

# External and internal scenarios for the Chilean economy



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# Agenda

- 1 Global outlook and external impulse
- 2 Transmission channels to the Chilean economy
- 3 How would Chile face new external challenges?
- 4 The domestic economy at the start of 2019



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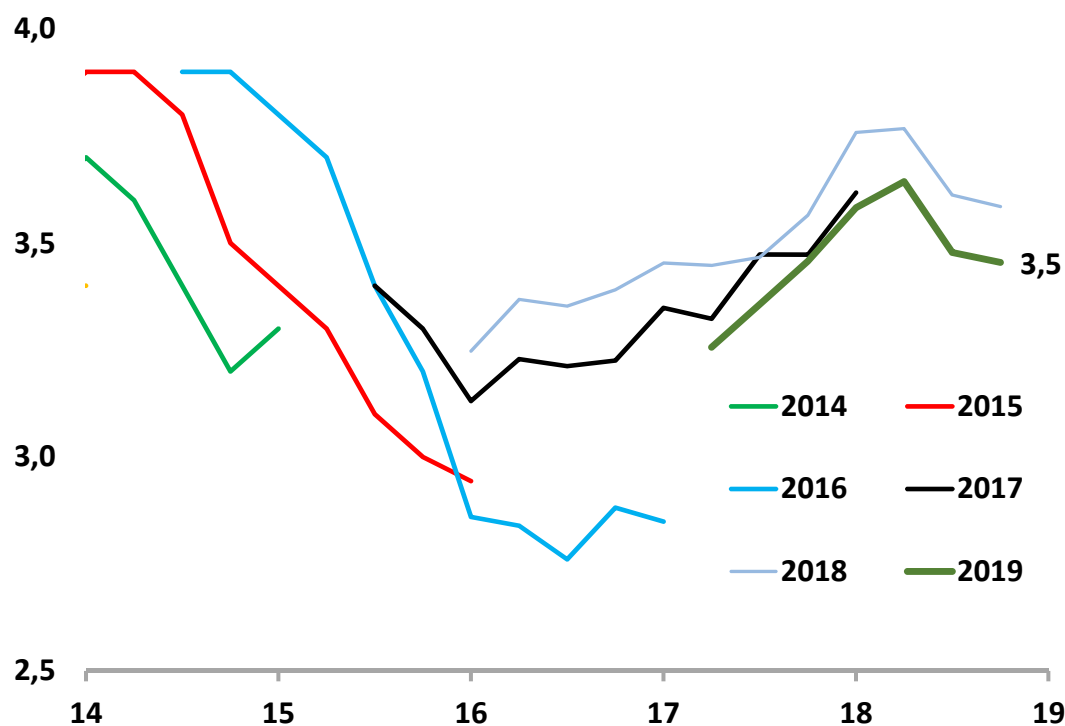
# Global outlook and external impulse

## Global outlook

Growth prospects for the advanced economies are correcting on the downside.  
Soft indicators are adjusting faster

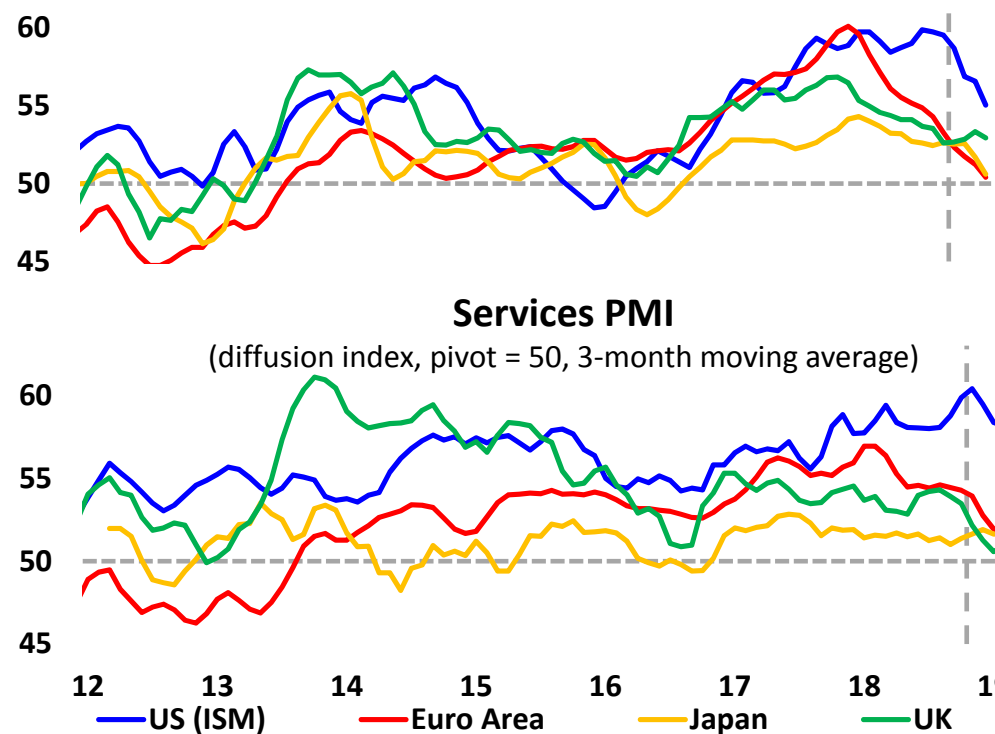
### Change in trading partners' forecasts

(annual change, percentage)



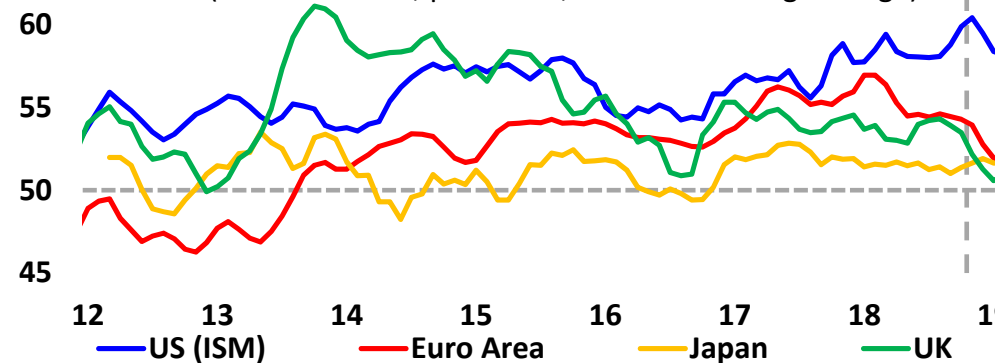
### Manufacturing PMI

(diffusion index, pivot = 50, 3-month moving average)



### Services PMI

(diffusion index, pivot = 50, 3-month moving average)

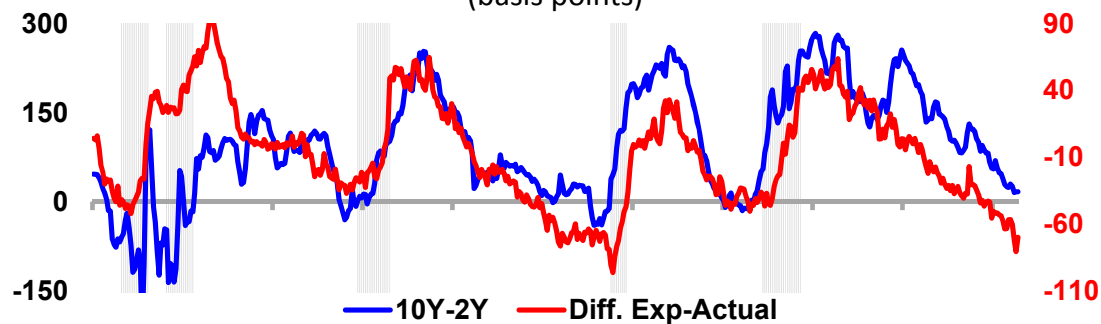


## US economy

In the case of the US, the probability of a hard landing has increased

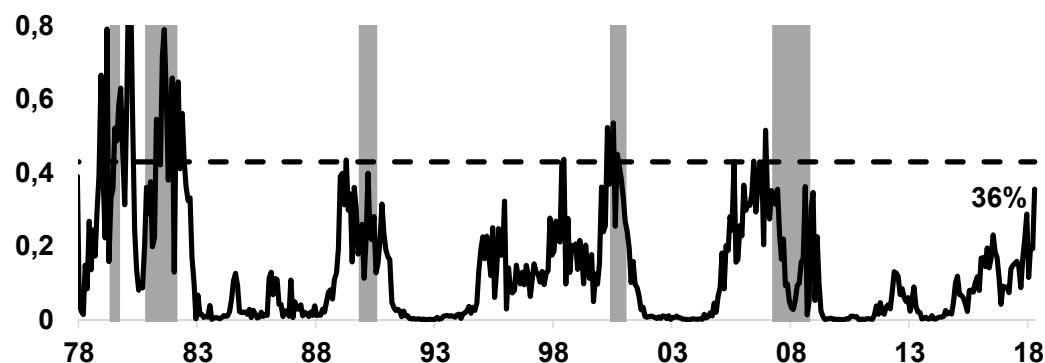
Yield curve and consumer expectations differential

(basis points)



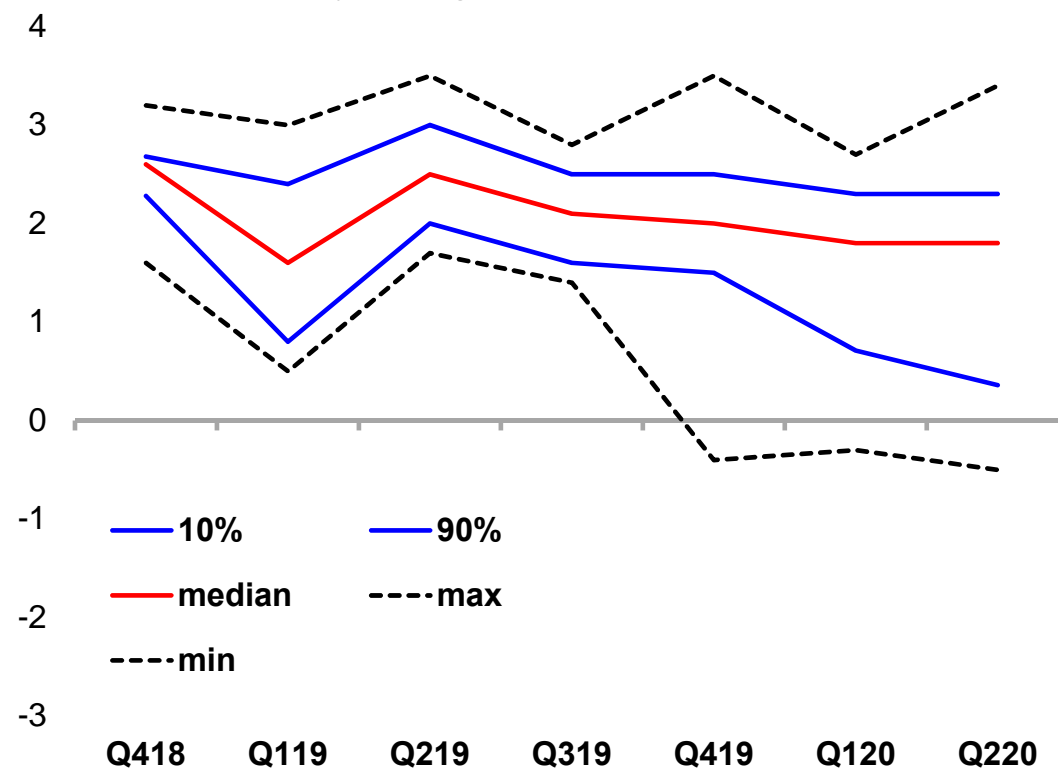
Probability of a recession in the US

(yield-curve-based Probit model)



Analysts' forecasts

(percentage, Thomson Reuters)



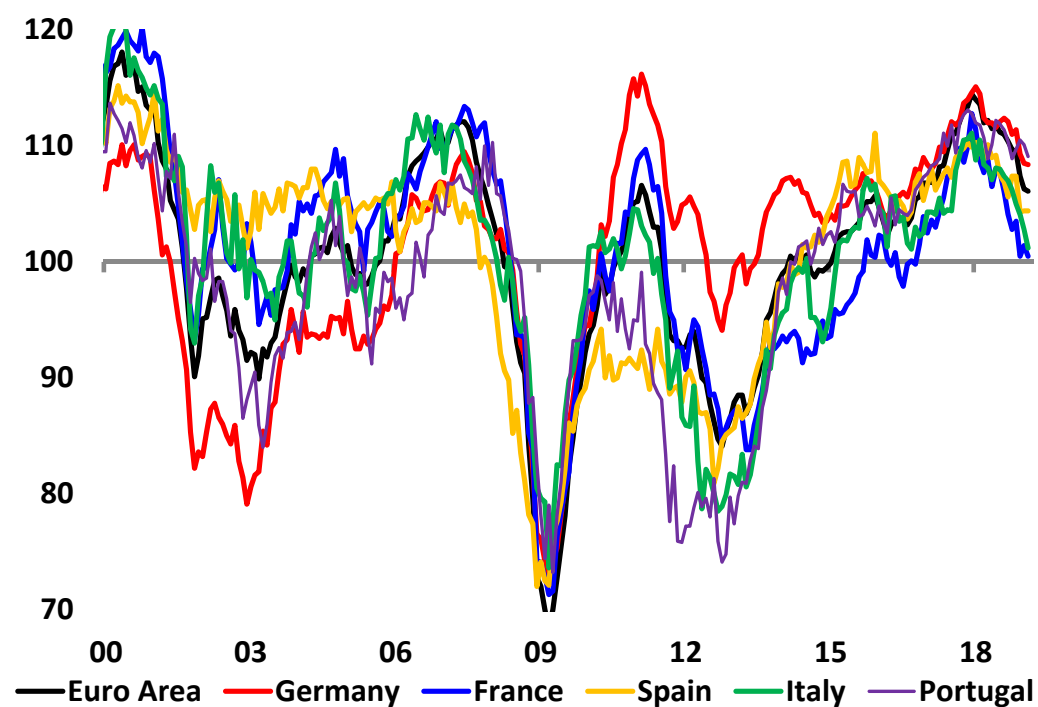


## Activity in the Euro Zone

Activity has deteriorated in the Euro Zone. Expectations are also corrected down

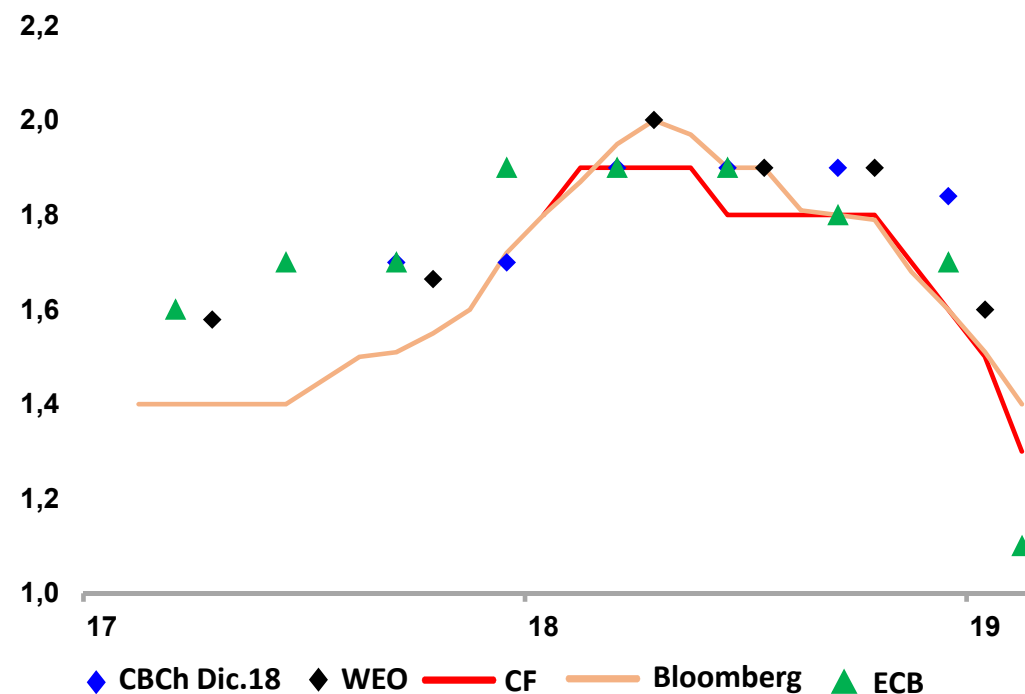
### Economic sentiment

(diffusion index, pivot=100)



### 2019 Growth forecasts

(annual variation, percentage)



## Developments in China

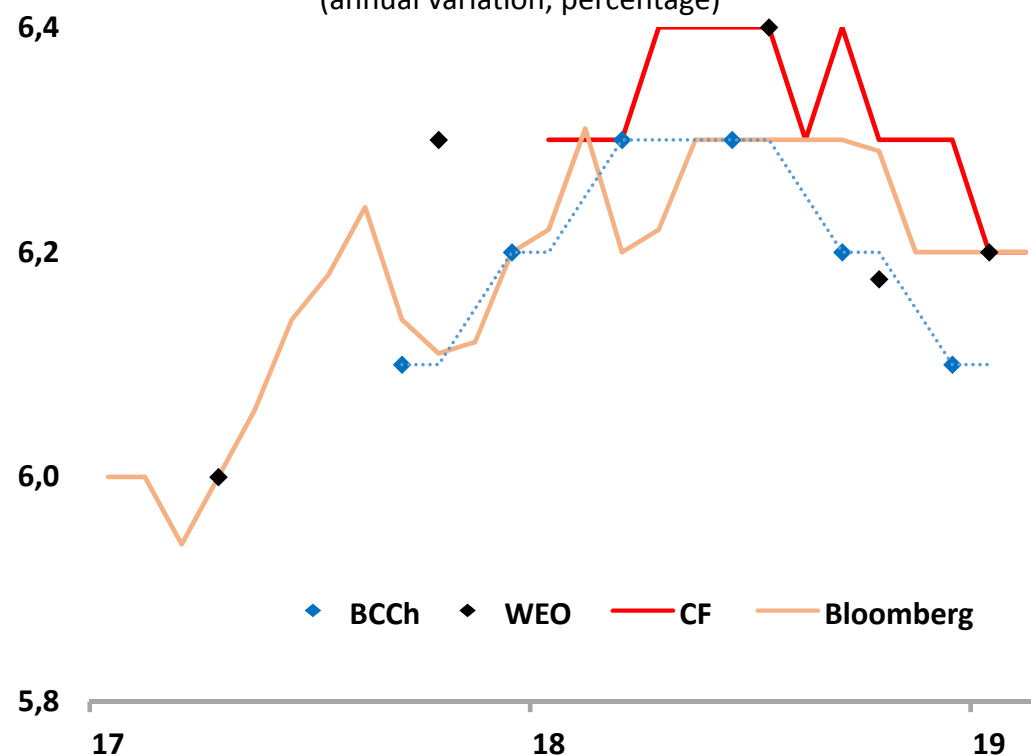
Short-term data generates some concern; challenges remain in the longer run

### Main economic indicators

	2017	2018	3t18	4t18	dec	jan	feb	m/m
GDP Growth (y/y)	6,8	6,6	6,5	6,4	--	--		--
Man. PMI (Caixin)	50,9	50,7	50,5	50,0	49,7	48,3	49,9	▲
Ser PMI (Caixin)	52,1	53,1	52,5	52,8	53,9	53,6	51,1	▼
Man. PMI (Official)	51,6	50,9	51,1	49,9	49,4	49,5	49,2	▼
Ser PMI (Official)	54,6	54,4	54,4	53,7	53,8	54,7	54,3	▼
Li Keqiang (y/y)	10,1	9,2	9,3	8,8	9,3			≈
Industrial production (y/y)	6,6	6,1	6,0	5,7	5,7	5,3 (5,6)		▼
Retail Sales (y/y)	10,4	9,0	9,0	8,3	8,2	8,2 (8,2)		≈
Fixed Asset investment (ytd, y/y)	8,1	6,2	5,4	5,8	5,9	6,1 (6,1)		▲
Exports (y/y)	8,1	11,2	11,7	4,6	-4,4	9,1	-20,7	▼
Imports (y/y)	16,8	16,6	20,7	5,2	-7,6	-1,5	-5,2	▼
IPC (y/y)	1,6	2,1	2,3	2,2	1,9	1,7	1,5	▼
Total Social Financing (RMB bn)	1700	1456	1334	1254	1554	4531	526	▼
New Loans (RMB bn)	1127	1347	1370	1009	1080	3230	886	▼

### 2019 GDP Growth forecast

(annual variation, percentage)

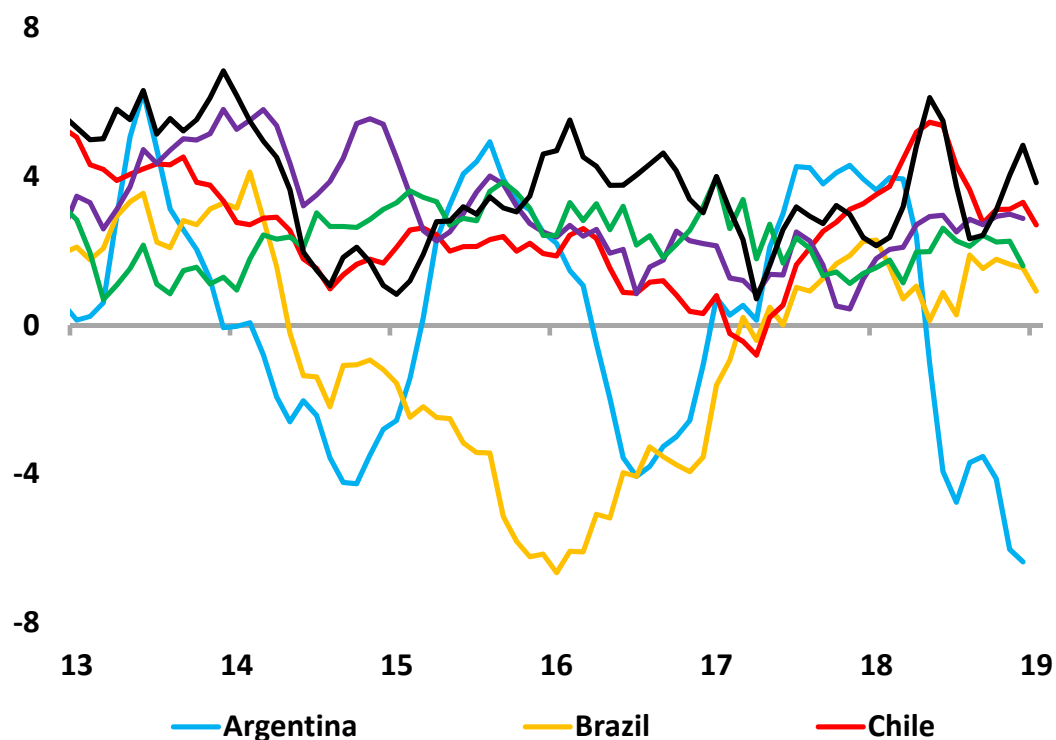


# Heterogeneity in LATAM

Accelerating, stable and weakening economies

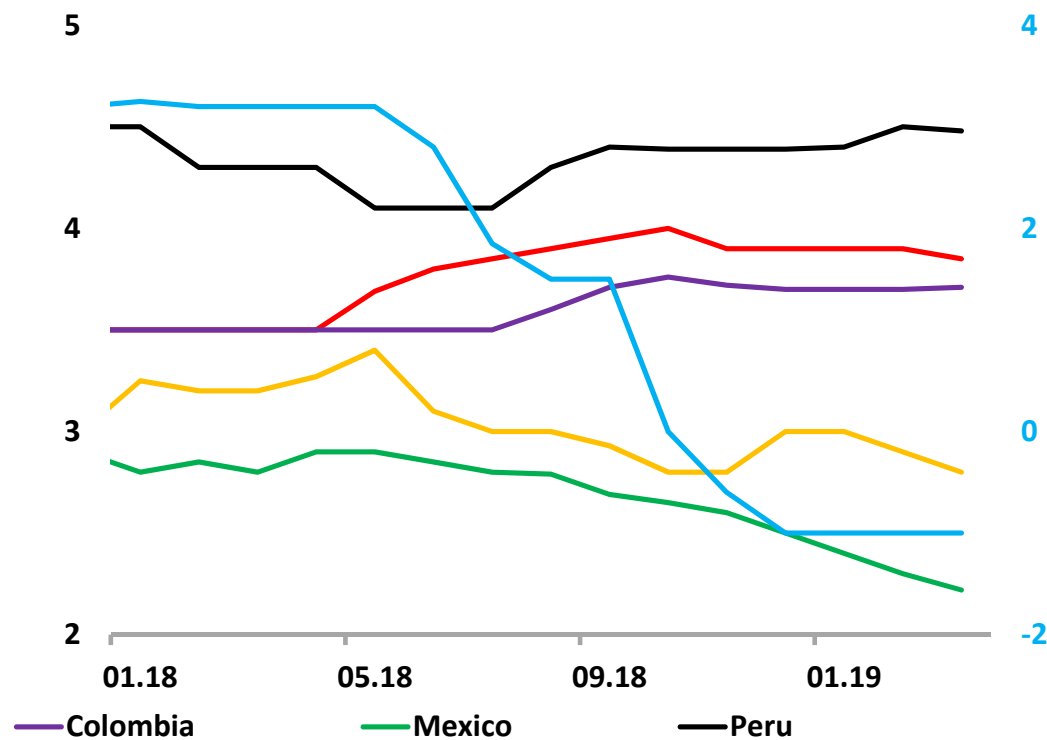
## Monthly activity

(annual variation, 3-month moving average, percentage)



## 2019 GDP forecasts

(annual variation, percentage)





## Balance of Risks

Deceleration in global growth coexists with high policy uncertainty in the major economies



**Trade tensions US-China**



**Fiscal and trade policy**



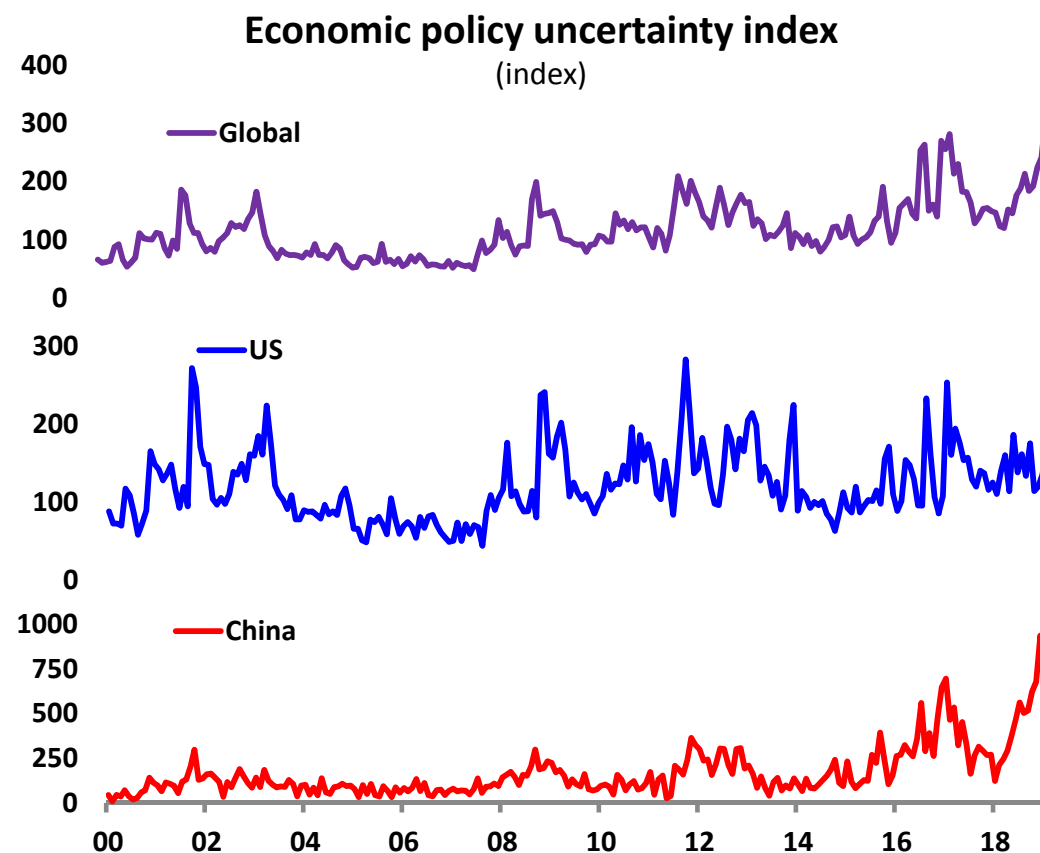
**Deceleration and sustainability of stimulus policies**



**Uncertainty around Brexit**

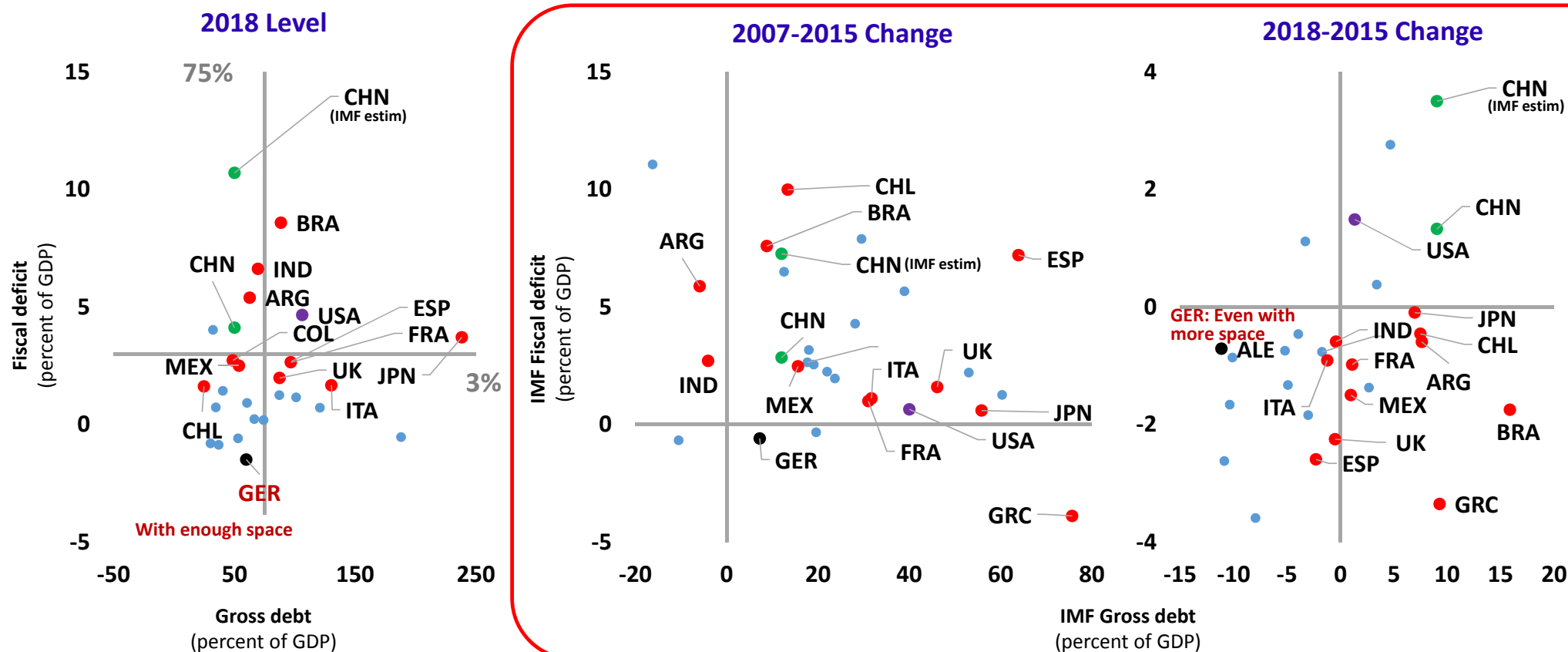


**Fiscal policy and politics**



## Fiscal policy space

After the GFC fiscal positions have weakened, limiting the space for active fiscal response in most economies --Germany an exception

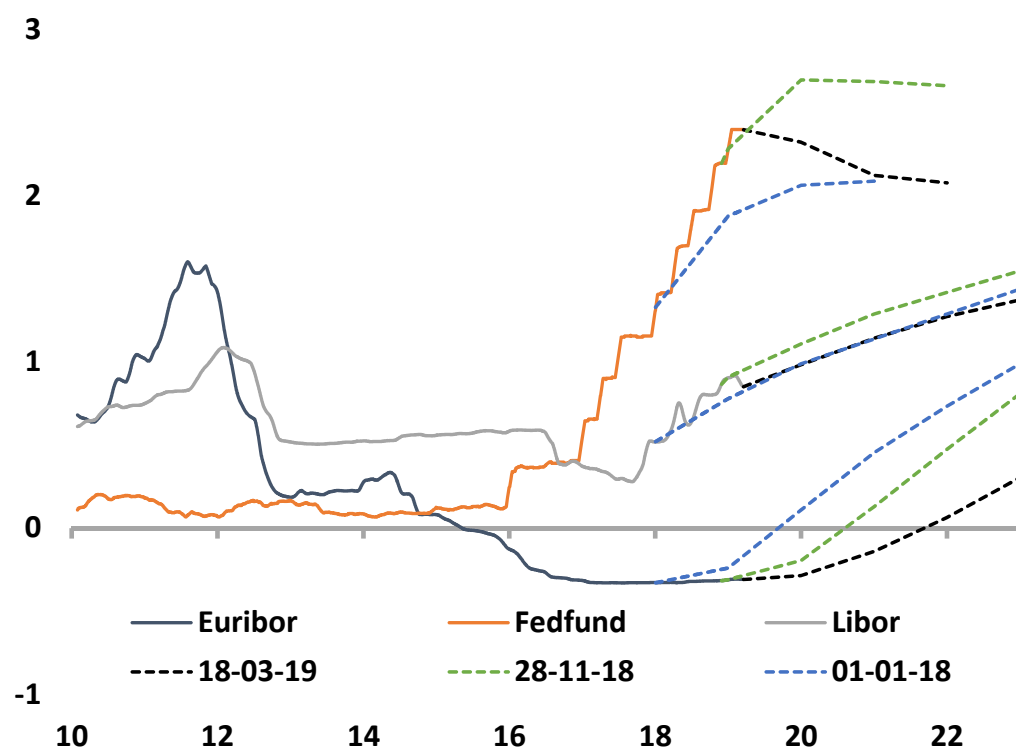


## Monetary policy space

Uncertainty over structural parameters, market sensitivity and low inflation explaining the Fed's cautious drive. ECB reacts to weakening economy

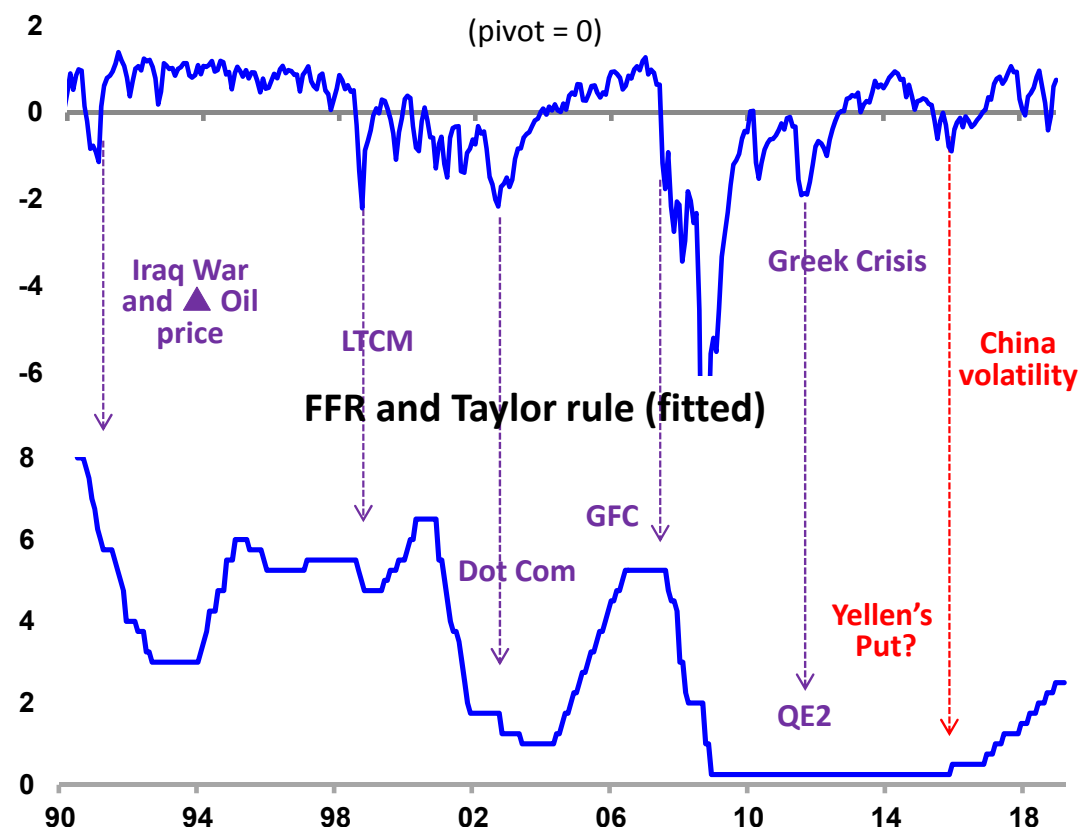
### Policy rate expectations

(December of each year, percentage)



### US: Financial conditions index

(pivot = 0)

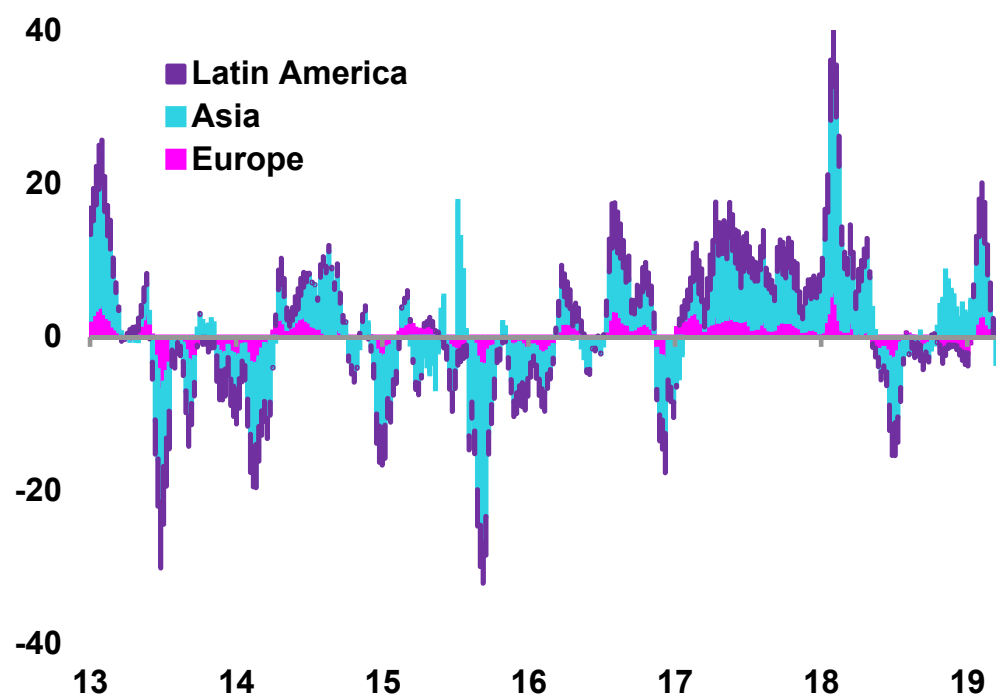


## Financial conditions for Emerging Markets

After a volatile 2018, financial conditions have improved for emerging markets in response to a more dovish Fed

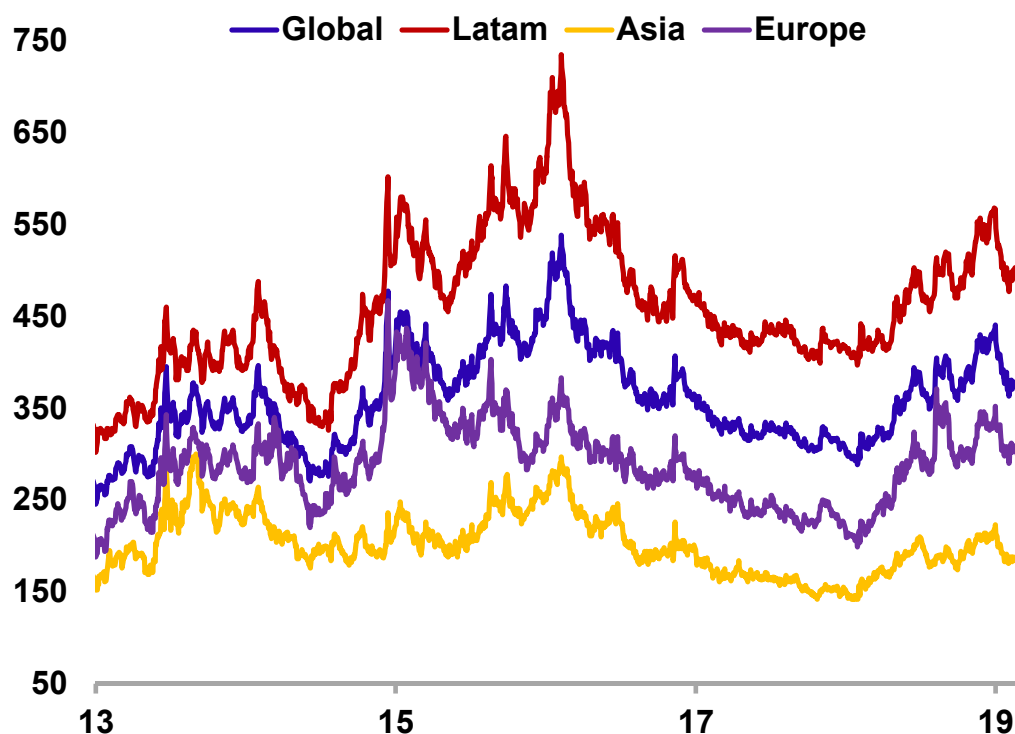
### Capital flows to emerging economies

(EPFR; US\$ bn, moving month)



### EMBI Global

(basis points)



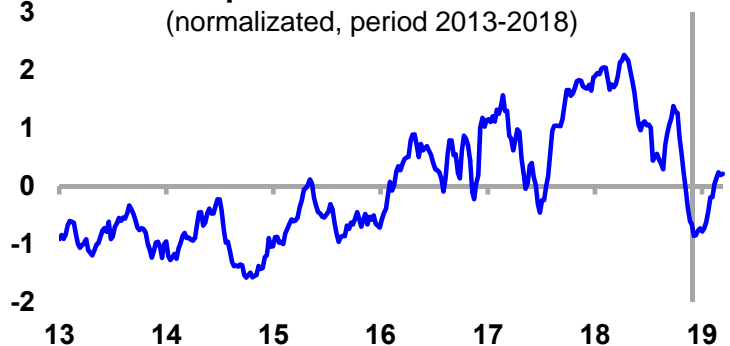
# Commodity prices

Better financial conditions also help recovery in commodity prices

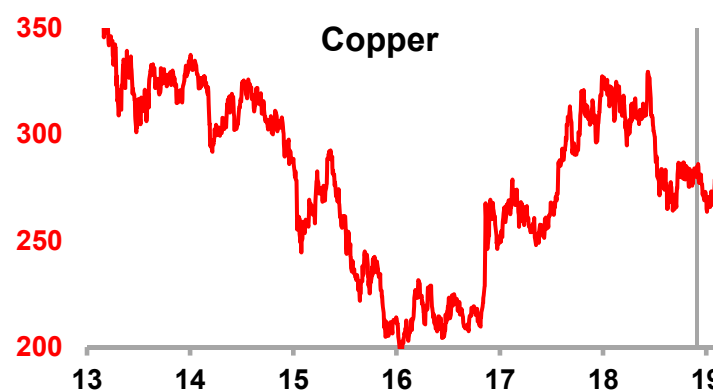
**Oil: Brent price**  
(US\$/b, nominal)



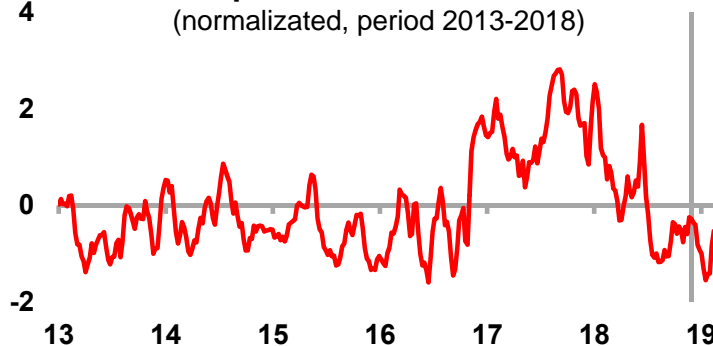
**Speculative Positions**  
(normalized, period 2013-2018)



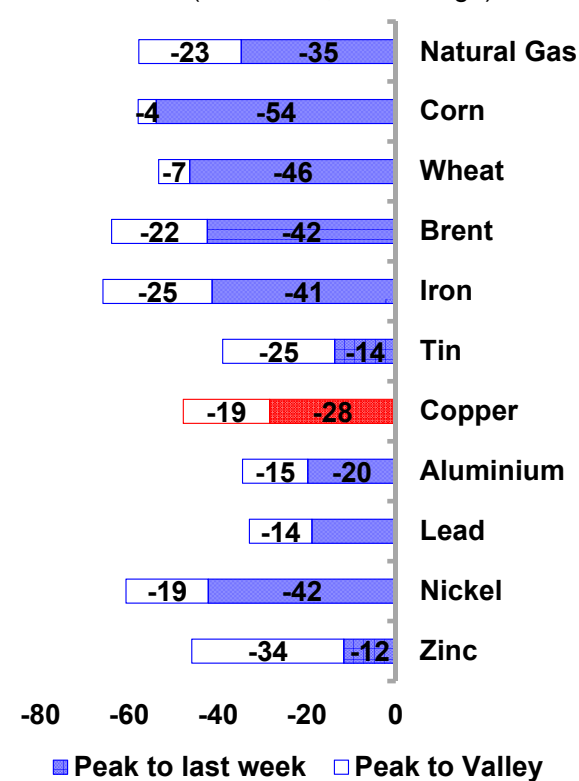
**Copper: Nominal price**  
(US\$/c/ pound)



**Speculative Positions**  
(normalized, period 2013-2018)



**Peak to Valley**  
(Last week, Percentage)



# Summing up

- Growth in advanced economies peaked by end-2017. Since then it has slowed down in a less synchronized way than in the previous expansion.
- Monetary policy played an important role in fostering economic growth, but the World economy has also become more sensitive to it.
- Incoming data points to a weaker position in some of the larger economies in 2019 and 2020; the probability of a recession in the US economy has increased.
- MP still has room for manoeuvre due to contained inflation. This makes the current cycle different from previous ones.
- Downside risks remain, but a more prudent MP drive and a clearer horizon for the resolution of the US-China trade conflict changes the external scenarios facing emerging economies and Chile in particular.
- So far, external volatility has been mostly reflected in ER fluctuations in EM, except in countries with weaker fundamentals. The latest volatility episode (end-2018) was milder for EM than similar ones in the recent past



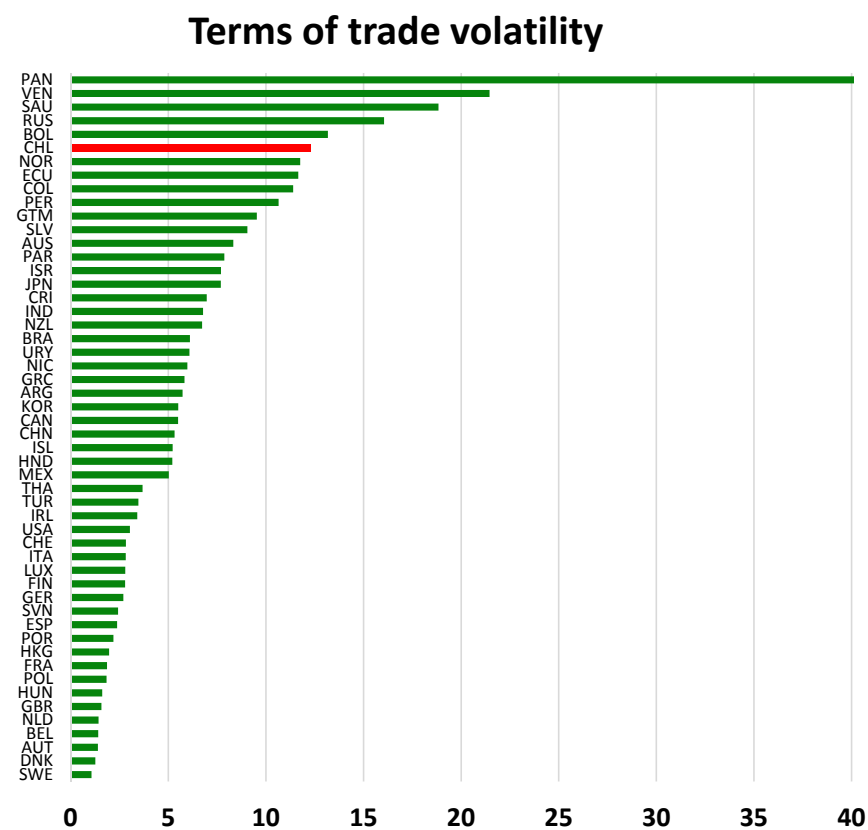
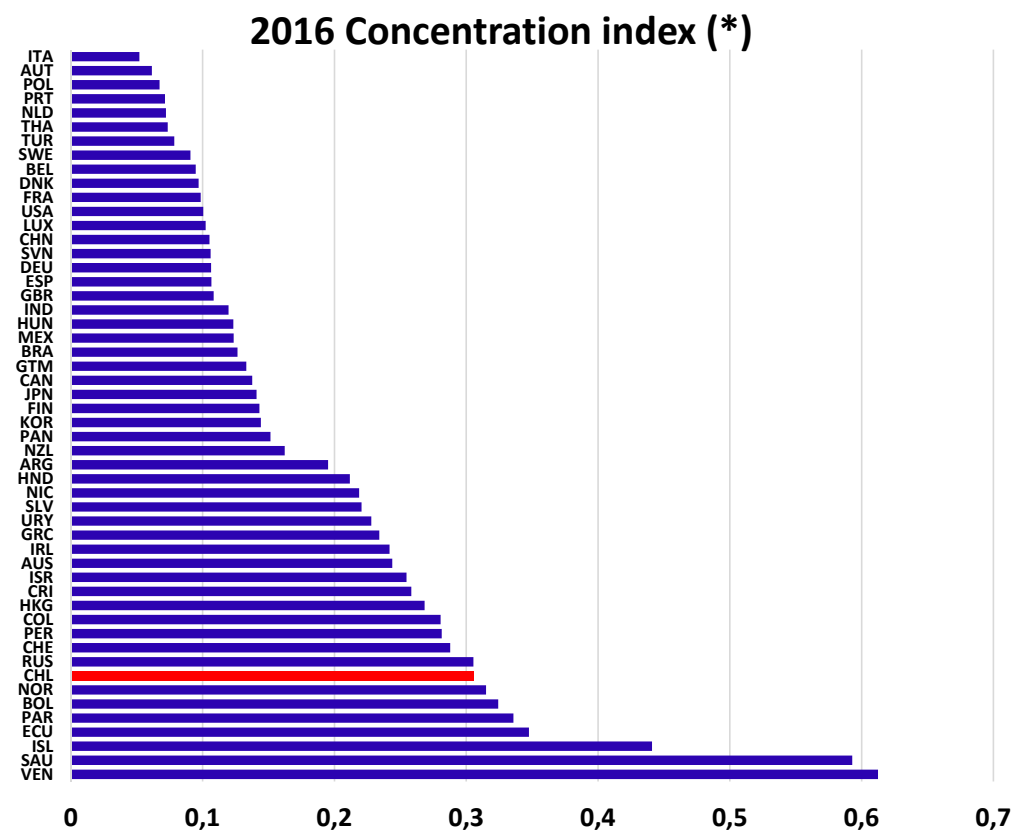


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## Transmission channels to the Chilean economy

## Trade channel: direct channel

Chile has a rather concentrated export sector, exposed to volatility in terms of trade



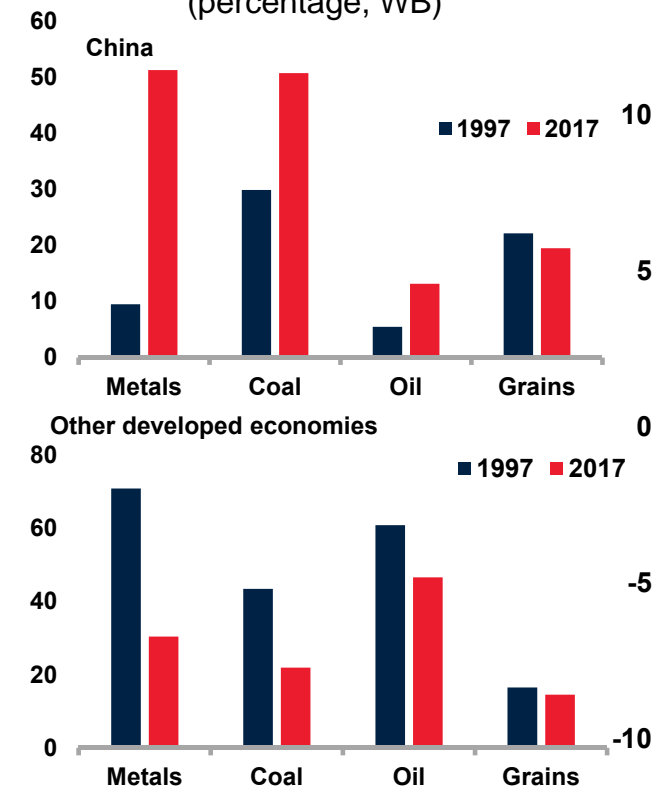
(\*) Concentration index: Herfindahl-Hirschmann index based on an export value by country and product, normalized to values between 0 and 1. A value close to 1 indicates a high concentration in a few products Source: UNCTAD.

## Trade channel: direct channel

Commodity prices increasingly correlated to industrial activity in China

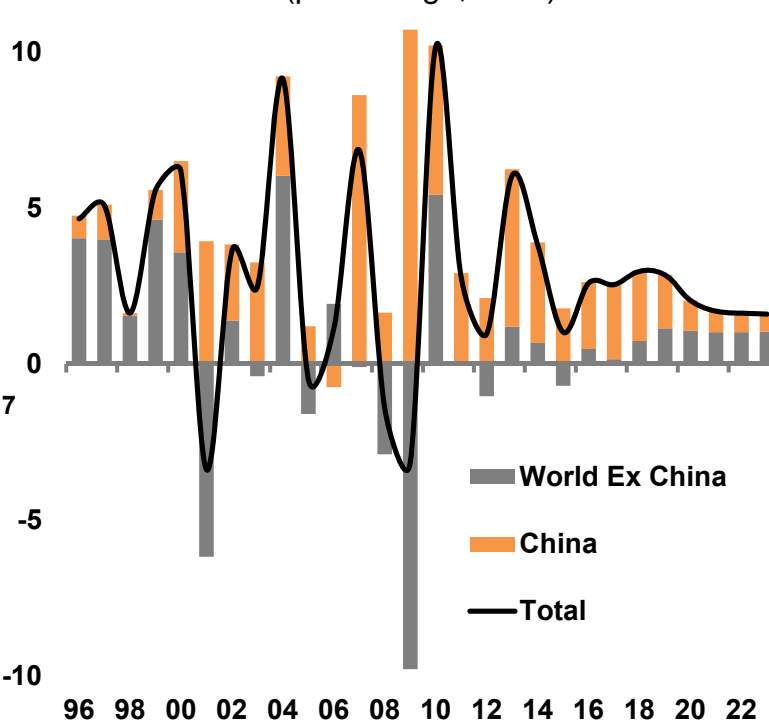
### Weight in the commodity demand

(percentage, WB)



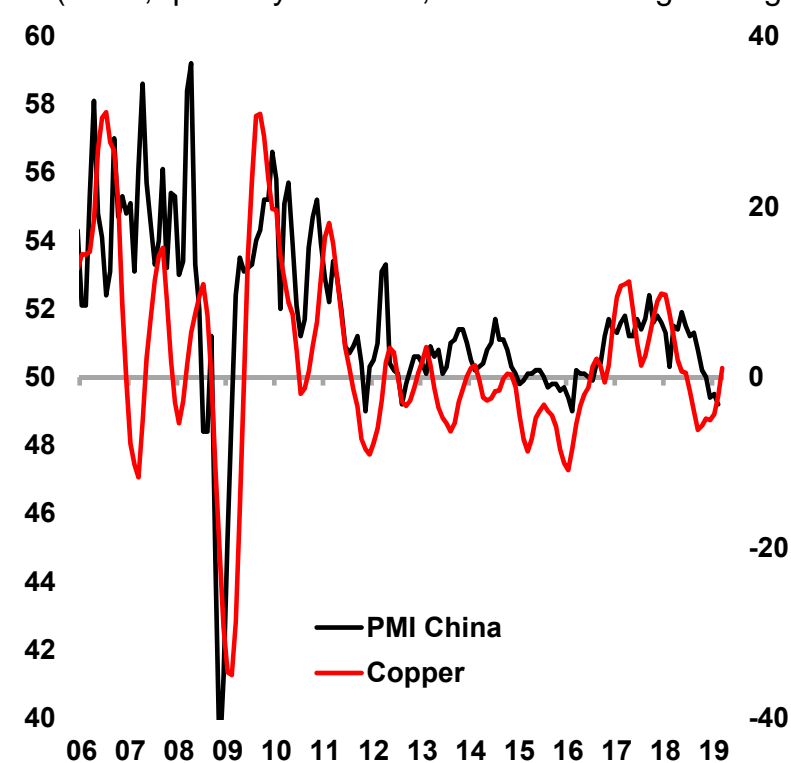
### China's contribution to the copper demand growth

(percentage, CRU)



### China PMI and copper price

(index, quarterly variation, 6-month moving average)

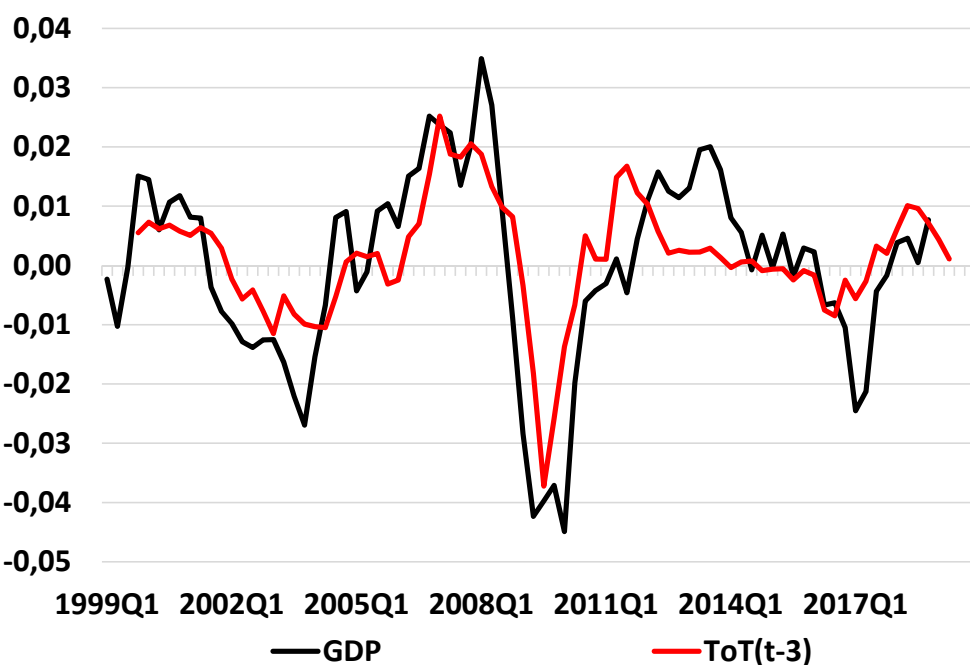


## Trade channel: indirect channel

Volatility in terms of trade: effects on the current account, demand and the exchange rate

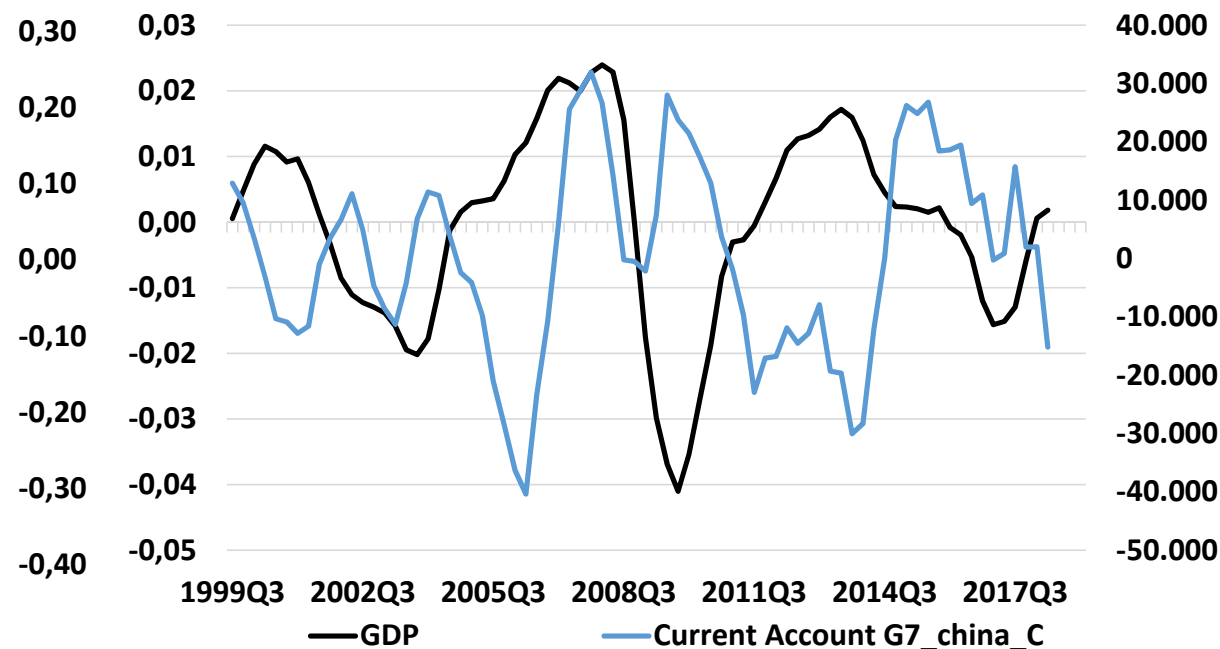
### GDP cycle and terms of trade

(GDP cycle based on Hodrick-Prescott filtering)



### GDP and Current Account cycle of G7 + China

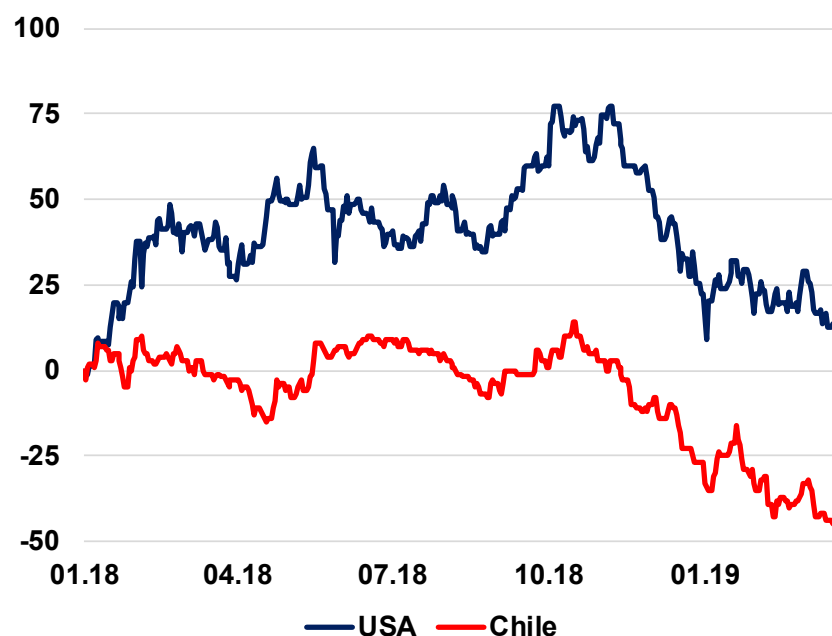
(12-month moving average of the Hodrick-Prescott filter based cycle)



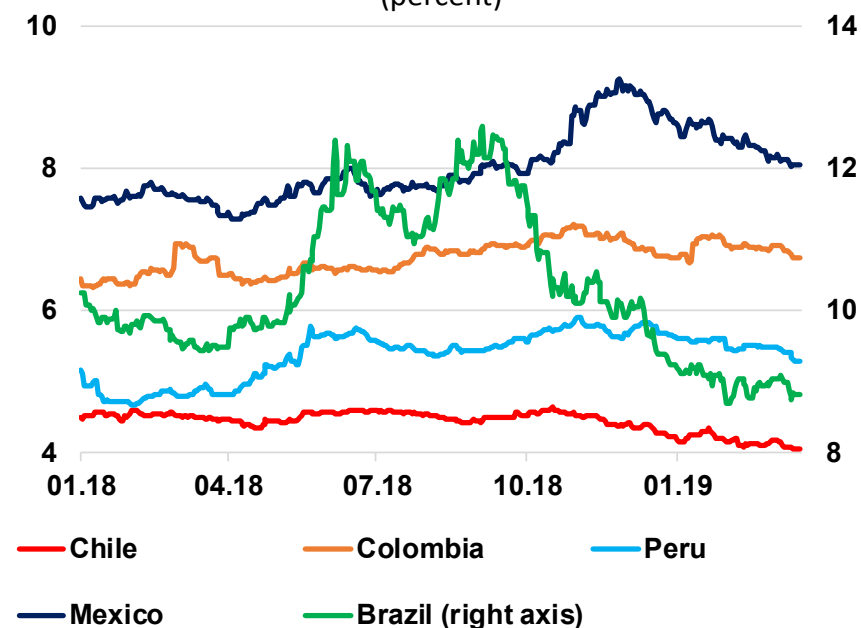
## Financial Markets

Local financial conditions remain favorable compared with other economies

**Interest rate on 10-year nominal sovereign bonds**  
(accumulated change since 03-Jan-2018, basis points)



**Interest rate on 10-year nominal sovereign bonds in Latin America**  
(percent)



## Financial channel: equities

Equities are not so sensitive to global shocks

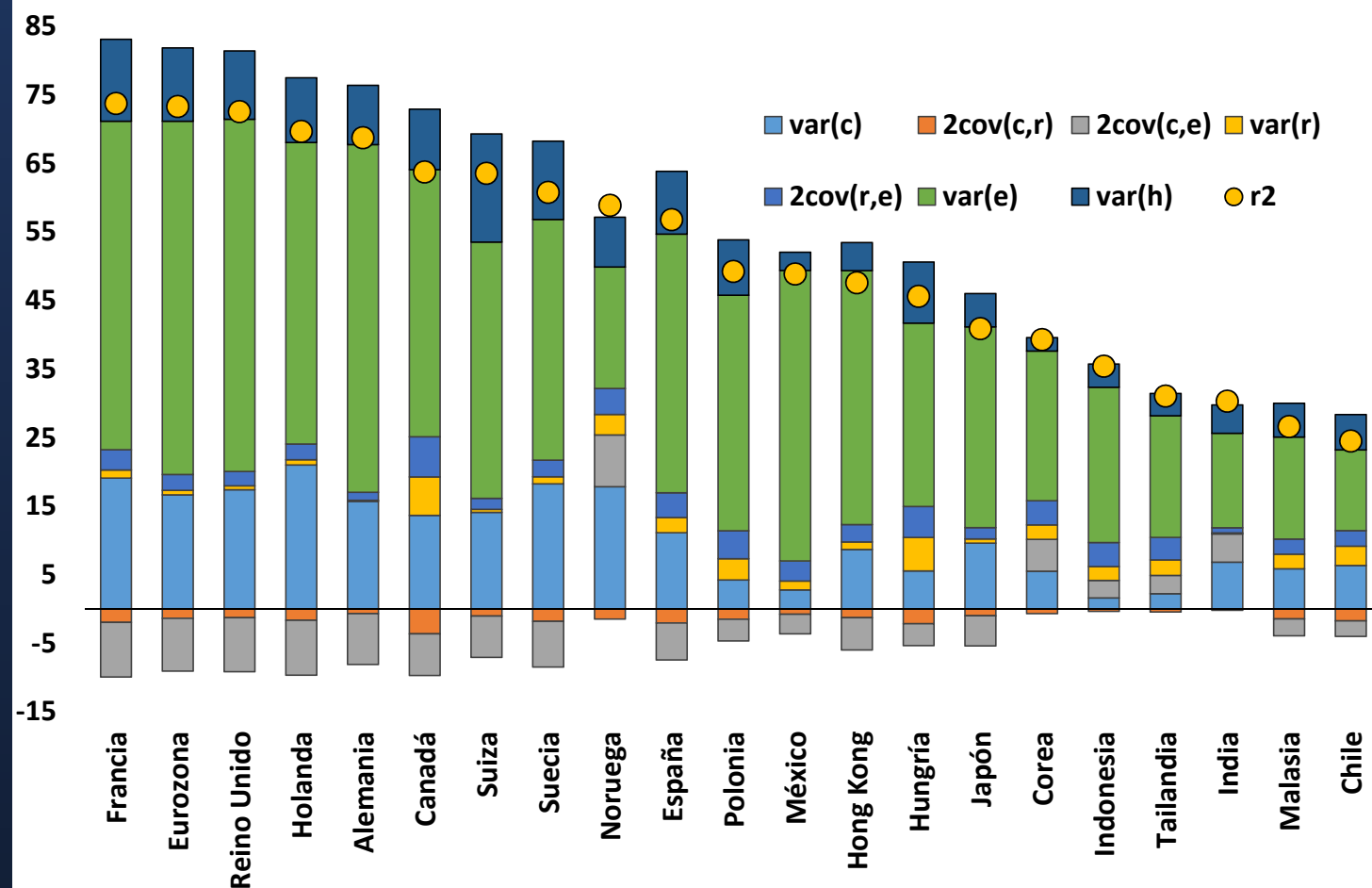
- Excess of returns from the US are decomposed through Campbell - Ammer (1993)
  - Shocks associated with the payment of future dividends (c)
  - Shocks associated with future interest rates (r)
  - Shocks associated with future risk prizes (e)
  - Expected component (h)
- Excess global returns are regressed using four previous series and decomposition of variance is obtained
- Percentage variance not explained → local idiosyncratic component
- Major spillovers (in percent) in developed (vs. emerging); Chile is the market where the lowest level of contagion is observed

Sources: CBC calculations

External and internal scenarios for the Chilean economy

CENTRAL BANK OF CHILE

## Variance decomposition of global equity through US equity spillovers



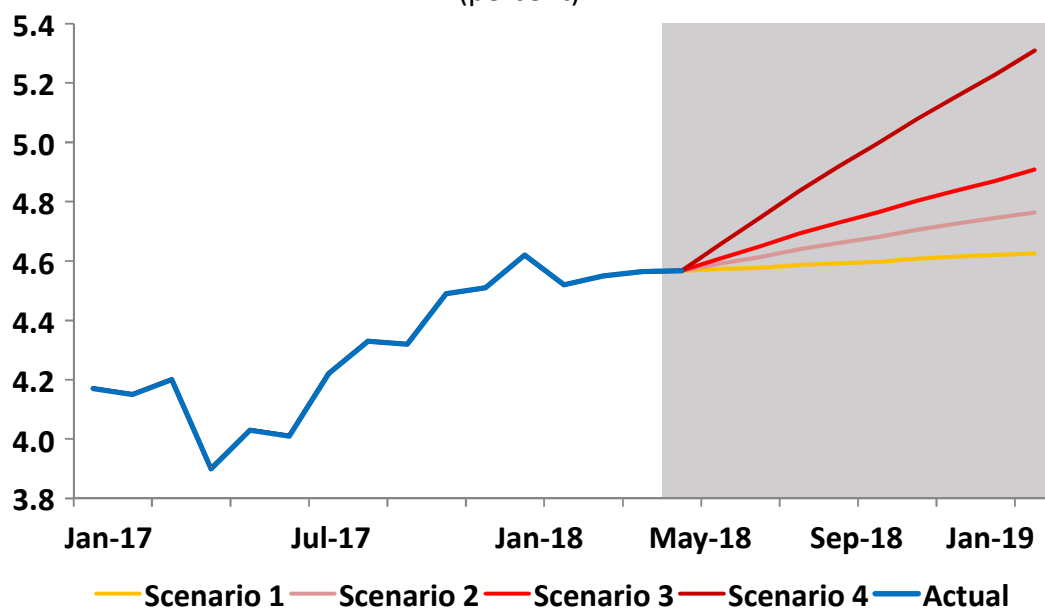


## Financial channel: fixed income

Shocks on external rates have a limited pass-through to local rates

**Under alternative scenarios of FFR increases, the term premium and EMBI Chile would affect the long-term local rate with a pass-through coefficient ranging from 0.15 to 0.25**

Impact on 10-year sovereign rate  
(percent)



Scenarios and effects on 10-year sovereign rate  
(basis points)

	Shocks (12-month var.)			BCP10 rate var. <sup>(1)</sup>	
	FFR <sup>(2)</sup>	TP	EMBI	Jun. 18	Dec. 18
<b>Scenario 1</b>	50	0	0	3	7
<b>Scenario 2</b>	50	50	0	6	18
<b>Scenario 3</b>	75	100	0	10	32
<b>Scenario 4</b>	75	100	100	20	68

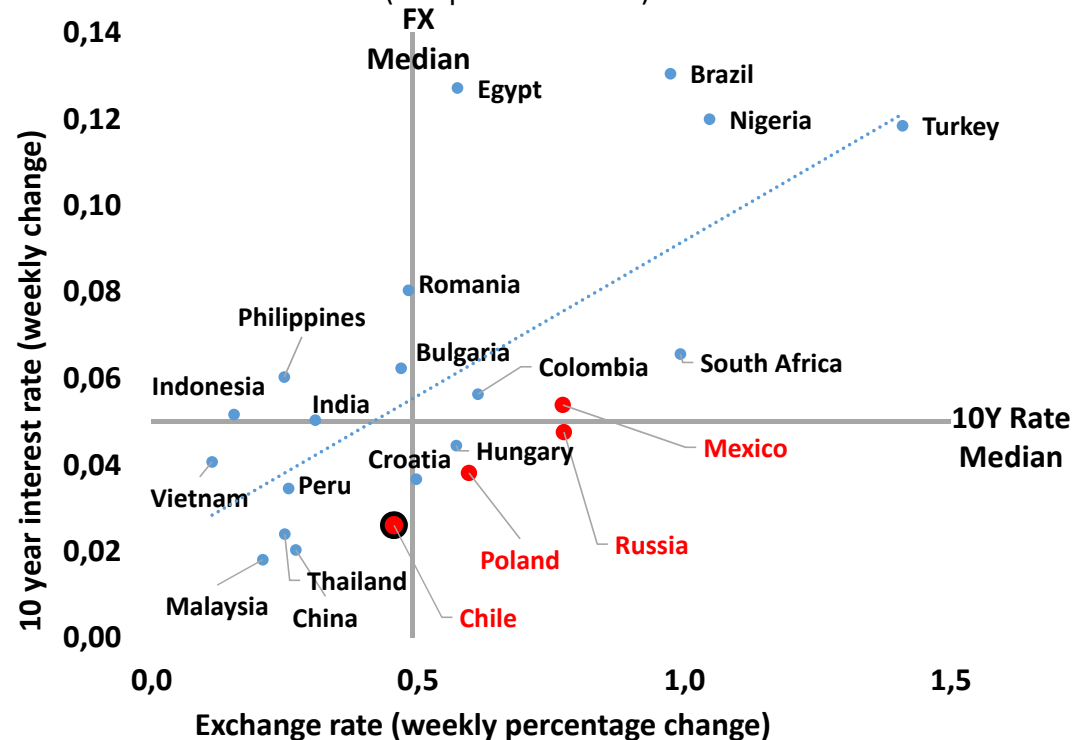
(1) Variation with respect to March 2018. (2): Hikes of 25 bp in June, September and December of 2018, where appropriate. (3) Estimations based on a VAR(1) model using the following variables: US shadow rate, 10-year neutral rate, 10-year term premium, expected depreciation of the Chilean peso, EMBI Chile, 10-year BCP rate. Out-of-sample forecasts over the period March 2018 to January 2019. Source: Central Bank of Chile.

## Financial channel: foreign exchange

Monetary policy autonomy is supported by the floating exchange rate regime

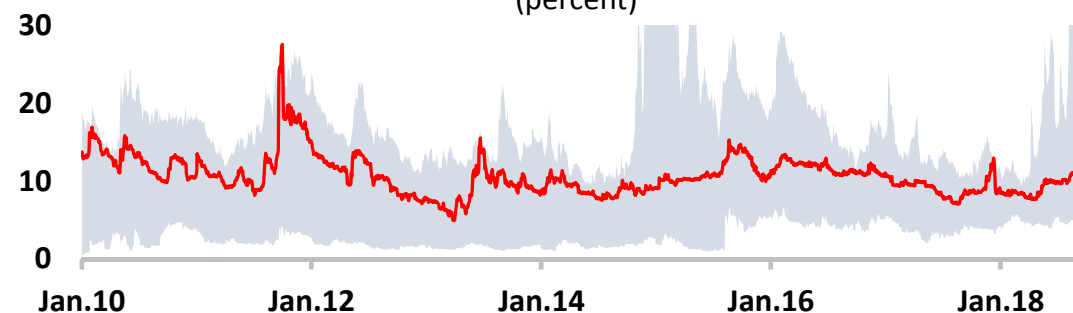
10Y interest rate and FX volatility (1)

(sample 2017-2018)



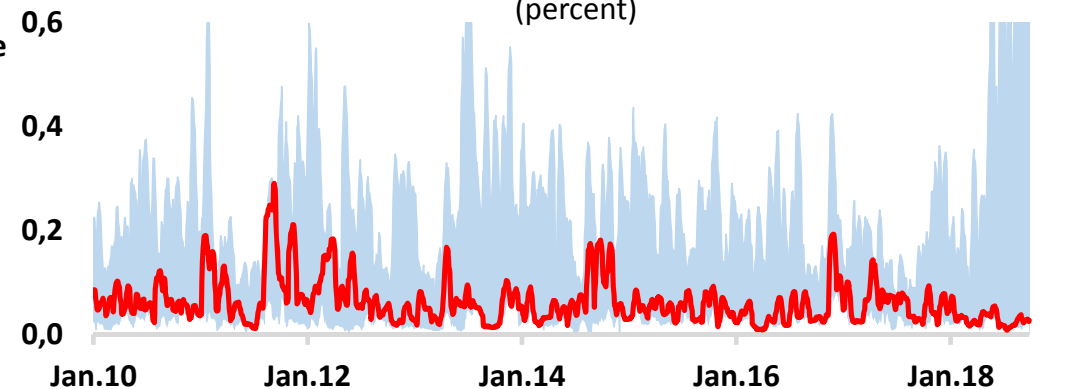
Currency implied volatility 1-month EE

(percent)



10Y rates volatility 1-month EE

(percent)



(1) Red points correspond to economies with free floating FX regime according to IMF classification (Annual Report on Exchange Rate arrangements and Exchange Restrictions, 2017). Source: IMF and Bloomberg.



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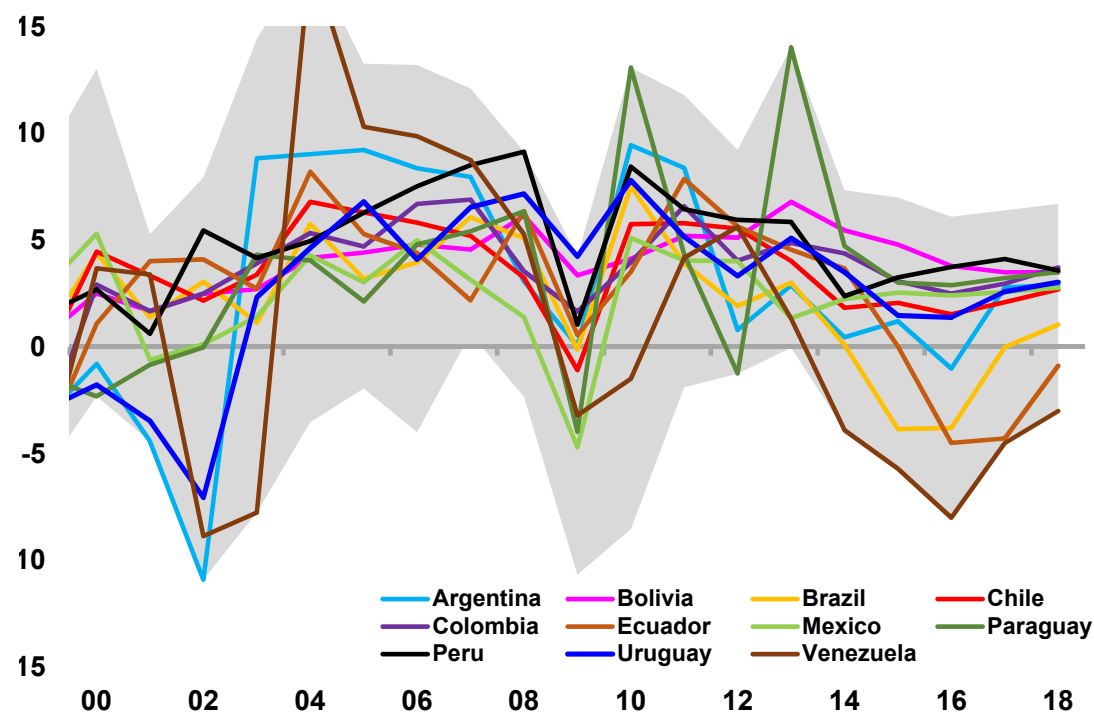
How would Chile face new external challenges?

## Activity in LATAM

Low correlation of economic activity in a region with low integration and disparate policies

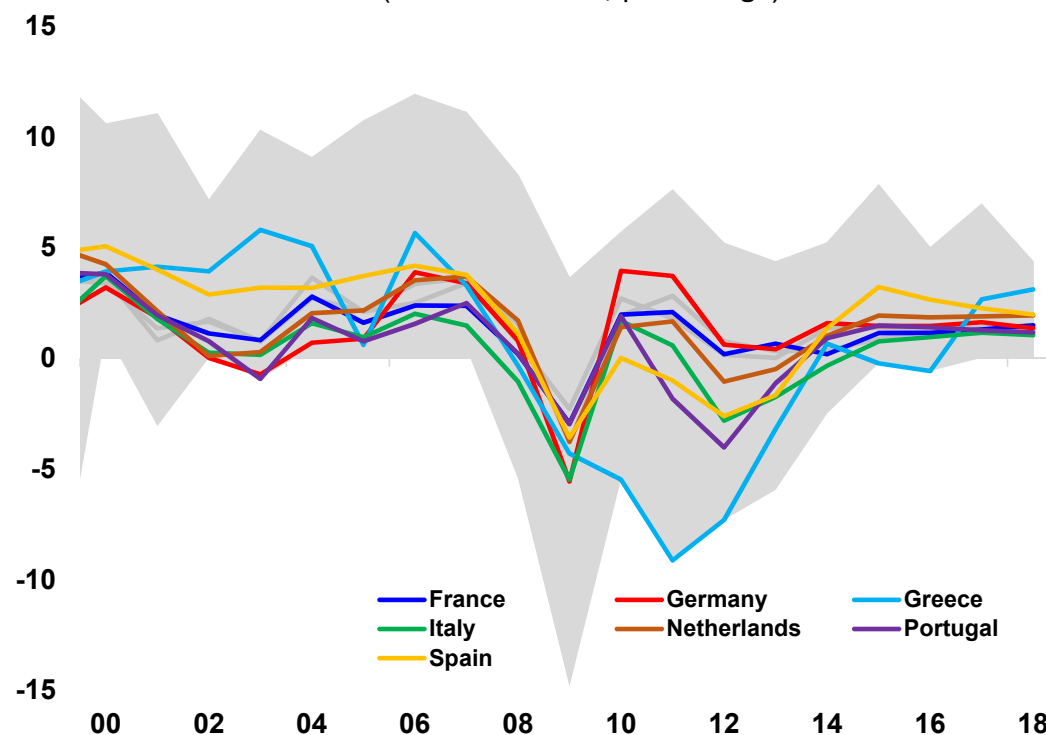
### Latin America: GDP growth (\*)

(annual variation, percentage)



### Europe: GDP growth (\*)

(annual variation, percentage)



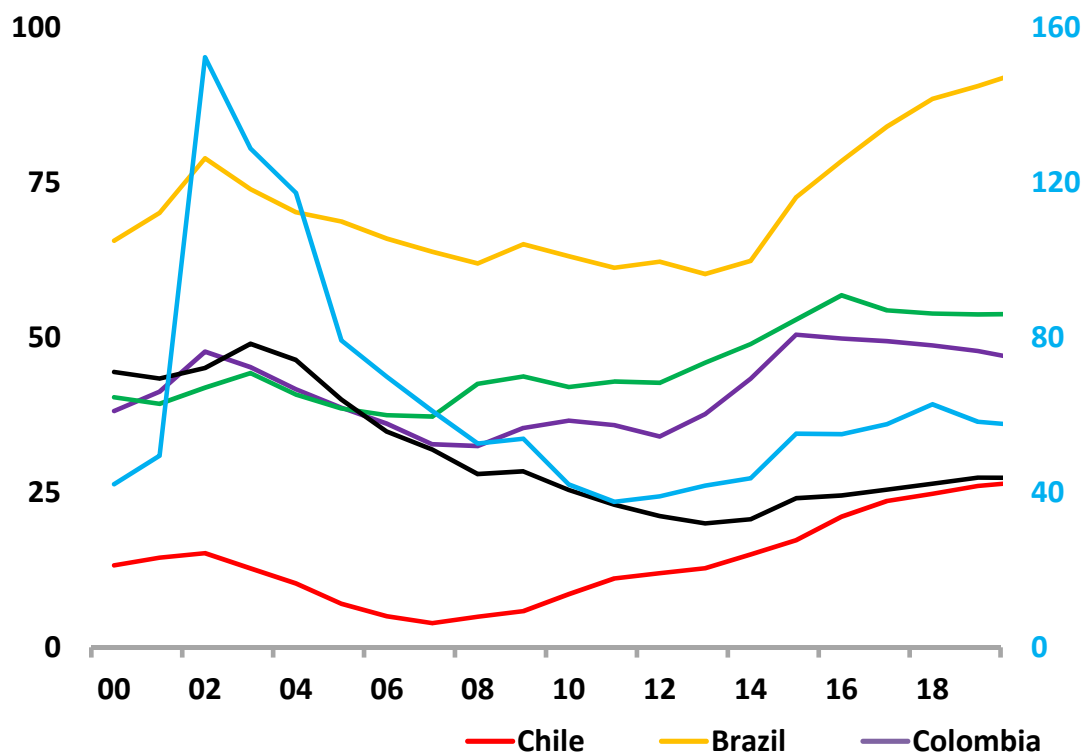
(\*) Shaded areas are the max-min variations of all countries in each zone. Source: IMF

# Fiscal standing

## Low government debt and risk

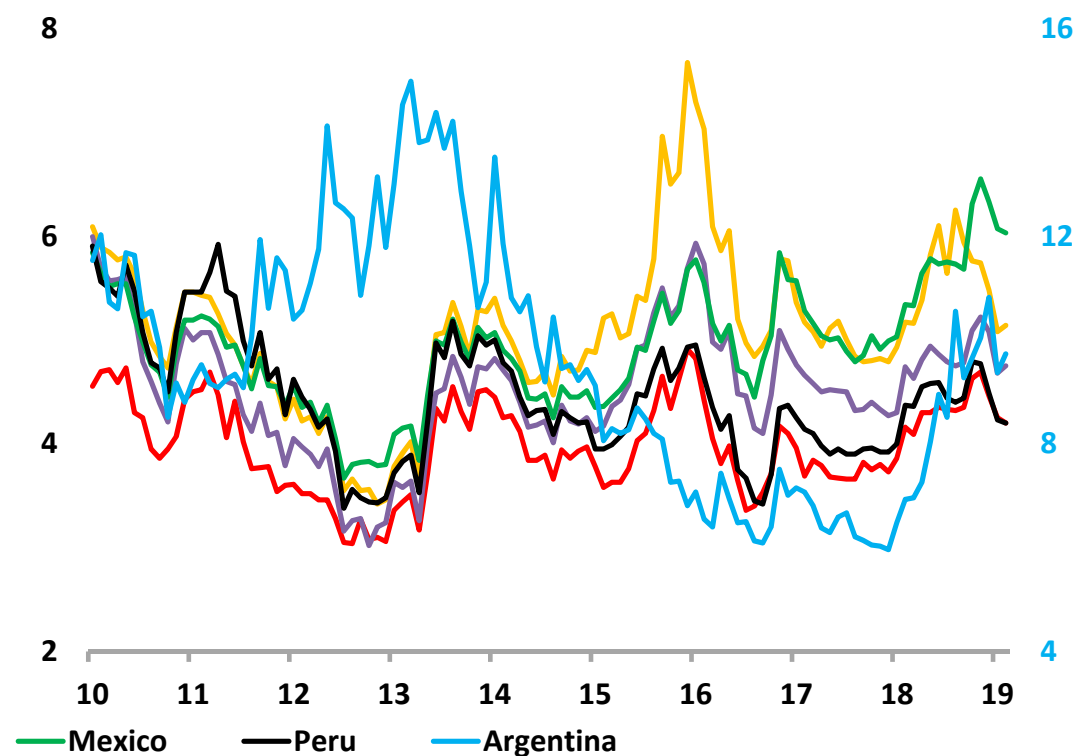
**Gross debt general government**

(percent of GDP, IMF)



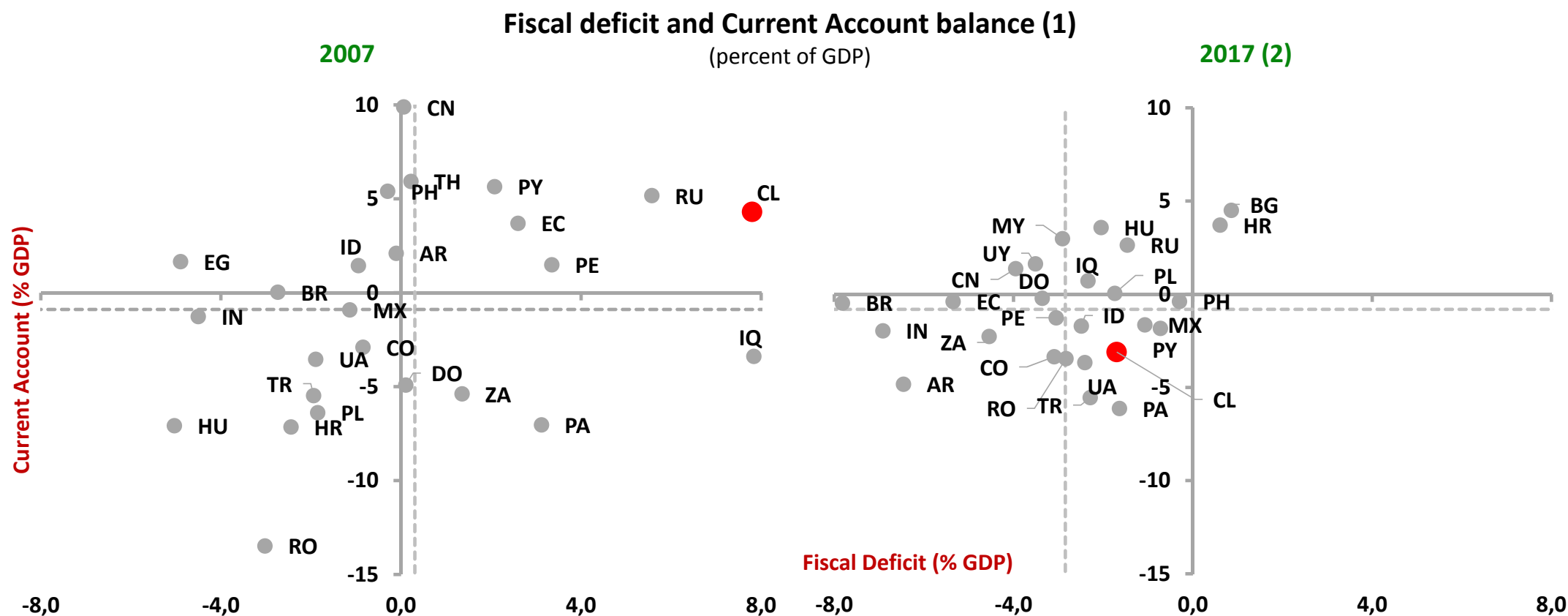
**Sovereign risk**

(index, Bloomberg)



# Fiscal deficit and current account

Yet fiscal position less of a positive differentiator



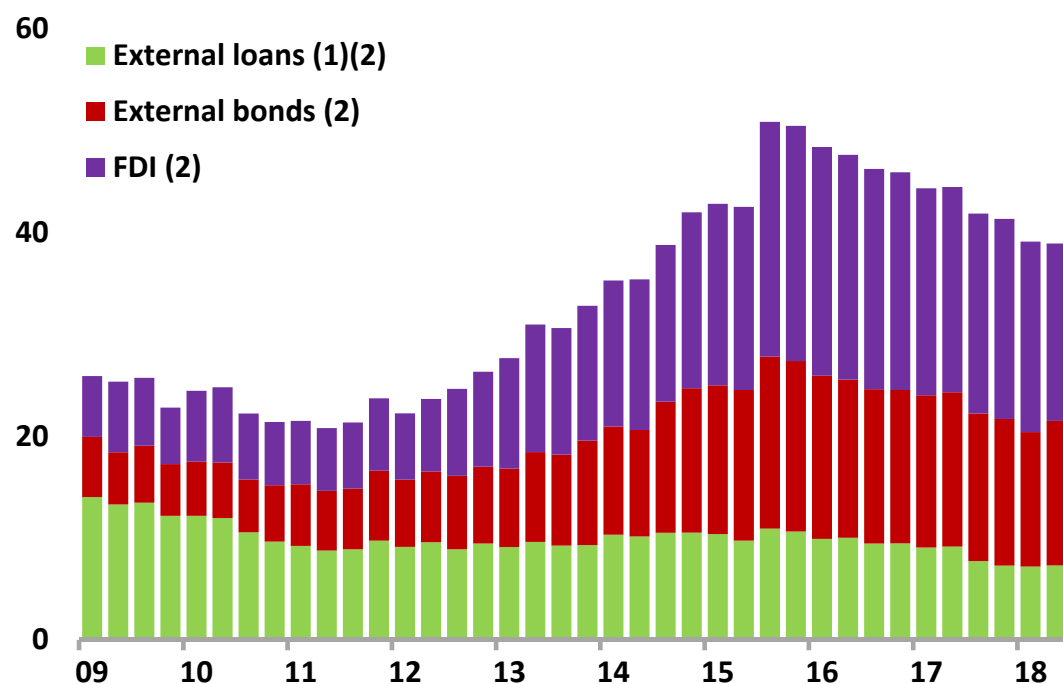


# External debt

## Corporate debt growth explained by FDI-related lending

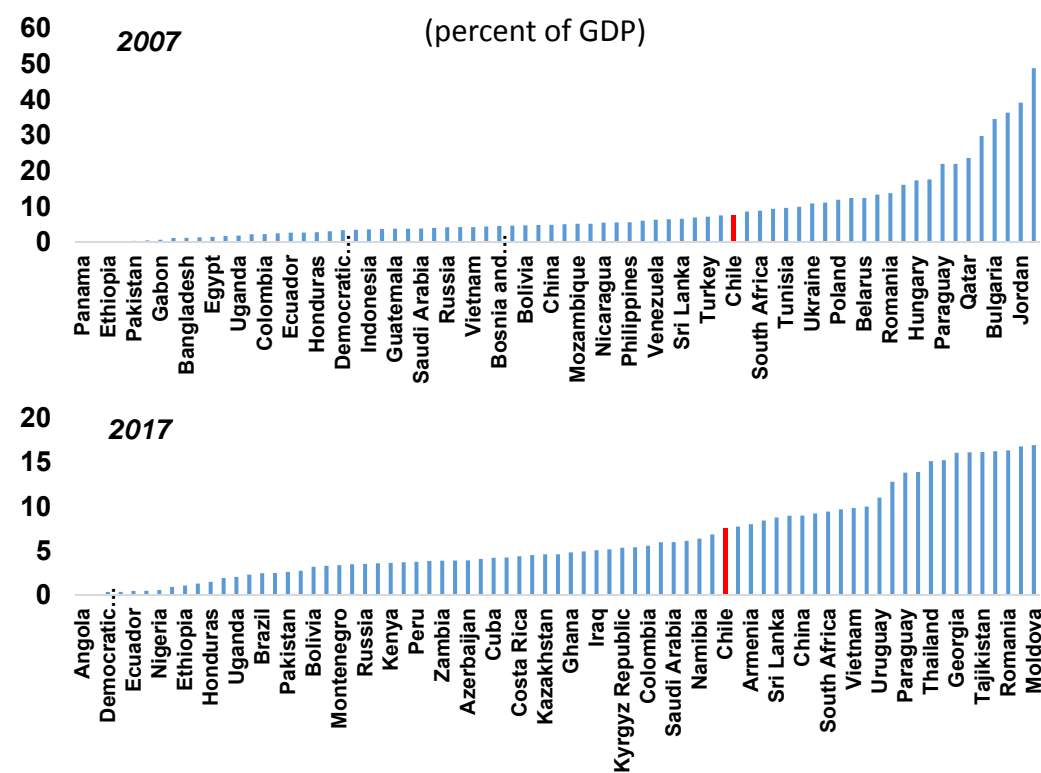
### Total debt of non-bank firms

(percent of GDP)



### Short term debt

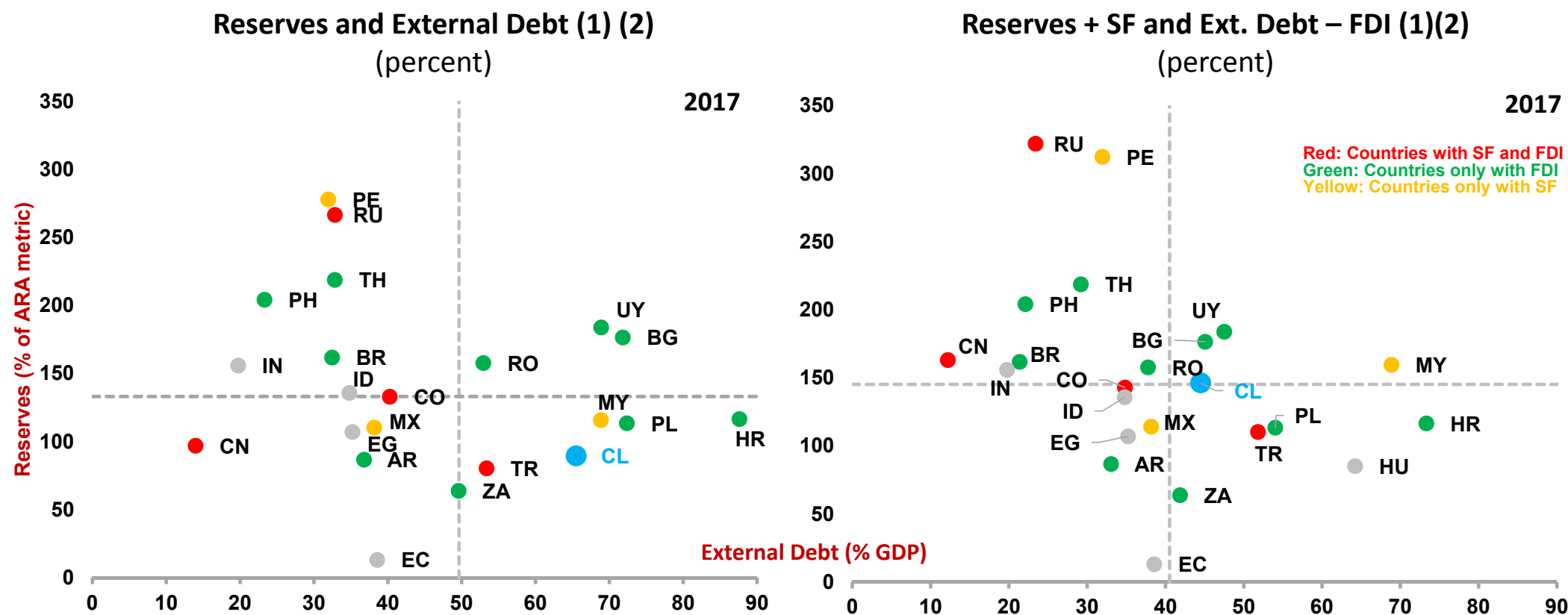
(percent of GDP)



(1) Includes multilateral organizations. (2) Converted to Chilean pesos according to the average FX of the last month of each quarter. Sources: WB (total external debt and FDI), IMF, BIS and CBCh, based on data from Association of Chilean Factoring Firms (ACHEF) and Financial Markets Commission (FMC). Moody's Handbook November 2018

# External debt and reserves

Change in comparisons when considering FDI debt and sovereign wealth funds



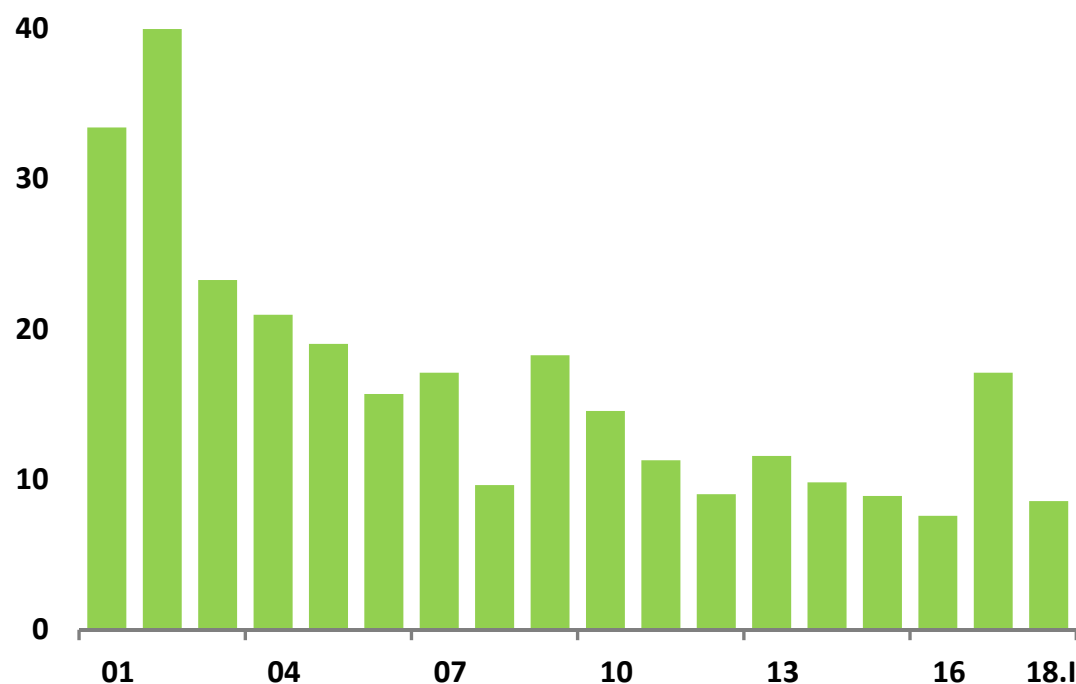
(1) ARA Metric: Fixed (Float) Exchange Rate = 10(5)% × Exports + 10(5)% × Broad Money + 30% × ST Debt + 20(15)% × Other Liabilities (2) Dotted lines mark annual average of the respective series without considering the minimum and maximum values. Source: IMF, WB and Central Bank of Chile.

## Exchange rate risk coverage

Extensive use of hedging instruments has helped firms to cope with FX volatility

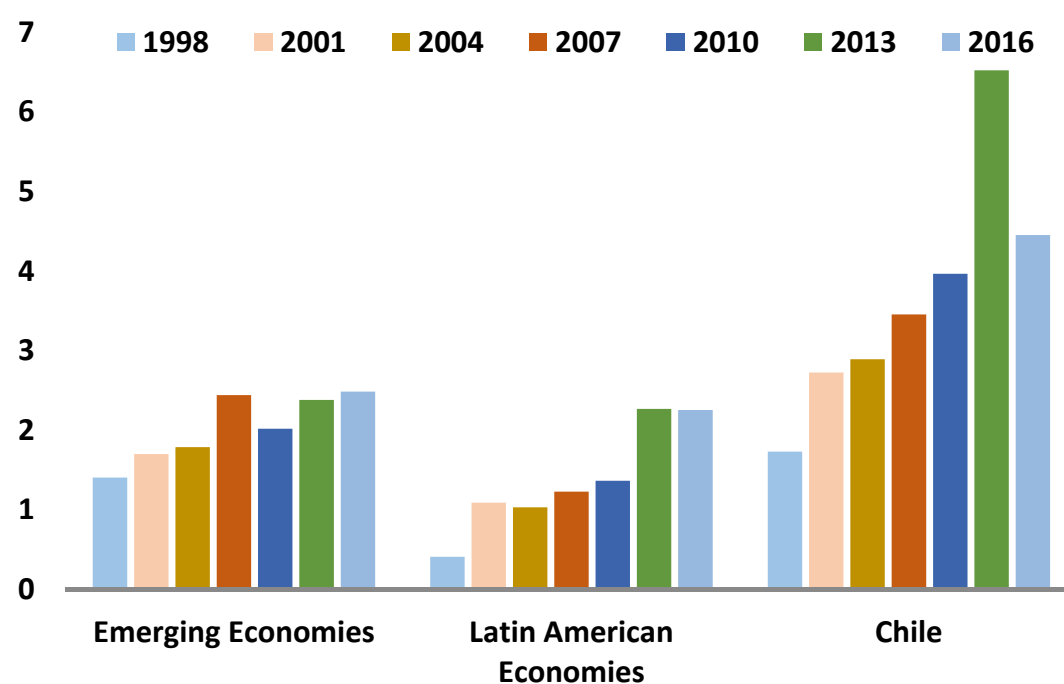
### Currency mismatch over 10% in the corp. sector (1)

(percent of total assets)



### Derivatives market activity

(annual transactions, percent of GDP)



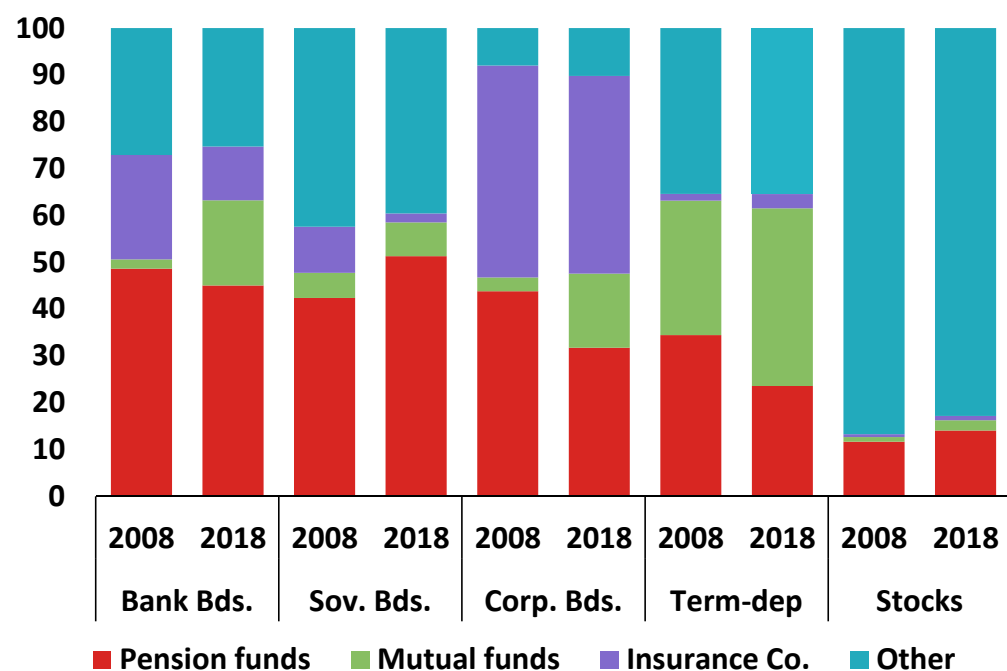
(1) Based on a sample of firms that report their balance sheet in pesos. Currency mismatch is the difference between foreign currency liabilities and foreign currency assets, less the net position in derivatives (the difference between buy and sell positions in derivatives contracts). Sources: WB, IMF, BIS and Central Bank of Chile, based on data from Financial Markets Commission (FMC).

## The role of local institutional investors

Institutional investors have played a stabilizing role

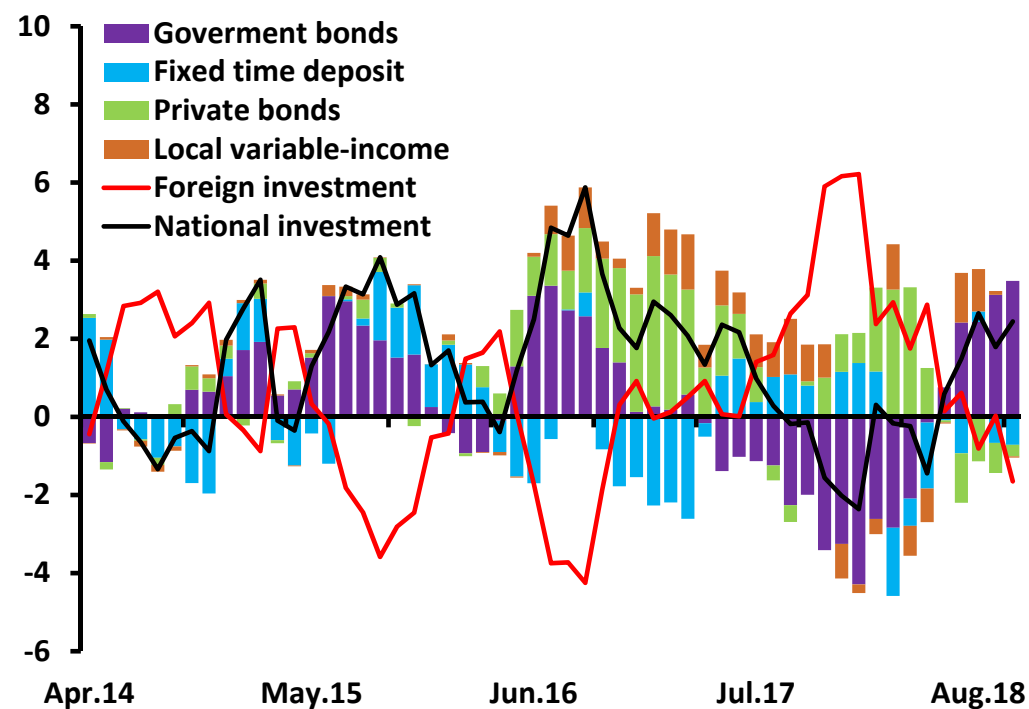
### Main financial assets holders (1)

(percent)



### Pension fund investment flows (2)

(percent of GDP)



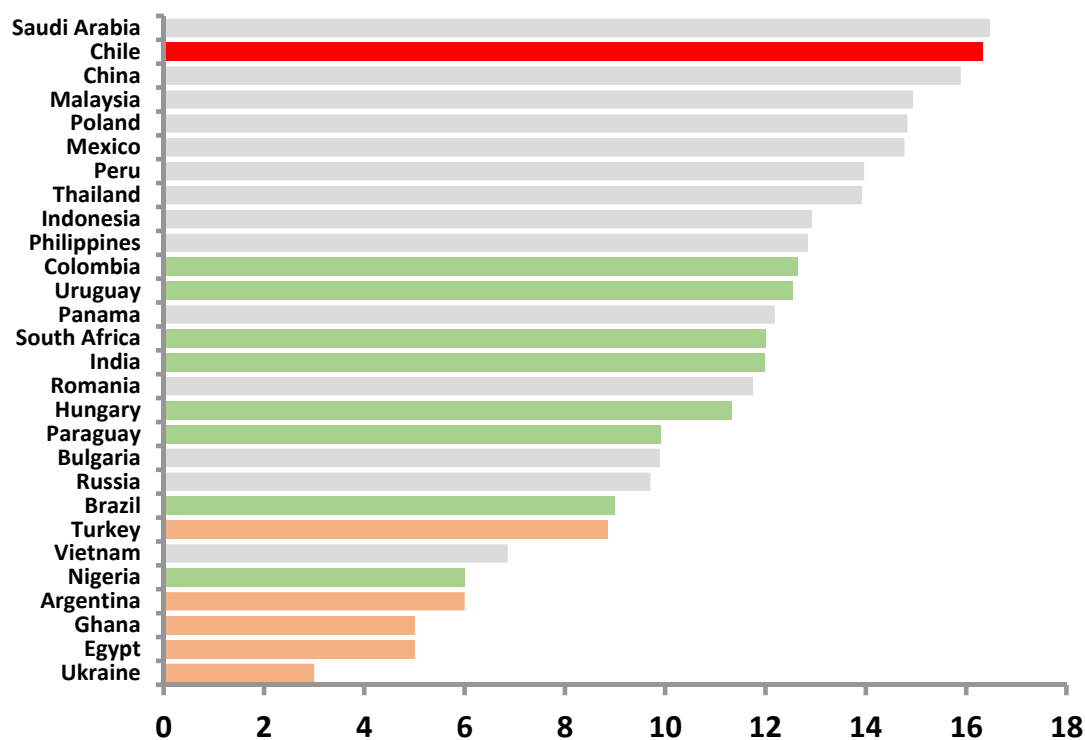
(1) Other includes other investment funds, stock exchanges, and stock brokers. (2) Net change per instrument, including purchases, sales, redemptions, and drawings and excluding derivative maturities, rebates, dividends, and coupon cuts. Last datum updated through 12 October 2018. Source: Central Bank of Chile, based on data from the Superintendence of Pensions, CMF and Santiago Stock Exchange.

# Banking sector

The Banking sector in Chile looks solid

## Bank Financial Strength Index

(percent, Moody's weighted average long-term banks rating)

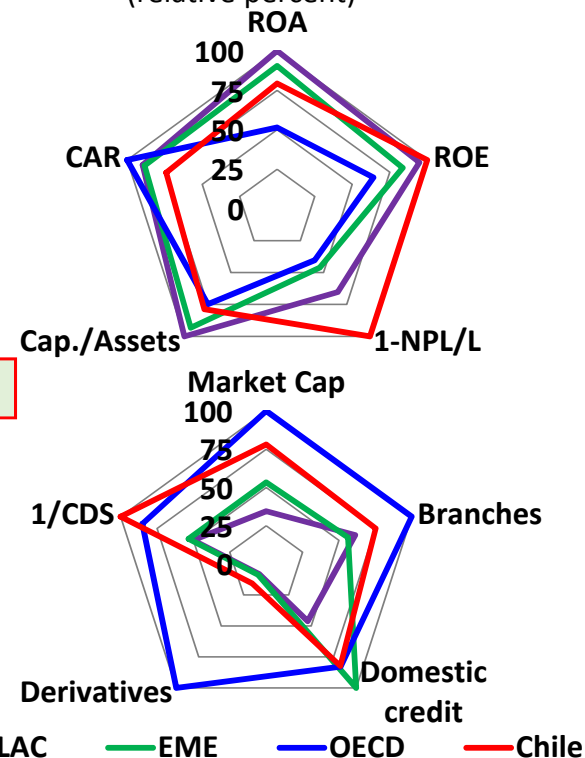


## Chilean financial development (1)

(relative percent)

Banking sector

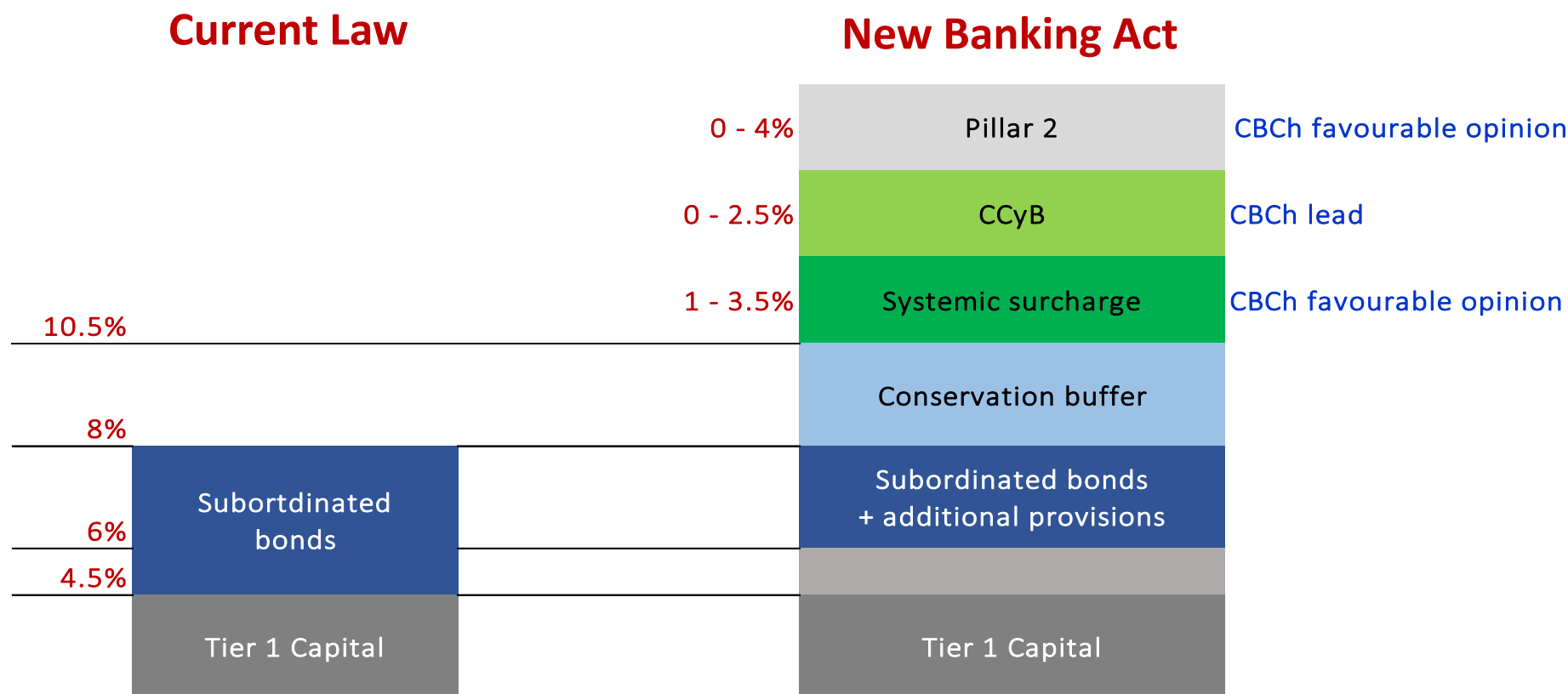
Financial sector



(1) Data are relative to the maximum on each dimension at the end of 2016 or to the latest availability. Sources: Moody's and Central Bank of Chile based on information from BIS, WB, IMF and Bloomberg.

## Banking sector

The New Banking Act will upgrade the bank solvency requirements to those of Basel III

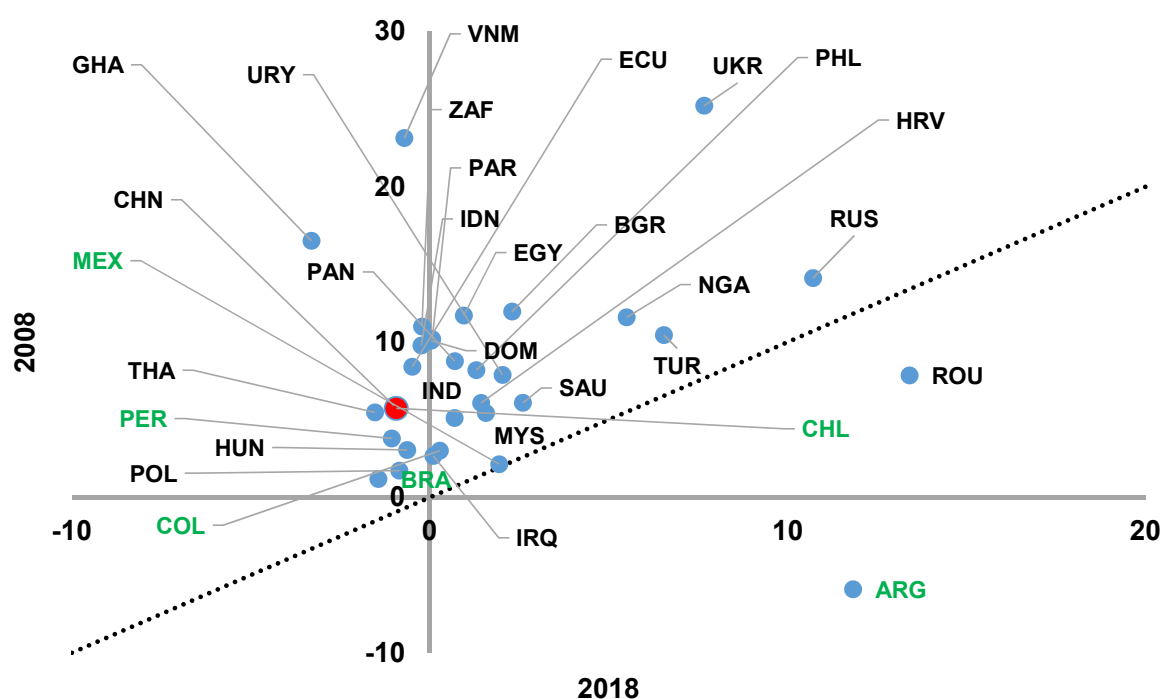




# Financial channel: FX float and anchoring of inflation expectations

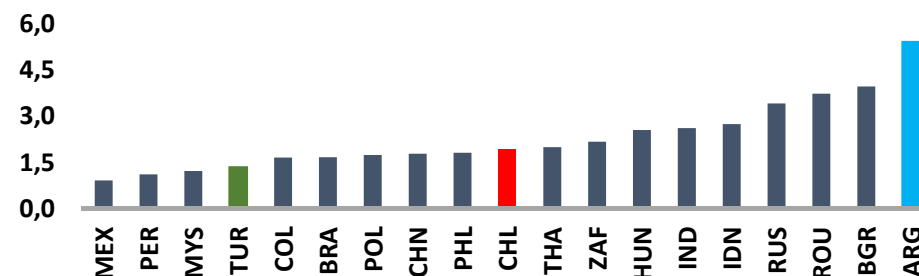
The anchoring of inflationary expectations has allowed monetary policy to focus on moderating the real cycle

**Effective inflation – Inflation target**  
(SD of annual variation, sample 2004-2018)

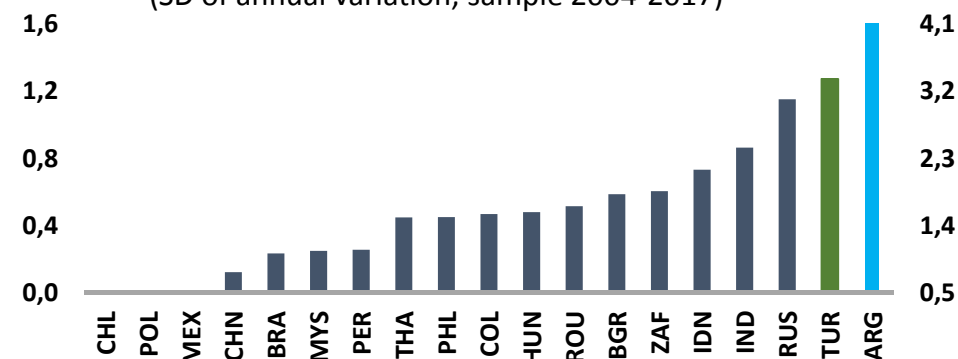


(1) 5-year forecast. Source: IMF and Central Bank of Chile.

**Inflation volatility**  
(SD of annual variation, sample 2004-2017)



**Long-term inflation expectation volatility (1)**  
(SD of annual variation, sample 2004-2017)



# Fundamentals compared

Taking a broad set of fundamentals, even without correcting corporate debt and reserves, Chile comes out quite well

From 1 to 33

Short Term Obligation/FR

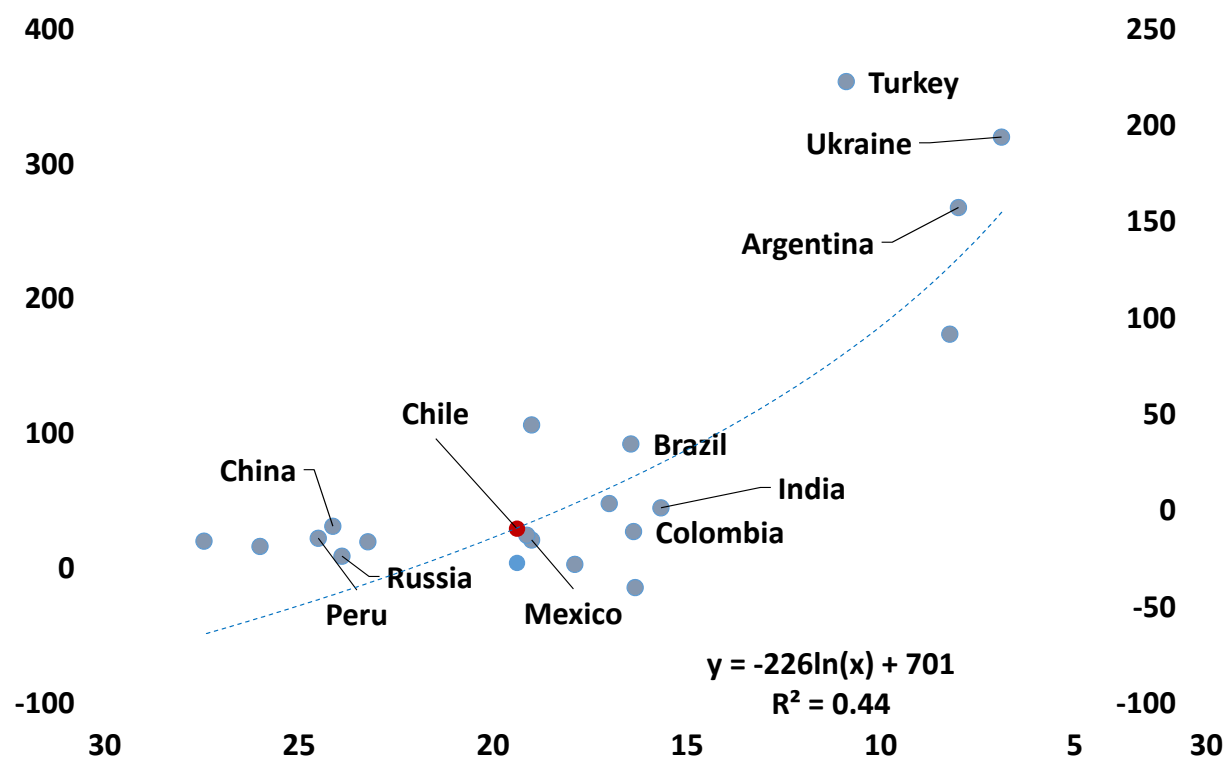
Country	Average Ranking	Moody's	$\pi$	CA Def	Fiscal Def	Gob Debt	External Debt	Foreign Reserves	External Vulnerability	Dollarization
Argentina	6,1	B2	31,8	-4,9	-6,5	57,6	234,6	7,9	182,1	55,2
Egypt	6,7	B3	20,9	-6,3	-11,4	103,0	79,0	11,8	92,9	108,2
Turkey	8,9	Ba3	15,0	-5,6	-2,3	28,3	454,8	9,7	188,8	139,6
Ukraine	9,4	Caa1	10,9	-1,9	-2,4	71,0	115,5	13,9	395,4	67,7
Venezuela	9,6	C	1370000,0	2,0	-31,8	38,9	141,8	1,2	1337,1	0,0
Ghana	10,1	B3	9,5	-4,5	-5,0	71,8	23,8	9,3	142,0	43,9
India	12,1	Baa2	4,7	-1,9	-6,9	71,2	529,3	15,3	71,1	5,1
South Africa	12,8	Baa3	4,8	-2,5	-4,5	53,0	173,3	12,2	94,9	15,5
Brazil	13,1	Ba2	3,7	-0,5	-7,8	84,0	667,1	17,8	43,4	0,0
Dom. Rep.	14,1	Ba3	4,3	-0,2	-3,4	37,2	32,9	8,9	131,7	91,1
Ecuador	14,3	B3	-0,2	-0,3	-5,4	45,4	39,8	1,6	257,8	--
Romania	14,8	Baa3	4,7	-3,4	-2,8	36,8	111,9	18,3	119,9	53,3
Colombia	15,6	Baa2	3,2	-3,3	-3,1	49,4	124,5	14,5	82,6	--
Uruguay	15,8	Baa2	7,6	1,5	-3,5	65,7	41,2	26,3	107,4	72,6
Mexico	16,6	A3	4,8	-1,7	-1,1	54,3	438,6	14,3	47,5	0,0
Indonesia	16,8	Baa2	3,4	-1,7	-2,5	28,8	353,1	12,2	43,6	33,4
Vietnam	16,8	Ba3	3,8	2,5	-4,7	58,5	109,3	21,8	42,6	41,0
Nigeria	16,9	B2	12,4	2,8	-5,8	21,8	38,7	9,9	57,1	31,0
Hungary	17,1	Baa3	2,8	3,2	-2,1	73,6	125,8	19,6	146,5	31,3
Iraq	18,2	Caa1	2,0	2,3	-2,3	59,7	97,4	23,3	106,0	11,7
Paraguay	18,4	Ba1	4,2	-0,8	-0,7	19,5	15,9	18,7	187,8	74,8
Croatia	19,7	Ba2	1,6	3,9	0,6	77,8	48,0	33,3	115,5	106,1
Russia	20,1	Baa3	2,8	2,2	-1,5	15,5	518,1	22,0	48,6	39,5
China	20,3	A1	2,2	1,4	-4,0	47,0	1710,6	25,7	32,7	--
Poland	20,3	A2	2,0	0,3	-1,7	50,6	382,0	20,6	90,3	--
Malaysia	20,4	A3	1,0	3,0	-2,9	54,1	216,6	30,5	146,7	--
Panama	20,5	Baa1	2,0	-4,9	-1,6	37,8	16,7	3,9	20,8	--
Philippines	20,7	Baa2	4,9	-0,8	-0,3	39,9	73,1	22,8	26,8	38,0
<b>Chile</b>	<b>21,6</b>	<b>A1</b>	<b>2,4</b>	<b>-1,5</b>	<b>-2,7</b>	<b>23,6</b>	<b>181,5</b>	<b>24,6</b>	<b>63,3</b>	<b>--</b>
Saudi Arabia	24,0	A1	2,6	2,2	-9,0	17,2	163,8	70,9	14,8	--
Peru	24,3	A3	1,4	-1,1	-3,1	25,4	76,9	28,7	32,7	--
Bulgaria	24,8	Baa2	2,6	4,5	0,9	23,9	40,1	44,1	68,0	51,1
Thailand	25,8	Baa1	0,9	11,2	-0,6	41,9	155,2	42,6	42,6	5,4

(\*) Vul.Externa: short-term external debt (<1 year) as a percentage of reserves. Dollarization: ratio between deposits in foreign currency over the total deposits of the banking system. Inflation corresponds to forecast 2018 (IMF). DCC, DF, DGob, Dext, Reserves corresponds to effective data 2017. Source: IMF, Moody's.

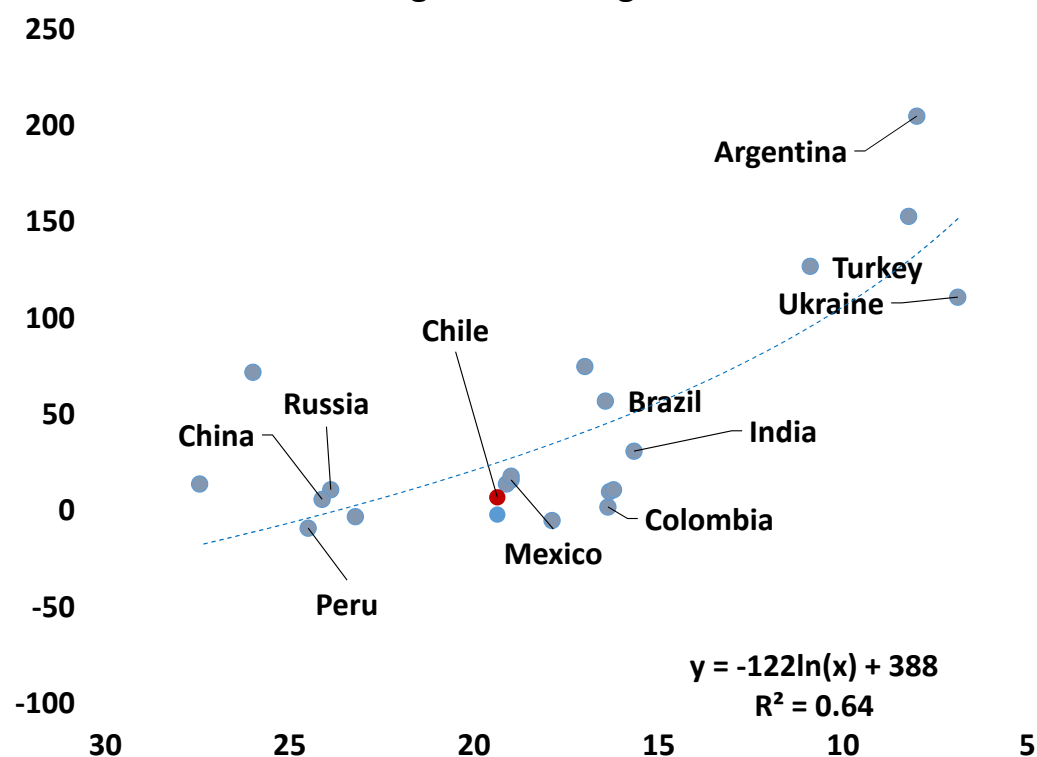
# Macro fundamentals and selloff effects

Understanding the impact on the sell-off suffered by emerging economies in April-August 2018

Rating versus change in **EMBI**



Rating versus change in **CEMBI**



## Response to recent episodes of financial stress

Movements in asset prices in Chile lower than in other emerging markets and concentrated in the currency

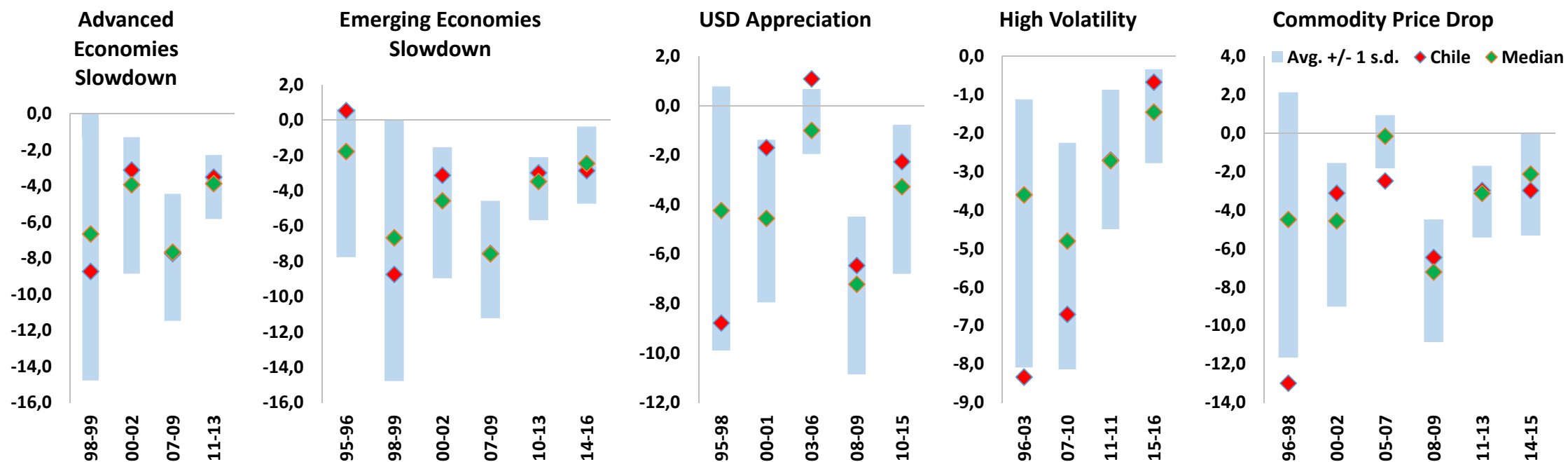
### Financial markets during selected sell-off episodes (1)

	Apr/19 to Oct/04 (Current Sell-off)			Jun/06/2015 to Aug/12/2015 (China)			May/21/2013 to Jul/23/2013 (Taper Tantrum)		
	NEER (%) (2)	CDS (bp)	10-year Sov. rate (bp)	NEER (%)	CDS (bp)	10-year Sov. rate (bp)	NEER (%)	CDS (bp)	10-year Sov. rate (bp)
Argentina	90.16	337.46	--	2.17	0.00	--	4.05	-729.85	--
Brazil	15.12	78.62	157.60	11.61	61.10	87.90	8.54	36.42	88.50
<b>Chile</b>	<b>12.15</b>	<b>-0.74</b>	<b>15.73</b>	<b>8.32</b>	<b>27.02</b>	<b>-6.60</b>	<b>3.70</b>	<b>13.51</b>	<b>29.27</b>
Colombia	10.54	11.74	54.30	16.35	35.79	20.30	1.84	31.26	151.00
Mexico	2.95	6.79	53.20	5.68	11.18	-20.80	1.29	26.50	96.60
Peru	3.22	4.31	45.00	2.17	17.01	63.00	5.01	28.66	93.00
China	9.39	-0.11	5.00	2.86	18.65	5.00	0.11	52.09	33.00
Korea	6.44	25.51	-19.50	6.80	-0.50	-20.10	0.58	3.00	49.00
India	11.84	31.03	52.70	1.14	17.91	-9.00	7.85	--	81.00
Indonesia	10.14	42.95	177.10	3.39	32.88	7.40	4.48	47.69	178.60
Malaysia	6.57	27.31	8.00	7.46	49.17	10.60	5.30	47.87	61.30
Thailand	4.49	-2.29	47.80	4.74	30.44	-27.80	4.12	21.78	42.40
Poland	10.63	18.95	-2.50	1.93	-2.67	-34.90	-1.81	6.62	32.00
Russia	9.44	9.06	8.20	17.27	17.73	--	3.43	27.54	73.20
S. Africa (3)	22.34	67.83	119.40	3.04	21.38	--	1.45	29.37	12.80
Turkey	51.90	220.80	172.90	2.34	22.52	4.40	3.06	66.66	122.10

(1) Changes correspond to end-to-end change, on the dates indicated. (2) Positive sign indicates a depreciation against the US dollar. (3) South Africa rate corresponds to 9-year rate. Source: Bloomberg.

## *Impact of external shocks on emerging economies*

Different shocks have a different impact on emerging economies, Chile more vulnerable to ToT, less to financial volatility



Note: Some episodes may be represented in multiple categories.

# Summing up

- The impact of external shocks on the Chilean economy differ substantially depending on the source of those shocks and transmission channels. Overall, ToT shocks have a larger volatility in financial markets.
- On the trade side, China has gained relevance in the external scenario faced by Chile, not only through trade volumes but also through its influence on the price of commodities, copper in particular.
- Given the larger size and the change in composition of the Chinese economy, smaller changes and domestic policies may have an important impact on commodity markets. This makes especially relevant the current stimulus measures, but also their longer-term sustainability and risks.
- The floating exchange rate regime is an important shock absorber for the Chilean economy, isolating domestic financial markets from external volatility.
- As this regime has consolidated over time, corporations have strengthened their hedging against ER risk and the CBC has lost fear of floating, contributing to anchoring of inflation expectations and creating more room for monetary policy to react.
- Depth of financial markets due to growth in the assets of institutional investors (partly invested abroad) are also supportive of a more resilient and flexible economy.
- Compared to 2007-2008, Chile is now in a stronger position to face external shocks, due to lower exposure to financial and ER risks. Lower strengths on the fiscal side are being addressed by the authorities. The banking sector will further strengthen in the next few years.



4

The domestic economy at the  
start of 2019

## *Economic activity recovered its momentum in 2018*

GDP growth paused in 18.3 to accelerate by the end of the year. GFCF speeded up throughout the year

### Economic Growth

(annual change, percent)

	2018 shares %	2016	2017	18.1	18.2	18.3	18.4	2018
<b>Domestic demand</b>	99.9	1.8	2.9	3.9	6.1	4.4	4.5	4.7
<b>Domestic demand (w/o inventory change)</b>	98.5	2.3	1.9	3.3	4.7	3.9	3.7	3.9
Total consumption	77.2	3.4	3.2	3.5	4.6	3.7	3.1	3.7
Private consumption	63.0	2.6	3.0	3.7	4.9	4.1	3.6	4.0
Government consumption	14.2	7.2	4.4	2.7	3.1	1.9	1.3	2.2
Gross fixed capital formation	21.3	-1.3	-2.7	2.5	5.3	4.9	5.6	4.7
Change in Inventories / GDP	1.4	-0.5	0.5	0.7	1.0	1.1	1.3	1.3
Goods and services exports	28.8	0.5	-1.1	8.2	7.2	1.3	3.3	5.0
Goods and services imports	28.7	0.9	4.7	5.6	10.4	8.0	6.6	7.6
<b>GDP</b>	100.0	1.7	1.3	4.7	5.3	2.6	3.6	4.0
q/q (1)				1.1	0.6	0.2	1.3	
<b>GDP excluding mining</b>	90.2	2.0	1.6	3.7	5.3	2.9	3.7	3.9
q/q (1)				1.1	1.0	0.1	1.1	

(1) Quarterly growth of the seasonally adjusted series.

Source: Central Bank of Chile.



# Current account deficit increased to 3.1% of GDP

## Retained FDI profits funded stronger capital imports

### Balance of Payments

(US\$ million)

	2017	2018
<b>Current account</b>	<b>-5,965</b>	<b>-9,157</b>
Goods and services	3,965	673
Exports of goods and services	79,054	85,725
Imports of goods and services	75,090	85,052
Income	-11,379	-12,241
Investment income	-10,953	-11,735
Income from direct investment	-10,519	-11,663
Income from portfolio investment	-117	557
Income from other investment	-317	-629
Current transfers	1,450	2,411
<b>Capital account</b>	<b>67</b>	<b>42</b>
<b>Lending / financing</b>	<b>-5,897</b>	<b>-9,115</b>

<b>Current account as % of GDP</b>	<b>-2.2</b>	<b>-3.1</b>
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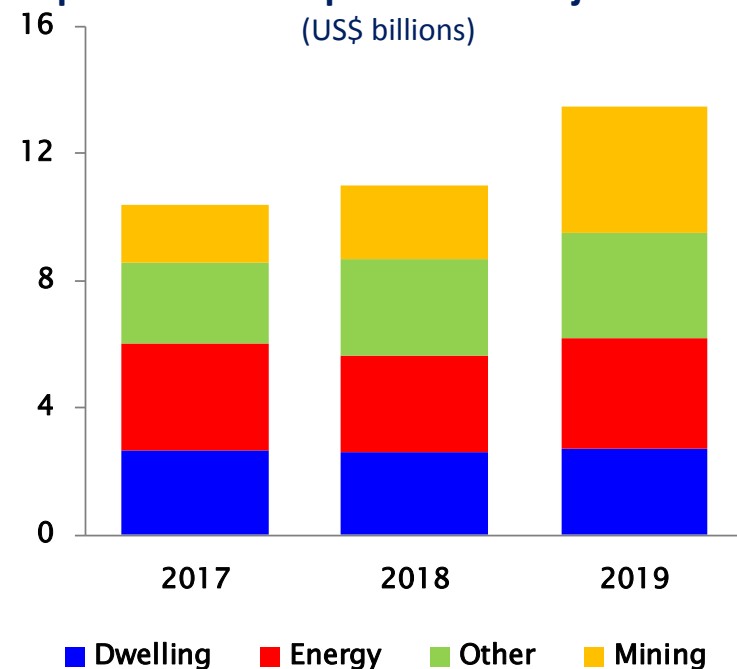
	2017	2018
<b>Financial account</b>	<b>-4,670</b>	<b>-8,076</b>
Direct investment	-680	-4,134
Assets	5,172	1,949
Liabilities	5,852	6,082
Reinvestment of earnings	4,821	5,599
Debt instruments	-1,039	-1,548
Portfolio investment	2,937	-1,549
Financial derivatives	52	912
Other investment	-4,228	-4,701
Assets	92	-378
Liabilities	4,320	4,323
Reserve assets	-2,750	1,397
<b>Errors and omissions</b>	<b>1,227</b>	<b>1,040</b>

- Significant growth of imports are responsible for the increased deficit.
- Growth in reinvestment of earnings contributes towards financing the deficit.

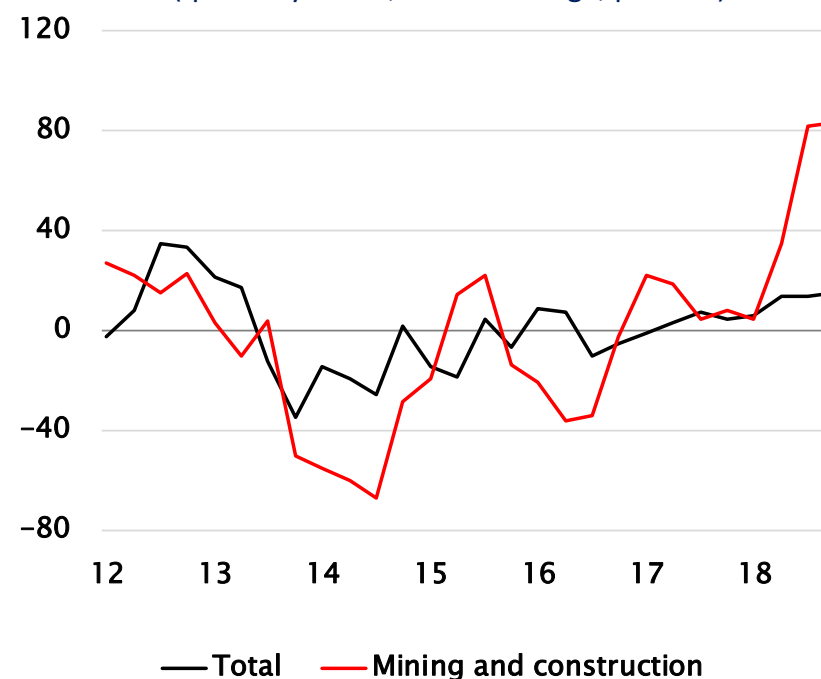
## Positive outlook for investment

Projected investment increases significantly as does the imports of capital goods

**Total Investment According to  
Capital Goods Corporation's Project Survey**



**Imports of Capital Goods**  
(quarterly series, annual change, percent)



Source: 2018 Q4 Investment Survey by Capital Goods Corporation (CBC) and Central Bank of Chile.

# Inflation

## CPI excluding food and energy increases its participation in new CPI basket

### CPI Weights comparison (percentage)

	2013 CPI Basket Weights	2018 CPI Basket Weights	Δ 2018 CPI Basket Weights - 2013 CPI Basket Weights
<b>CPI Excluding Food and Energy</b>	<b>72.3</b>	<b>73.2</b>	<b>0.87</b>
Goods	28.6	27.3	-1.35
Services	43.6	45.9	2.22
<b>CPI Food</b>	<b>19.1</b>	<b>19.3</b>	<b>0.24</b>
Fruits and Vegetables	2.9	2.8	-0.10
Other Food Items	16.1	16.5	0.34
<b>Energy</b>	<b>8.7</b>	<b>7.5</b>	<b>-1.12</b>
Electricity	2.7	2.3	-0.42
Fuels	6.0	5.3	-0.70
<b>IPC</b>	<b>100</b>	<b>100</b>	<b>0.00</b>

Total products 2013 CPI Basket = 321



Total products 2018 CPI Basket = 303

### New CPI Composition:

- Some products were merged. 29 products from 2013 CPI basket were involved.
- Three products were eliminated (men's suits, soil and fertilizer, and legal advice services)
- A new product was added: online subscription service.

# Inflation

The new CPI includes some adequate methodological changes. It delivers a lower measure of inflation

## Changes at product level

### ✗ Deleted products

- Men suits
- Soil and fertilizer
- Legal advice services

### ✓ New products

- Online subscription services

### ➔➔ Merged Products

- 29 products were merged in 13 products

## Methodological changes

### Use of Hedonic models

- Clothing and footwear
- Wireless telephone services (Mobile phone services)
- Telecommunications Services (pack)

### Introduction of season calendar by destination

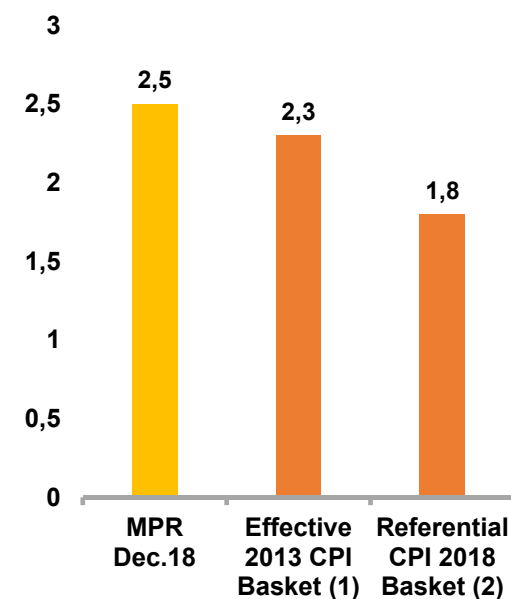
- Package Holidays

### Increase in data collection frequency

- Health Division

## CPIEFE at December 2018

(annual variation, percentage)

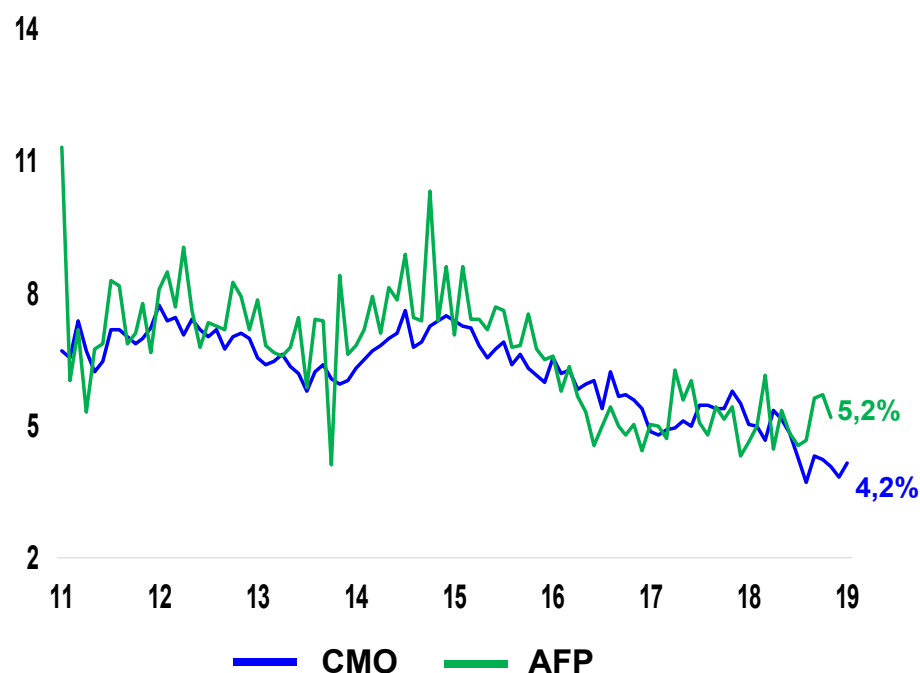


## Labor Market

Nominal wages growing around 4-5%. Employment expanding between 1% and 3% with some differences between surveys and administrative data

### Nominal wages dynamics (1)

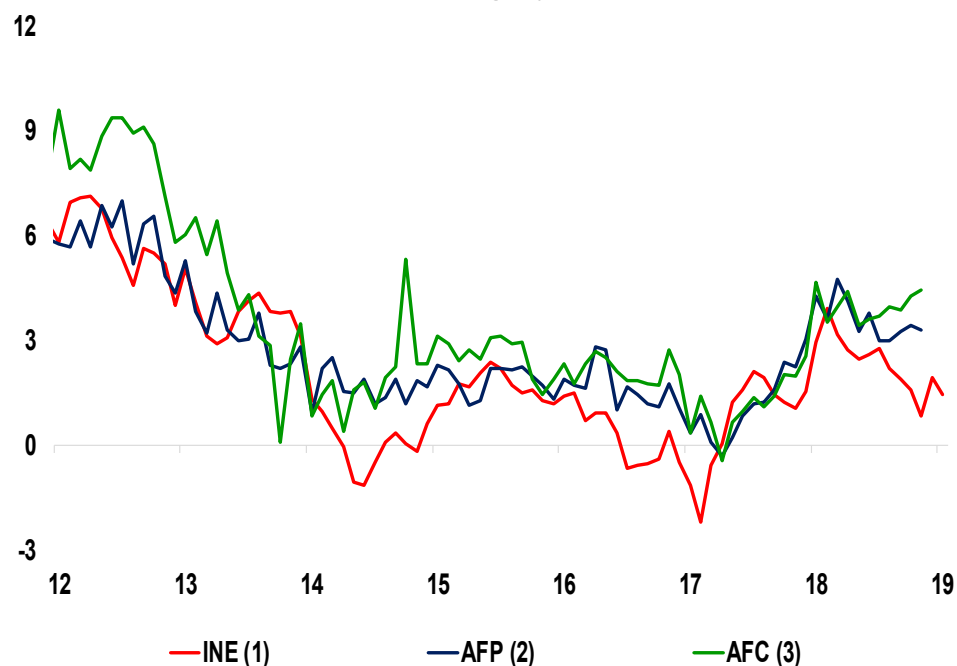
(annual change, percent)



(1) AFP: Average taxable income. Last data available: november 2018.  
Sources: Central Bank of Chile, National Statistic Institute y Superintendence for Pensions.

### Employment dynamics

(annual change, percent)

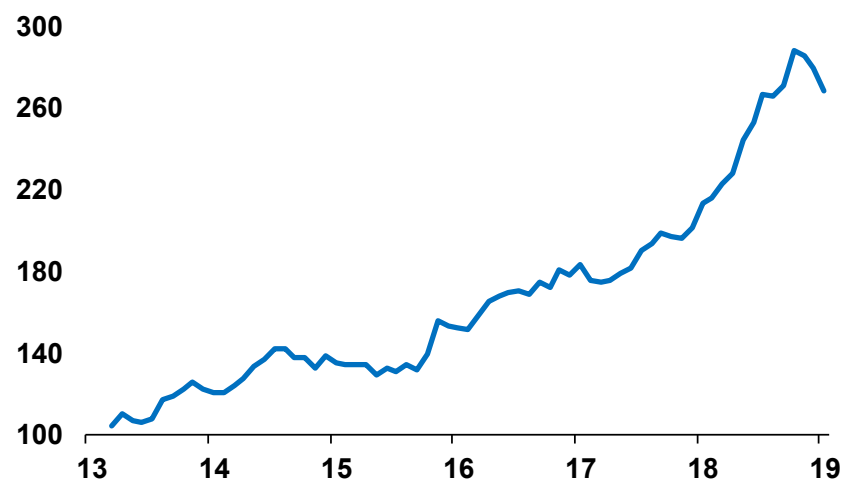


(1) Workers with social security contributions. (2) Number of contributors to the Chilean Private Pension System. Last data available: november 2018. (3) Number of contributors who have unemployment insurance. Last data available: november 2018.  
Sources: Central Bank of Chile, National Statistic Institute y Superintendence for Pensions.

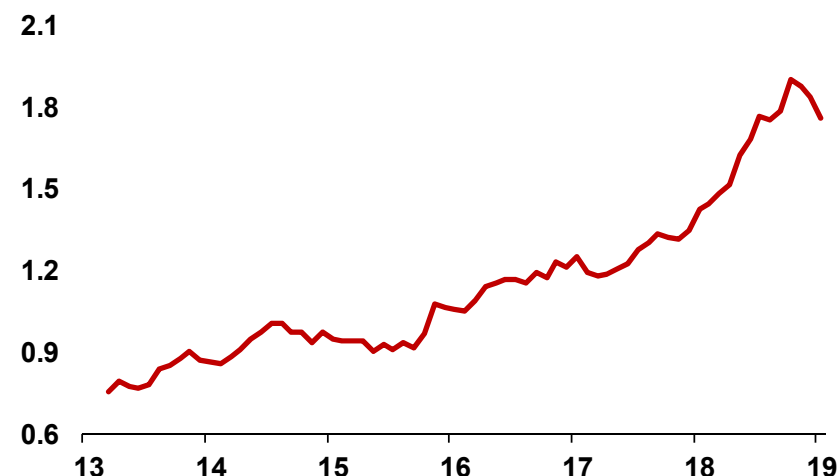
## Labor Market

Immigrant participation in labor markets has increased over the last 3 years

**NES: Immigrant Labor Force**  
(thousands of people)



**NES: Immigrant Participation Rate in EAP (1)**  
(percentage)



The migration process has caused a significant increase in the labor supply. Data from NES (2) indicates that represents 1,4% of the population in 2017 and 2,0% of the labor force (around 179.000 people). If we consider the data from 2017 Census, immigrants represent 4,4% of the population in 2017 and 6,3% of the labor force.

These information implies the following: On one hand, if we consider the data from NES (2) immigrants have a labor participation rate of 76,8% higher than Chileans (59,4%). On other hand, considering data from 2017 Census, the participation rate increases to 80,2%, a rate higher than Chileans (61,2%).

(1) Total Economically Active Population. (2) Results from NES for the following period: March 2017 to May 2017.  
Sources: Central Bank of Chile and National Statistic Institute

# Summing up

- The domestic economy strengthened since mid-2017. This is reflected in the rebound of growth to 4% in 2018.
- GFCF has been an important driver of growth. It accelerated during 2018 and this impulse is likely to persist in 2019.
- At the same time, some positive factors have operated on the supply side. The most important being the immigration wave of the last three years.
- 2019 is also starting with lower inflation pressures measured by the new CPI.
- CBC has committed to normalize monetary policy in a gradual and cautious way.
- This should lead to pay close attention to:
  - The evolution of external conditions, both on the real and financial side
  - The degree of slack in the labor market.
  - Inflation dynamics with the new CPI measure.
- Part of these issues will be covered by the March Monetary Policy Report (IPoM). Structural parameters, including estimates for trend GDP and neutral interest rate will be updated in the June IPoM.



# The external outlook and policy options for emerging economies



Mario Marcel  
*Governor*  
*Central Bank of Chile*

*One on One Seminar, organized by LarraínVial, Santiago, March 19, 2019*