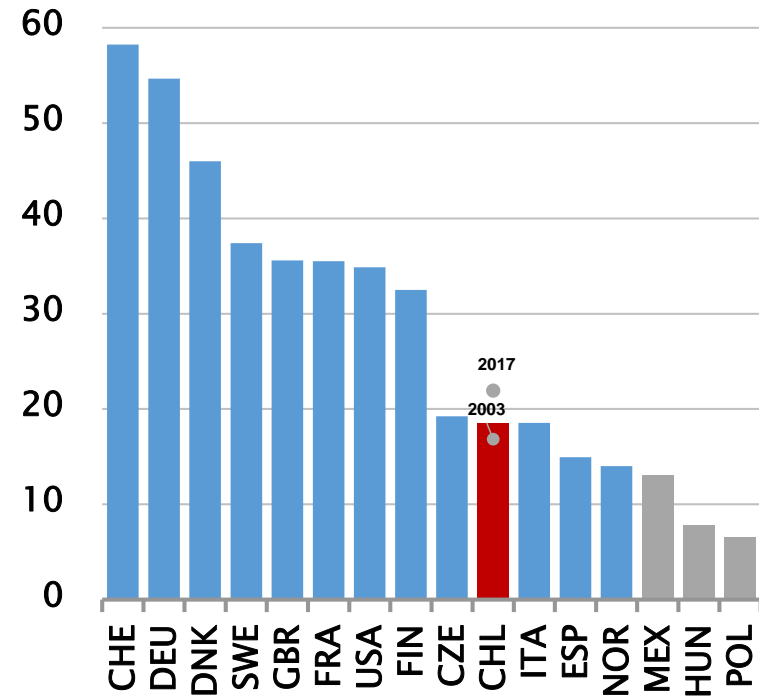
Source: Central Bank of Chile, based on data from SBIF and IRS.

But, there is room for development in the rental market

Mortgage Loans as a Percent of GDP
(year-end 2013)



OECD Rental Rates (*)
(percent)



Source: XXIX Meeting of South American Central Bank Governors, McKinsey Global Institute, and European Mortgage Federation.

(*) For Chile, the red bar corresponds to the 2013 CASEN Survey; the dots, the 2003 and 2017 CASEN Surveys, as indicated.

Source: Central Bank of Chile, based on data from CASEN Survey and OECD.



A threat to financial stability is a sudden adjustment of external financing conditions

EXTERNAL THREATS TO FINANCIAL STABILITY

Faster monetary policy adjustments in the advanced economies, combined with changes in investors' risk appetite, could have a negative impact on different asset prices

MAIN THREATS TO FINANCIAL STABILITY

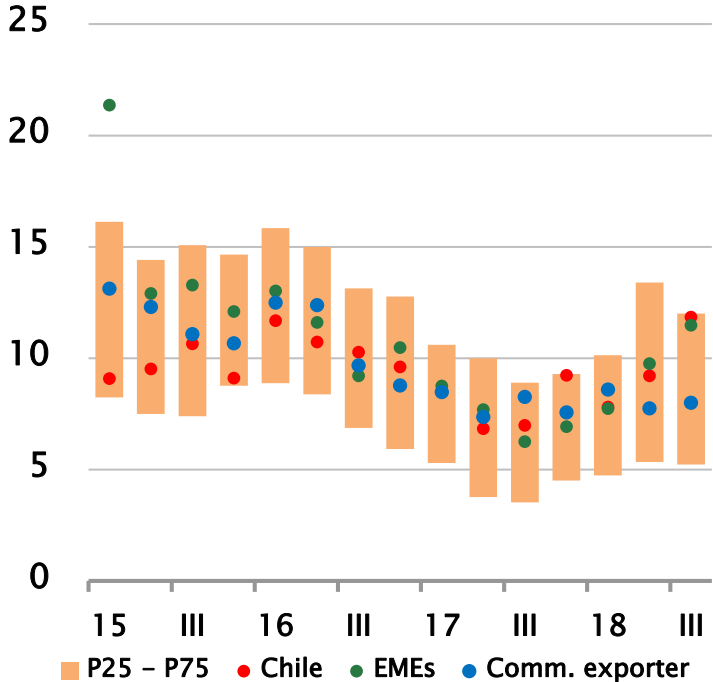
Sharp hikes in external interest rates continue to represent an important risk.



In that scenario free-floating FX works as a buffer against the impact on long-term interest rates...

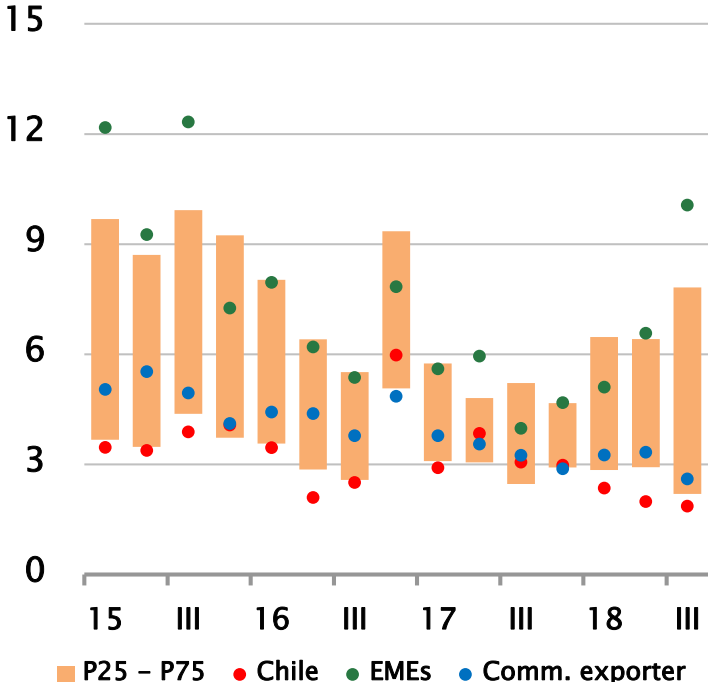
Annualized Exchange Rate Volatility (*)

(percent)



Volatility of Emerging 10-year Sovereign Rates (*)

(basis points)



(*) EMEs include Chile, Brazil, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Poland, Russia and Turkey. Commodity exporters include Australia, Canada, Norway and New Zealand.

Sources: Central Bank of Chile and Bloomberg.

(*) Calculated as the standard deviation of the daily change in rates. Ems include Chile, Brazil, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Poland, Russia and Turkey. Commodity exporters include Australia, Canada, Norway and New Zealand.

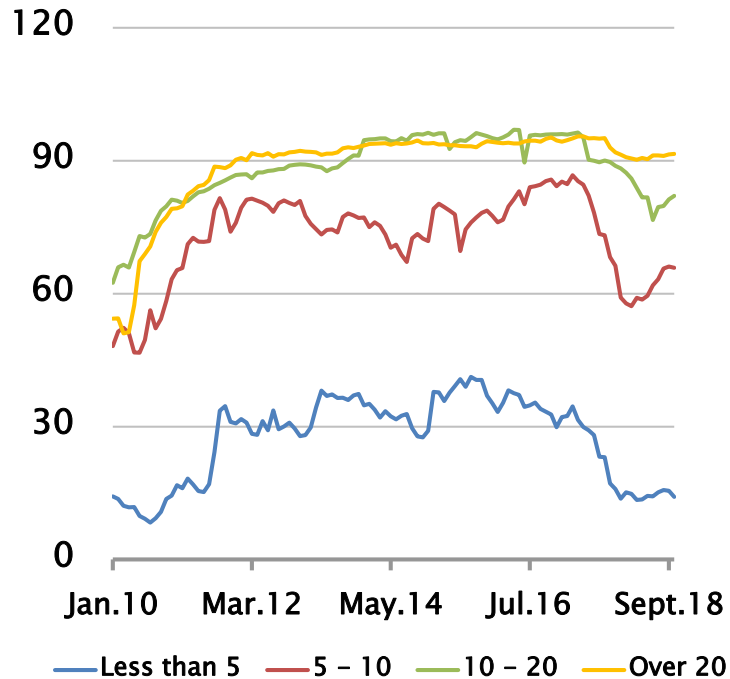
Source: Central Bank of Chile and Bloomberg.



... Pension Funds contribute to that stability as well

Share of PFs in the Yield Curve (*)

(percent)



Muestra 2010m1 - 2017m12

	(1)	(2)	(3)	(4)
$s_{i,t}$	-0.156 (0.053)	-0.181 (0.053)	-0.157 (0.038)	-0.124 (0.037)
$\sigma_{i,t}^e$	0.088 (0.004)	0.085 (0.004)	0.023 (0.003)	0.021 (0.003)
σ_t^{r*}		0.430 (0.085)	0.314 (0.062)	0.273 (0.061)
$\sigma_{i,t}^\gamma$			0.430 (0.013)	0.439 (0.012)
Obs.	1,219	1,219	1,185	1,185
δ_t	No	No	No	No
R^2	0.401	0.412	0.713	0.735

(*) Share based on residual maturity, measured in years, of domestic sovereign bonds.

Source: Central Bank of Chile and CSD

Includes Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Poland, Russia, Turkey and Ukraine.



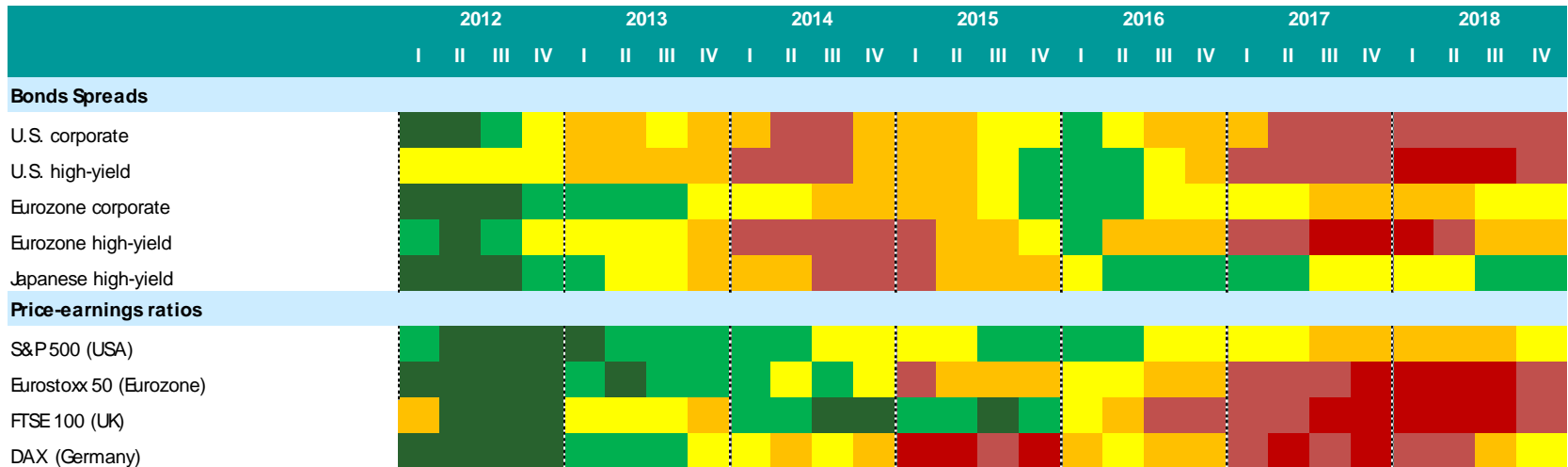
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Do nothing, but communicate potential vulnerabilities

Heat Map of Vulnerabilities Arising from Valuation (*)



(*) Green, yellows/orange, and red indicate low, medium and high risk, respectively. Low spreads and high price-earnings ratios indicate high risk. Risk categories are based on sextiles of the distribution for each variable. Earnings per share was cyclically adjusted taking the ten-year moving average.

Source: Central Bank of Chile, based on data from Bloomberg.



Do nothing, but communicate potential vulnerabilities

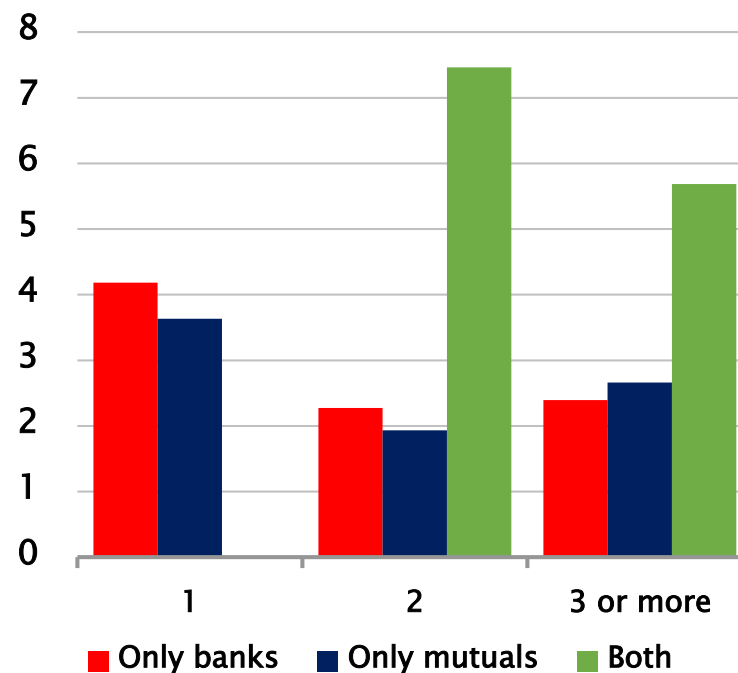
Monthly debt-to-income (DTI) ratio and Monthly Debt Service Ratio (DSR) (*)

(left: times; right: percent; household with debt in each category)

Bracket	Median DTI		Median DSR	
	2014	2017	2014	2017
1	1,3	2,2*	23,3	27,4
2	1,8	4,1*	18,6	22,8
3	3,0	7,5*	17,4	23,0*
Total	1,6	3,5*	20,1	24,7*

Mortgage default rate by type and number of institutions (*)

(percent of debtors in each group, third quarter 2017)



(*) An asterisk indicates a statistically significant change between 2014 and 2017 at the 5% confidence level.

Source: Central Bank of Chile.

(*) 90-to 180-day default rate. The “only banks” group includes 95.2% of debtors; only mutual, 4.4%; and both 0.3%.

Source: Central Bank of Chile, based on data from SBIF and FMC.



Do nothing, but communicate potential vulnerabilities

Table 2: FSR Warnings

First Half 2012
(June 18, 2012)

“Aggregate housing prices move in tandem with the economy’s level of interest rates and income. At some districts in the central and eastern area of the Santiago Metropolitan Region prices are outgrowing their historic trends, possibly due to constraints in the land available. It is important to keep in mind that the materialization of the risk scenario described in this Report could lead to a breakdown in current price trends. The potential implications of this are price adjustments influencing the profits of executed projects and, additionally, the collaterals backing mortgage loans”.

Second Half 2012
(December 18, 2012)

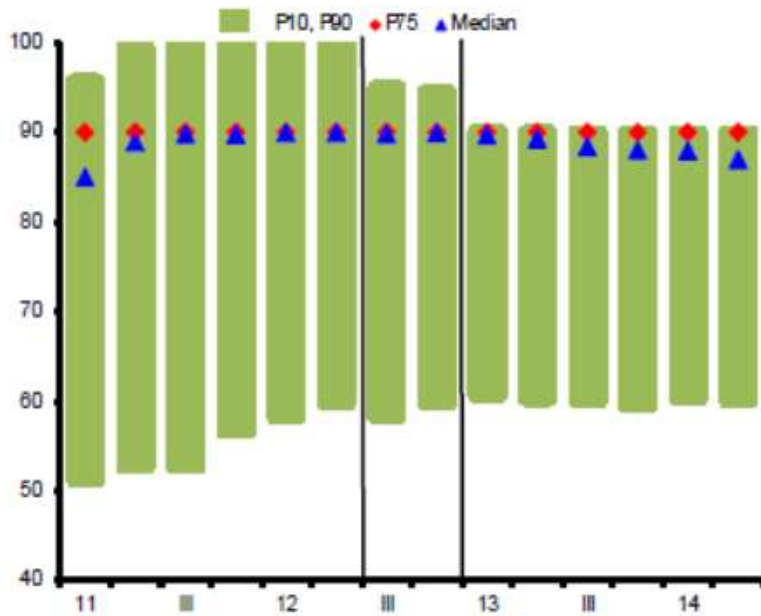
“The Report highlights that aggregate housing prices indices have maintained their pace of expansion, in line with the dynamism of the economy, and that in many districts prices are rising above historic trends. These increases occur in a context of high growth in housing demand and a significant expansion of activity in this sector. [...] This, together with somewhat less stringent lending standards for mortgage credit. These developments could lead to financial vulnerabilities in the real estate and construction industry, or in those households searching for a home”.

Source: Central Bank of Chile.



It could affect market behavior

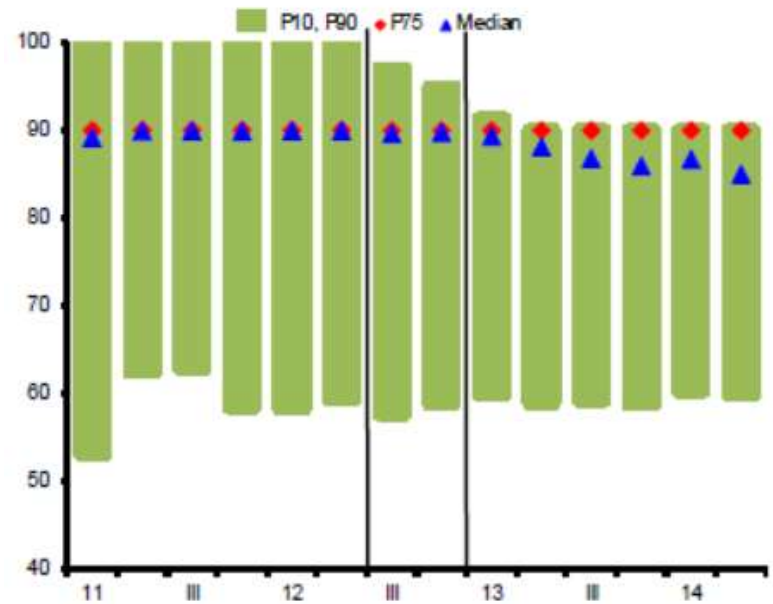
LTV Full Sample (*)
(percent)



(*) Vertical lines indicate warnings dates.

Source: Central Bank of Chile

LTV without BE (*)
(percent)



(*) Vertical lines indicate warnings dates.

Source: Central Bank of Chile





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