

Report on the Latin American economy. Second half of 2017



20 October 2017

Latin America is now participating in the cyclical improvement in global activity. The weighted average growth rate of GDP in the region's six main economies stood fairly close to estimated potential growth. Moreover, the results across the countries show a degree of convergence. Broadly, there has been a significant reduction in inflation rates which has enabled central banks – with the odd exception, such as Argentina and Mexico – to cut policy rates. To offer a deeper assessment of the monetary policy stance in the main economies with an inflation target, the Report includes a thematic section in which a Taylor rule is constructed on the basis of estimated natural interest rates. Furthermore, the Latin American economies have continued to adjust their external balances to a new scenario of low commodities prices, but fiscal adjustment has not progressed to the same extent. Nonetheless, the region's financial markets have performed very favourably and currencies have tended to appreciate.

The higher-frequency indicators show that the dynamism of activity has run into the second half of the year. Nonetheless, the continuity of the recovery in the region is subject to certain downside risks. Chief among these in the external environment is the possible tightening of financial conditions on international markets. Risks persist too in the case of possible changes in tack in US policies, principally towards greater trade protectionism in the context of the negotiation of the North American Free Trade Agreement, to which Mexico is a signatory. In this respect, the second thematic section of this report analyses the factors behind the recent strength of private consumption in Mexico, against a relatively unfavourable background. On the internal front in the region, where there is a very busy electoral calendar until late 2018, the risks appear to be more balanced. In the medium term, the countries in the region remain subject to modest growth prospects.

Introduction

Since the start of 2017 the global economic recovery has been broad-based, proving more dynamic than expected. Notwithstanding, there has been an absence of inflationary pressures, including in countries with low or non-existent output gaps. In the United States, monetary policy has held on a path of very gradual normalisation. The financial markets, against a background of high liquidity, have continued to be marked by low volatility levels and high appetite for risk, which has been conducive to capital flows being directed towards the emerging economies.

Latin America is now participating in the cyclical improvement in global activity. On National Accounts data, the weighted average growth of GDP in the region's¹ six main economies rose from 0.2% quarter-on-quarter in the second half of 2016 to 0.6% in the first half of 2017, a figure fairly close to the estimated potential growth for this set of countries. In year-on-year terms, growth was 1.2% in 2017 Q2 after having posted negative rates in the second half of the previous year. Country-by-country results show some convergence in growth rates, with a recovery in Argentina and Brazil, and a slowdown in Chile, Colombia and Peru, while in Mexico the dynamism of activity has held firm.

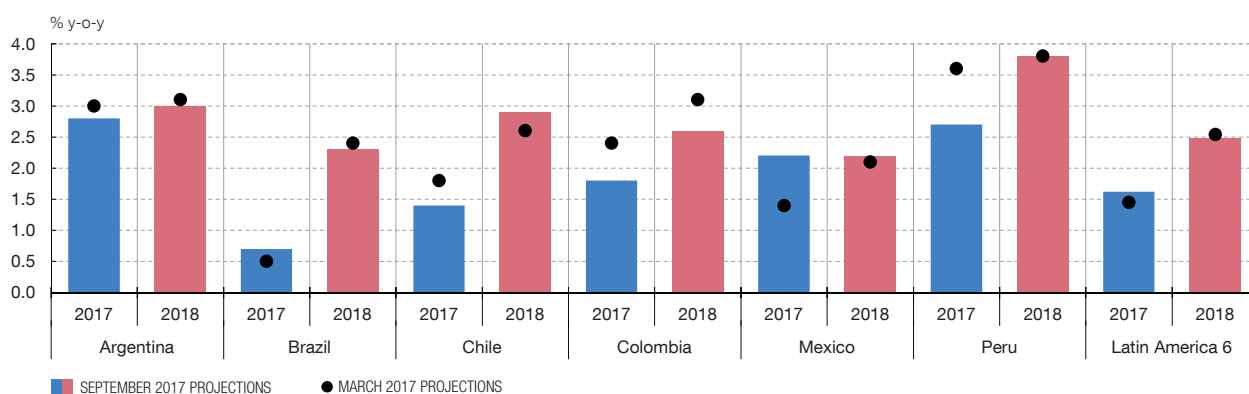
This improvement in growth has generally been compatible with a substantial reduction in inflation rates, which has enabled central banks to cut policy rates, in some cases most significantly. Mexico alone continued to tighten its monetary policy in the first half of the year, against the backdrop of uncertainty over the direction US economic policies would take, and of rising inflation largely associated with the delayed impact of the depreciation of the peso; however, in the coming quarters there will foreseeably be declines in the inflation rate like those experienced in other countries in the region. On a separate note, the Latin American economies have continued to adjust their external balances to a new scenario of lower commodities prices than those observed pre-2014. In contrast, the fiscal adjustment has not progressed to the same extent, despite which financial markets in the region have performed very favourably and currencies have tended to appreciate.

The higher-frequency indicators show that the dynamism of activity has run into Q3, underpinned by lower interest rate levels and by the global recovery. As a result, consensus macroeconomic forecasts for the aggregate of the six main economies in the region (excluding Venezuela, given the lack of official data) point to growth of 1.6% in 2017, following the decline of -0.6% estimated for 2016; moreover, an additional pick-up – of up to 2.2% – is expected in 2018. Country by country, mention should be made of the contribution of Brazil and Argentina to this improvement in the aggregate growth figures (see Chart 1).

The continuity of the recovery in the region is subject to certain downside risks. The main such risk in the external environment stems from the possible tightening of financial conditions on international markets and from an increase in global risk aversion, which reverses capital inflows. The possible triggers for this scenario would include a swifter-than-expected tightening of US monetary policy, the materialisation of adverse geopolitical events or a potential sharp adjustment in the Chinese economy. Risks also persist in respect of possible turnarounds in US policies, mainly towards greater trade protectionism, in the context of the negotiation of the North American Free Trade Agreement (NAFTA). On

¹ Brazil, Mexico, Argentina, Colombia, Chile and Peru.

2017 AND 2018 GROWTH PROJECTIONS IN LATIN AMERICA



SOURCE: Latin American Consensus Forecasts.

the internal front in the region, risks appear to be more balanced. In the political arena, there is a very busy electoral calendar until late 2018, with elections in almost every country, which could give rise to changes in the degree of support to adjustments outstanding, especially in the fiscal realm. But fresh impulses to structural reforms that raise potential growth in the region's economies cannot be ruled out; that said, as has been seen in the case of Mexico, the positive effects might only emerge in the medium term. In the short term, there is a possibility that the output gap will close more rapidly than anticipated in some countries, such as Brazil and Chile. The following section of this Report analyses in greater detail the main features of recent economic developments in and the outlook for the principal economies in the region.

More generally, the recovery in Latin America in the recent quarters illustrates the significant contribution of the monetary policy and exchange rate flexibility frameworks with which the main economies in the region have equipped themselves to take advantage of the current global expansionary cycle. To offer greater depth on this aspect, this Report includes a thematic section which assesses the monetary policy stance in the main economies with inflation targets, drawing on a Taylor rule constructed on the basis of the estimated natural interest rates of these countries. In the medium term, however, the countries in the region remain subject to modest growth prospects, in a scenario of less favourable terms of trade than in the past, as previously indicated, and of weak productivity growth. This emphasises the importance of those policies geared to enhancing the efficiency and quality of employment, but also the significance of sound and sustainable growth in domestic demand. The second thematic section of this Report analyses the factors behind the recent strength of private consumption in Mexico, against a relatively unfavourable background.

Recent developments in the Latin American economy

THE EXTERNAL ENVIRONMENT AND DEVELOPMENTS ON FINANCIAL MARKETS

The pick-up in the global economy intensified during 2017, with positive surprises in activity and greater dynamism in international trade. This improvement, though modest, is proving fairly generalised, in the advanced and emerging economies alike, which has led to mild upward revisions in short-term growth forecasts in recent months. In the case of the United States, where the cycle is ahead relative to other countries, there have been downside revisions, as the expansionary fiscal measures announced by the new US administration have yet to materialise. Despite this improvement in activity, which has helped close the output gaps in numerous countries, low inflation rates persist. Against

this background, the withdrawal of monetary stimuli by the Federal Reserve, at a more gradual pace than in previous cycles, has not surprised the financial markets.

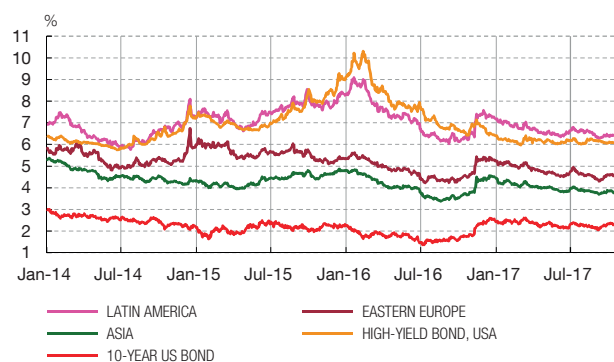
The conditions on global financial markets during the period analysed, running from mid-April to mid-October, have been very benign. There was an across-the-board rise on stock markets (on a greater scale in the United States, where price-earnings ratios stood 15% above their historical average), a decline in long-term interest rates (especially in the United States) to levels close to those at the start of the year, and a further narrowing of credit spreads in the riskier segments, including the emerging economies (see Chart 2.1). Adding to this was the continuation of very low implicit volatilities in most assets, which reacted more mildly than on previous occasions to the rise in geopolitical tensions (see Chart 2.2). On the foreign exchange markets, the keynote was the depreciation of the dollar as from July, as the divergences in monetary policy expectations across the advanced economies diminished. This trend reversed, in part, towards late September, following the Federal Reserve's FOMC meeting, which issued a somewhat more restrictive message than expected, and the unveiling of a proposed joint fiscal reform by the Trump Administration and the Republicans in the two legislative chambers. However, the rises in sovereign spreads, stock market losses and currency depreciations were very mild, and as from the second week of October the previous trends prevailed anew.

In the case of the emerging markets, the setting of low volatility and appetite for risk increased the attractiveness and profitability of carry trade (see Chart 2.3) and boosted portfolio capital inflows (see Chart 2.4), the appreciation of currencies, declines in sovereign spreads (in some cases to levels close to all-time lows) and a strong increase on stock markets. Likewise, bond issues grew significantly, more than 30% up from January to September on the same period a year earlier. Notable among these placements were those by Chinese and Hong Kong real estate companies, following the macroprudential measures adopted by the Chinese authorities to restrict the growth of domestic credit, and the return to the markets of governments or companies from countries with a low credit rating. As in previous quarters, the demand for this type of asset far outpaced supply. Such behaviour came about, moreover, in spite of the increase in political risk in some emerging markets and of the sovereign downgrades by one or more of the three main agencies (Chile, Venezuela, Ecuador, Turkey, China, Hong Kong, South Africa and Saudi Arabia have seen their sovereign ratings downgraded since the start of the year).

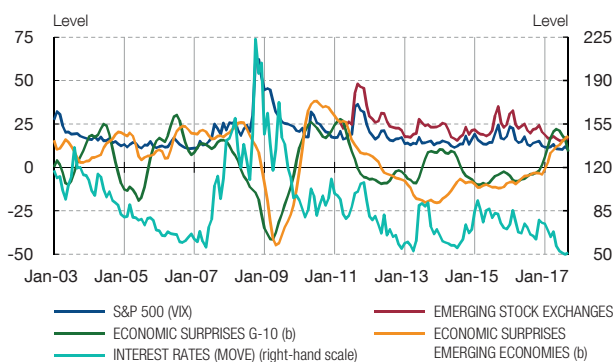
The Latin American markets were among those that most benefited from this search for yield, as their domestic interest rates were at relatively high levels. The financial stress indicators stood at low levels (see Chart 2.5), with some reactions stemming from idiosyncratic political tensions, which were rapidly reversed. The Latin American MSCI increased, from May to September 2017, by 15%, a similar movement to that in the related index for Asia (14%) and above that for Eastern Europe (5%) (see Chart 2.6). The biggest increases were posted on the Peruvian and Brazilian stock market, with the latter the market that saw the biggest gain from end-April among the large emerging markets, and this despite the further deterioration of the political environment, the paralysis in some of the reforms announced following the change of government and the slippage from fiscal objectives. Conversely, the Mexican stock exchange increased only slightly from May, weighed down by the announcement of policies by the new US Administration, despite the high profitability of its carry trade (see Chart 2.3) and the increase in oil prices since late August.

Sovereign spreads narrowed as from late April in the Latin American countries, in line with the movements on the other emerging markets, with the exception of the increase

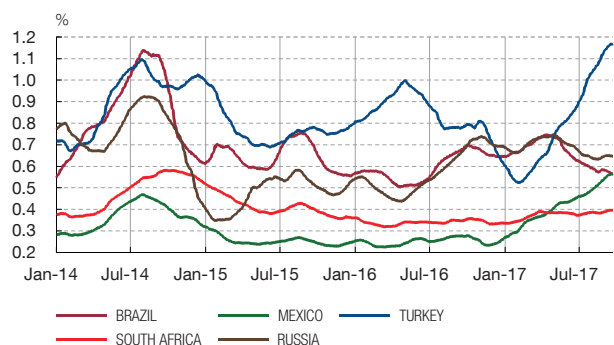
1 INTEREST RATES (a)



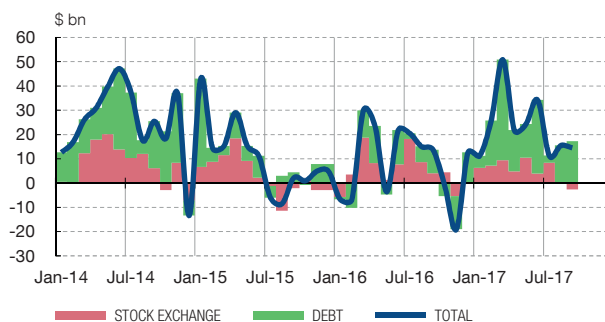
2 VOLATILITY AND ECONOMIC SURPRISES



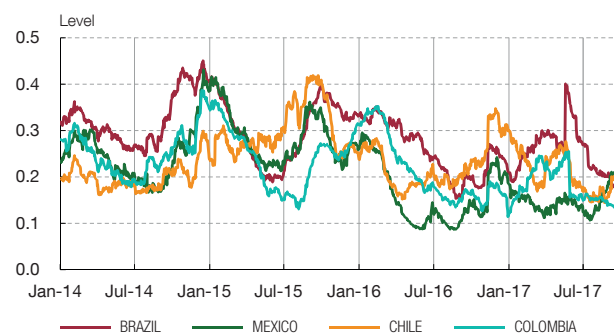
3 CARRY-TRADE YIELD INDICATOR (c)



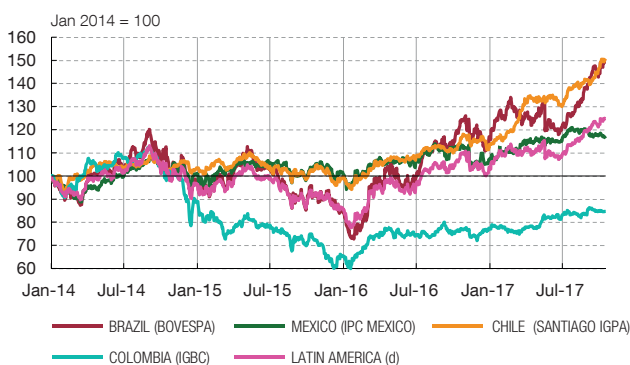
4 PORTFOLIO CAPITAL FLOWS INTO EMERGING MARKETS



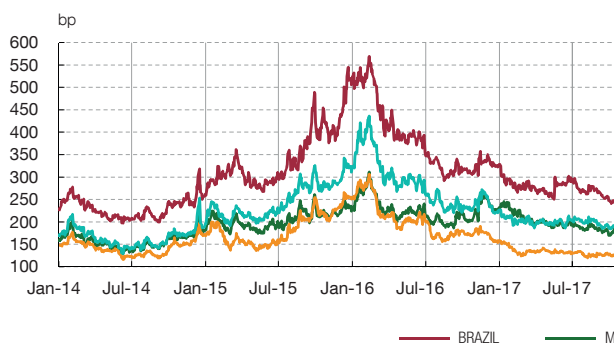
5 FINANCIAL STRESS INDICES



6 STOCK EXCHANGE INDICES



7 SOVEREIGN SPREADS



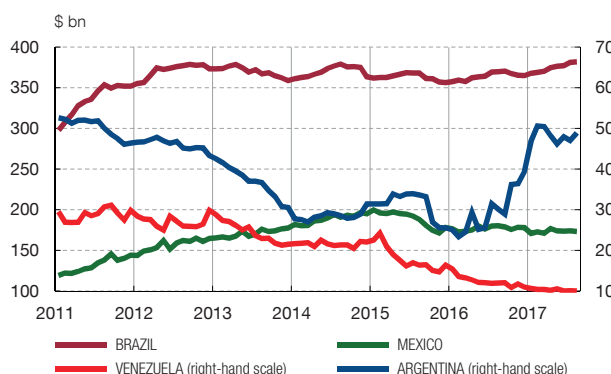
8 NOMINAL EXCHANGE RATE AGAINST THE DOLLAR



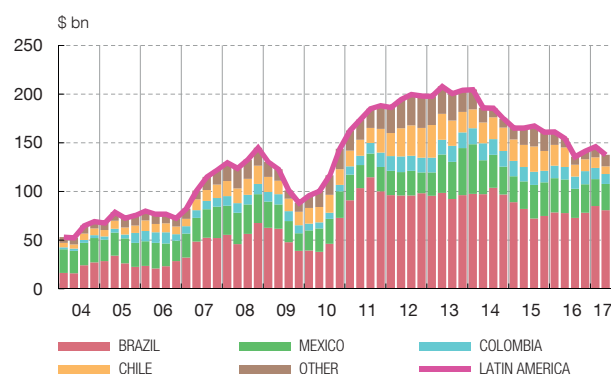
SOURCES: Banco de España, Datastream, IIF and JP Morgan.

- a Latin American, Asian and Eastern European rates have been constructed by adding together the US 10-year government bond yield and EMBI spreads.
b Citigroup economic surprise index.
c Short-term interest rate spread over the United States standardised by the volatility of the one-month forward exchange rates of each currency against the dollar.
d MSCI Latin America index in local currency.

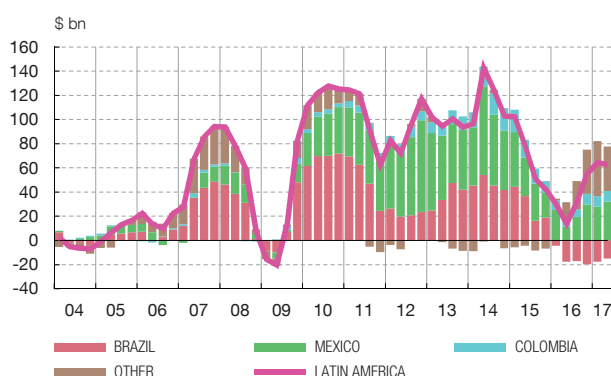
1 LATIN AMERICA: INTERNATIONAL RESERVES



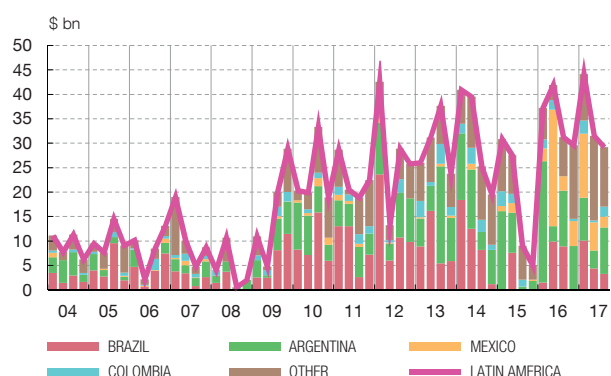
2 LATIN AMERICA: DIRECT INVESTMENT FLOWS (a)



3 LATIN AMERICA: PORTFOLIO INVESTMENT FLOWS (a)



4 LATIN AMERICA: FIXED-INCOME ISSUES ON INTERNATIONAL MARKETS



SOURCES: Datastream, Dealogic, IIF, JP Morgan, IMF and national statistics.

a Four-quarter cumulated data.

in Venezuela's risk premium (from 2,100 bp in May to 3,200 bp in September). The fall in Venezuela's international reserves to historical lows (scarcely \$10 billion -- see Chart 3), the deterioration in the political atmosphere, the sanctions imposed by the United States and the decline in activity, along with skyrocketing inflation rates, led to further cuts in its credit rating and prompted the markets to discount a very high likelihood of default, including in the shortest-dated terms. In the other countries, spreads declined by between 40 bp (Argentina) and 15 bp (Peru), and in some cases lows not experienced since summer 2014 following the first collapse in oil prices (see Chart 2.7) were seen. Finally, the Latin American currencies appreciated against the dollar as from early May, and more markedly so as from July, with the exception of the Argentine peso (see Chart 2.8). The nominal appreciation observed since early 2017 has translated into a real effective appreciation, which is especially notable in Mexico's case.

Foreign direct investment (FDI) inflows into the region diminished notably in the first half of 2017, resulting in a figure \$5.8 billion down on the first six months of 2016 (see Chart 3.2). Country by country, the sharpest falls were in Mexico, Colombia and, especially, Chile, which posted a slightly negative figure for the first time since 1976. Conversely, FDI in Brazil increased thanks to the financial and electricity generation sectors. Portfolio investment inflows in the first six months were almost \$10 billion up on the same period in

the previous year. Argentina (\$6.4 billion up on the first half of 2016) and Mexico benefited most, while in Brazil capital outflows from the domestic debt market eased. On the primary markets there was a slight decline in cumulative placements in the first nine months of the year compared with the same period in 2016 (see Chart 3.4), owing to the moderation in the summer months. The lower placements by Argentina and, especially, Mexico were in contrast to the increase seen in less habitual countries, such as Chile (\$10.6 billion more). There was practically no change in financing conditions in the period analysed. In terms of currencies, placements in euro fell to 7% of the total, compared with 13% in the same period in 2016. Lastly, portfolio investment inflows enabled international currency reserves to continue building up, reaching new historical highs in some cases (see Chart 3.1), after having fallen over the course of 2016.

ACTIVITY AND DEMAND

Aggregate GDP growth in the main Latin American economies in the first two quarters of 2017 (with quarter-on-quarter rates of 0.7% and 0.5%, respectively) was above that recorded in the second half of 2016 (0.2%). The mild slowdown in Q2 is due to the exceptional performance of the Brazilian economy in Q1 (posting quarter-on-quarter growth of 1%), driven by agricultural activity (see Table 1 and Chart 4). In any event, the growth rates of the countries in the region continue to evidence high heterogeneity. Thus, while Brazil emerged from recession, as Argentina had done in the second half of 2016, the Mexican economy posted slightly lower growth rates than those in the second half of 2016, and activity in Chile, Colombia and Peru picked up in Q2 following the weakness shown in the two previous quarters. Despite no official data being available, all indicators suggest the strong recession in Venezuela has continued.

In Brazil, private consumption recovered, assisted by the strong decline in inflation (which allowed an increase in real wages), by the reduction in policy rates (by 600 bp since October 2016) and, temporarily, by the Government's decision to allow households to access their pension funds. Investment, however, continued to contract (by almost 30% in the cycle), as did government consumption. The external sector made a positive contribution to growth in Q2, owing to the contraction in imports.

The Mexican economy offered a favourable surprise, as a greater slowdown in activity had been expected owing to the uncertainty generated following the US presidential election and to the more restrictive fiscal and monetary policy stances. Specifically, quarter-on-quarter growth was 0.7% and 0.6% in the first two quarters of the year, respectively. In terms of components, private consumption – which is analysed in greater detail in the final section of this article – was notably resilient. This behaviour is related to the increase in remittances from the United States (which are at historical highs), the growth in lending to the private sector (which has been easing but is still growing at a double-digit rate) and the improvement in the labour market. So far, the effects – in principle transitory – of the surge in inflation and its impact on real wages are not bearing significantly on consumption. Conversely, the remaining domestic demand components are evidencing persistent weakness.

The Argentine economy, which emerged from recession in the second half of 2016, also began to post positive year-on-year growth rates in the first half of the year. Domestic demand grew at a rate of close to 5% year-on-year in Q2, with positive contributions to the growth of all the components that showed growing strength. However, the contribution of net external demand was negative, owing partly to the decline in exports.

In Chile, the downturn in activity reached a turning point in Q1. The subsequent improvement was attributable to consumption, private and government alike, since

	2015	2016	2015		2016				2017		2017
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	September
GDP (quarter-on-quarter rate) (a)											
Latin America 6 (b)			-0.2	-0.1	-0.3	-0.3	0.2	0.2	0.7	0.5	
Argentina			0.1	-0.8	-0.9	-2.0	0.0	1.0	1.2	0.7	
Brazil			-1.4	-0.9	-1.0	-0.4	-0.6	-0.5	1.0	0.2	
Mexico			0.6	0.4	0.4	0.1	1.0	0.7	0.7	0.6	
Chile			0.6	0.5	0.7	-0.3	0.8	-0.4	0.1	0.7	
Colombia			1.2	0.5	0.1	0.7	-0.1	0.9	-0.3	0.7	
Peru			0.3	2.9	-0.1	0.6	1.9	0.1	0.2	0.7	
GDP (year-on-year rate)											
Latin America 6 (b)	-0.1	-0.6	-0.2	-0.9	-1.0	-0.7	-0.6	-0.2	0.9	1.2	
Argentina	2.7	-2.3	3.8	2.7	0.6	-3.7	-3.7	-1.9	0.4	2.7	
Brazil	-3.8	-3.6	-4.5	-5.8	-5.4	-3.6	-2.9	-2.5	-0.4	0.3	
Mexico	2.7	2.3	2.8	2.5	2.2	2.6	2.0	2.3	2.8	1.8	
Chile	2.3	1.6	2.4	1.9	2.5	1.7	1.8	0.5	0.1	0.9	
Colombia (a)	3.1	2.0	3.2	3.4	2.5	2.5	1.2	1.6	1.2	1.3	
Peru	3.3	4.0	3.3	4.6	4.6	3.8	4.7	3.0	2.1	2.5	
CPI (year-on-year rate)											
Latin America 5 (b)	6.1	6.1	6.3	6.7	6.8	6.3	6.1	5.3	4.7	4.4	3.9
Brazil	9.0	8.7	9.5	10.4	10.1	9.1	8.7	7.0	4.9	3.6	2.5
Mexico	2.7	2.8	2.6	2.3	2.7	2.6	2.8	3.2	5.0	6.1	6.3
Chile	4.3	3.8	4.8	4.1	4.6	4.2	3.5	2.8	2.8	2.3	1.4
Colombia	5.0	7.5	4.9	6.4	7.7	8.2	8.1	6.1	5.1	4.3	4.0
Peru	3.5	3.6	3.8	4.1	4.5	3.6	3.0	3.3	3.4	3.2	2.9
Budget balance (% of GDP) (c)											
Latin America 6 (b)	-6.1	-5.7	-5.4	-6.1	-5.7	-5.6	-5.6	-5.7	-5.3	-5.7	
Argentina	-3.9	-4.5	-3.6	-3.9	-3.2	-3.6	-3.6	-4.5	-4.7	-5.4	
Brazil	-10.2	-9.0	-9.0	-10.2	-9.6	-9.8	-9.3	-9.0	-9.1	-9.5	
Mexico	-3.0	-3.1	-2.6	-3.0	-3.0	-2.0	-2.7	-3.1	-1.4	-2.0	
Chile	-2.2	-2.7	-2.1	-2.2	-1.7	-1.8	-2.5	-2.7	-3.4	-2.9	
Colombia	-3.1	-3.8	-2.8	-3.1	-3.1	-3.2	-3.9	-3.8	-4.2	-4.0	
Peru	-2.9	-2.6	-2.1	-2.9	-3.2	-3.2	-3.2	-2.6	-2.8	-3.2	
Public debt (% of GDP)											
Latin America 6 (b)	51.1	54.9	50.6	51.1	51.6	53.4	54.3	54.9	54.9	—	
Argentina	35.3	50.6	38.7	35.3	38.8	41.6	44.7	50.6	50.1	—	
Brazil	65.5	69.9	63.6	65.5	66.3	67.5	69.9	69.9	71.2	73.1	
Mexico	46.2	50.8	45.6	46.2	47.9	48.0	49.3	50.8	48.7	47.5	
Chile	17.4	21.3	16.7	17.4	18.4	19.4	20.4	21.3	21.6	23.1	
Colombia	41.4	42.5	43.1	41.4	42.3	41.7	41.8	42.5	42.9	43.1	
Peru	23.3	23.8	21.1	23.3	22.8	22.2	22.7	23.8	22.9	24.1	
Current account balance (% of GDP) (c)											
Latin America 6 (b)	-3.3	-2.1	-3.5	-3.3	-2.9	-2.6	-2.3	-2.0	-2.0	-1.7	
Argentina	-2.7	-2.7	-2.3	-2.7	-2.8	-2.9	-2.8	-2.7	-2.9	-3.4	
Brazil	-3.3	-1.3	-4.0	-3.3	-2.5	-1.8	-1.4	-1.3	-1.1	-0.7	
Mexico	-2.5	-2.2	-2.3	-2.5	-2.5	-2.6	-2.5	-2.2	-2.2	-1.7	
Chile	-1.9	-1.4	-1.6	-1.9	-2.0	-2.2	-1.9	-1.4	-2.0	-2.2	
Colombia	-6.4	-4.3	-6.7	-6.4	-6.0	-5.6	-4.9	-4.3	-4.2	-4.1	
Peru	-4.8	-2.7	-4.7	-4.8	-4.5	-4.3	-3.6	-2.7	-2.0	-1.3	
External debt (% of GDP)											
Latin America 6 (b)	34.4	37.0	32.3	34.2	37.0	38.6	38.0	36.9	36.0	—	
Argentina	26.5	34.5	27.7	26.5	29.1	31.1	33.1	34.6	36.0	—	
Brazil	37.0	37.3	33.3	36.5	39.8	41.9	40.0	37.1	34.9	33.4	
Mexico	25.9	30.1	24.9	25.9	28.5	29.7	29.9	30.1	30.5	30.5	
Chile	65.1	66.3	63.8	65.0	67.7	69.3	68.3	66.2	64.2	—	
Colombia	37.9	42.5	34.7	37.8	40.9	42.8	42.0	42.4	40.9	40.0	
Peru	38.1	38.2	37.0	38.1	39.5	39.1	38.9	38.2	37.5	38.4	

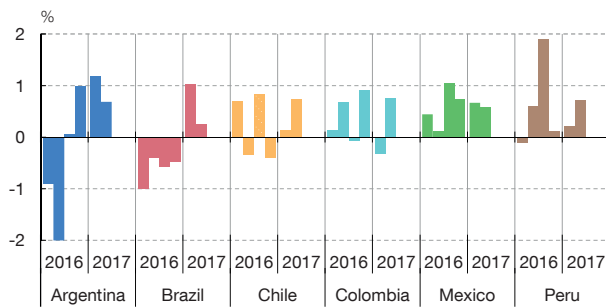
SOURCE: National statistics.

a Seasonally adjusted.

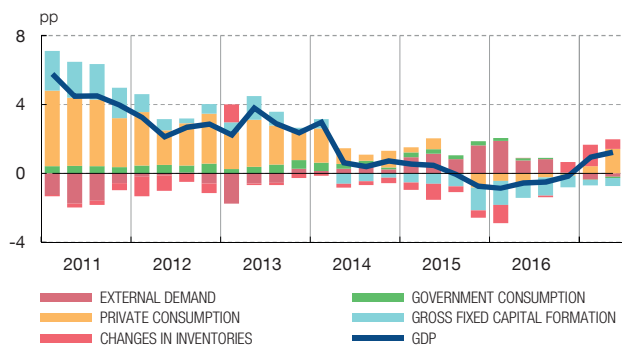
b Latin America 6: Argentina, Brazil, Chile, Colombia, Mexico and Peru. Latin America 5: Brazil, Chile, Colombia, Mexico and Peru.

c Four-quarter moving average.

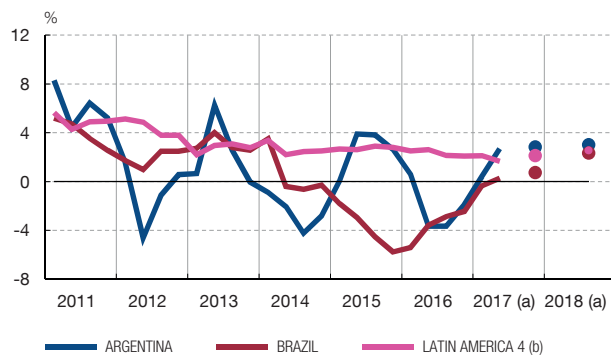
1 GROSS DOMESTIC PRODUCT
Quarter-on-quarter rate



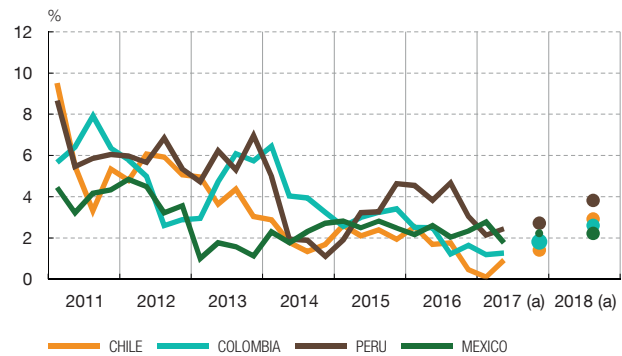
2 CONTRIBUTIONS TO YEAR-ON-YEAR GDP GROWTH. LATIN AMERICA-6



3 GROSS DOMESTIC PRODUCT
Year-on-year rate



4 GROSS DOMESTIC PRODUCT
Year-on-year rate



SOURCE: Datastream and national statistics.

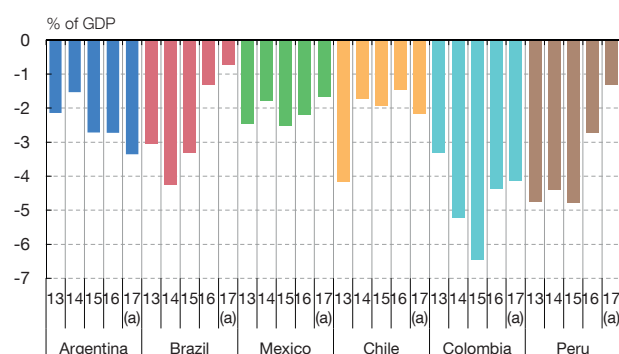
- a The dots represent the September 2017 forecast for 2017 and 2018 by Latin American Consensus Forecasts.
b Mexico, Chile, Colombia and Peru.

investment and net external demand, which was notably affected by the fall in exports derived in part from mining strikes, continued to bear down on activity. During the first half of the year economic activity in Colombia continued on the slowing path that began with the collapse in oil prices, in late 2014, although the sequence of growth rates indicates that this downturn has touched bottom, with growth of -0.3% quarter-on-quarter in Q1 and 0.7% in Q2. However, a significant portion of this rise was due to government consumption. Lastly, the buoyancy of exports in Peru led to an improvement in the performance of GDP in Q2, following two quarters of weakness, associated with climate-related factors that caused floods, and with corruption scandals that had a negative effect on public spending.

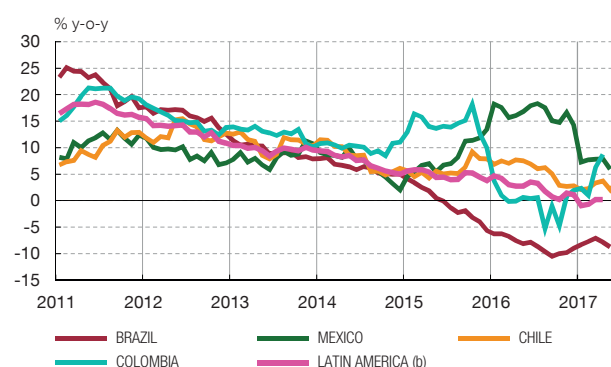
At the aggregate scale, the contribution of domestic demand to regional growth in the first half of 2017 notably turned positive. Private consumption quickened notably, whereby in 2017 Q2 its growth rate stood above that of GDP. This improvement came about despite the fact that unemployment rates increased practically across the region in the first half of 2017 (see Chart 5). Investment, for its part, continued to decline in the region as a whole.

The contribution of net external demand was more mixed across the region. Indeed, in the first half of 2017 the Latin American countries continued to correct their external imbalances,

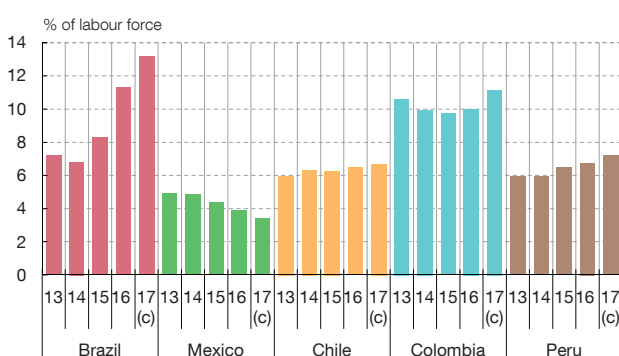
1 CURRENT ACCOUNT BALANCE



2 REAL CHANGE IN CREDIT TO THE PRIVATE SECTOR



3 UNEMPLOYMENT RATE



4 CONSUMER AND BUSINESS CONFIDENCE INDICES



SOURCE: Datastream

- a Sum of four quarters, to 2017 Q2.
- b Brazil, Chile, Colombia, Mexico and Peru.
- c Average January-July 2017.
- d Argentina, Brazil, Chile, México and Peru.
- e Brazil, Chile, Mexico and Peru.

with the exceptions of Argentina – owing to the worsening of its trade balance – and Chile (see Chart 5). Mention should be made once more of the correction of the current account deficit in Brazil, which stood at 0.7% of GDP in 2017 Q2, its lowest since 2008 Q1, and also in Peru. Elsewhere, Colombia was still posting a deficit of 3.5% in Q2, despite its notable decline. Focusing on the trade balance, while the attendant adjustments generally began with a squeeze on imports, the result of the adjustment in domestic demand, exports have subsequently been seen to be more dynamic. This is attributable, in part, to an improvement in the terms of trade and, also in part, to the lagged effects of currency depreciations in previous years. Except in Colombia and Argentina, net foreign direct investment flows have provided for the financing of current account deficits, notably so in Brazil and Chile.

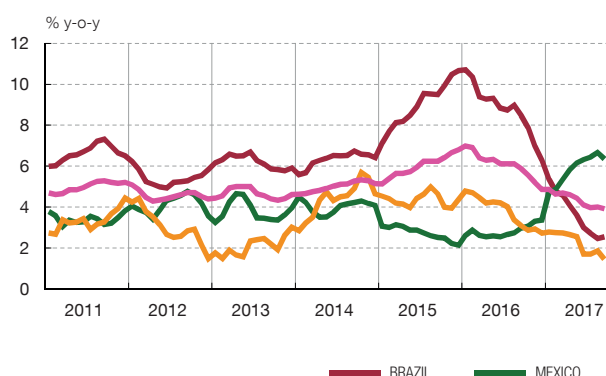
Short-term forecasting models, based on the latest updated indicators, point to a continuation of the rate of increase in the second half of the year. Moreover, certain extraordinary factors that restricted growth in the first half of the year, such as the mining strikes in Chile, weather phenomena in Peru and the impact of the VAT tax hike in Colombia, are expected to have disappeared. The exception would be Mexico, where the erosion of real disposable income owing to the temporary increase in inflation might prompt a lessening of the momentum of private consumption, without other spending components taking up the slack.

INFLATION AND POLICY INTEREST RATES

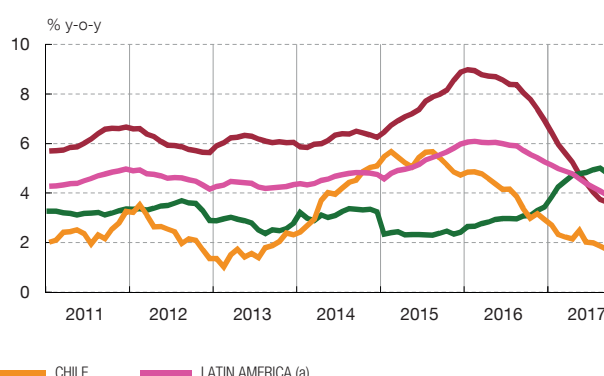
Year-on-year rates of change and percentage

CHART 6

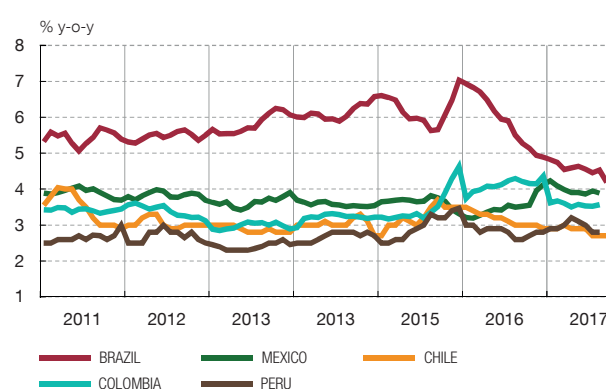
1 INFLATION RATE



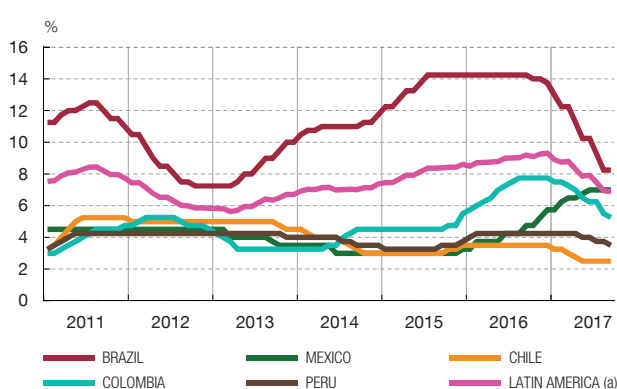
2 CORE INFLATION RATE



3 12-MONTH INFLATION EXPECTATIONS



4 POLICY INTEREST RATES



SOURCES: Datastream.

a Aggregate of Brazil, Chile, Colombia, Mexico and Peru.

INFLATION

Year-on-year rates of change

TABLE 2

Country	2016			2017		2018
	Target	December	Fulfillment	September	Expectations (a)	Expectations (a)
Brazil	4.5 ± 2 (b)	6.3	Yes	2.5	3.2	4.1
Mexico	3 ± 1	3.4	Yes	6.3	6.3	3.8
Chile	3 ± 1	2.7	Yes	1.4	2.2	2.8
Colombia	3 ± 1	5.7	No	4.0	4.1	3.5
Peru	2 ± 1	3.2	No	2.9	2.7	2.7

SOURCES: National statistics and Consensus Forecasts.

a September 2017 Consensus Forecast for the end of the year.

b The inflation target for Brazil for 2017 and 2018 has been established at 4.5 ± 1.5.

INFLATION AND ECONOMIC POLICIES

In the past six months, inflation in the region moved on a declining path, with the exceptions of Mexico – where it increased substantially – and Peru – where it held stable (see Chart 6). This enabled convergence on central bank targets, and, temporarily, in the cases of Brazil and Chile (see Table 2), inflation even stood below the lower bound of the target interval. This slowdown was chiefly due to the stabilisation of exchange rates, following the heavy depreciations between mid-2014 and early 2016, to food price developments and, in

Brazil, to the changes in regulated prices. In Mexico, inflation has continued to rise and move away from its target, boosted by the prolonged effect of the past depreciation of the peso and by the increase in the price of petrol, due in part to changes in its taxation. In any event, significant second-round effects are not expected, meaning that inflation might in 2018 once again stand close to its target. In Argentina the downward trend of inflation eased, following the notable decline in the opening months of the year, and the central bank has voiced its concern over the lack of correction of the core component. For inflation to continue falling, it is essential that economic agents should abandon the reference to past inflation in their decision-making processes.

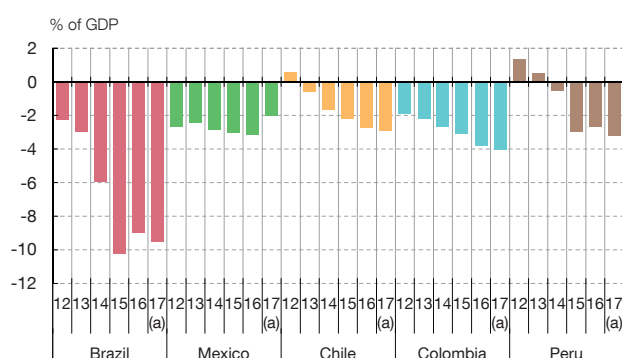
Lower inflation, against a background of negative output gaps in Brazil, Chile, Colombia and Peru, allowed central banks to cut policy rates. In Brazil, the cycle of cuts to the policy interest rate began in October 2016 and has entailed, following the last four 100 bp cuts, a total reduction of 600 bp, placing the rate at 8.25% (see Chart 6). However, the central bank has already indicated that the cycle of monetary easing is ending, which it will do gradually, with cuts of a lesser scale. The Brazilian central bank has also announced a 25 bp reduction in its inflation target in 2019, to 4.25%, with a further 25 bp in 2020, to 4%, maintaining the symmetrical tolerance band at 1.5 pp, which would shift from 2.5% to 5.5% in 2020. Also, approval has been given to the replacement of the subsidised interest rate at which the public bank BNDES (TJLP) lends with an interest rate closer to that prevailing on the market, a measure which will improve the monetary policy transmission mechanism, reduce the fiscal cost associated with BNDES's operations and, generally, prove conducive to the redistribution of resources towards more productive companies.

The cycle of monetary easing initiated by the Colombian central bank in December 2016 has entailed a total cut of 250 bp to its policy interest rate, leaving it at 5.25%. At its last meeting, the Monetary Policy Committee indicated that the slowdown in economic activity had touched bottom and that higher growth was expected in the second half of the year, further suggesting the end of the policy rate cuts. Monetary easing would also appear to have come to an end in Chile, where the policy rate stands at 2.50%, after a 100 bp reduction over the course of this year; the latest cut was at the May meeting, since which time the central bank has maintained a neutral bias. Finally, policy interest rate reductions in Peru began last May, following a series of cuts in reserve requirements, and have entailed a total reduction of 75 bp to 3.50%; at its last meeting, the central bank left the door open for a further cut of 25 bp.

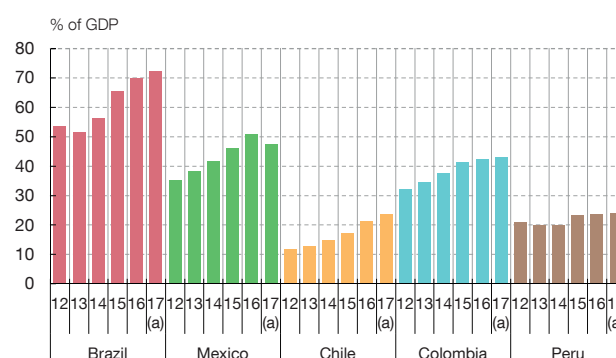
In Mexico, the monetary tightening that began in December 2015 and which has entailed a 400 bp increase in the policy rate, to 7%, concluded in June. With a view to the future, the key variables that will in principle guide the central bank's measures will be: confirmation that inflation is embarking on a downward course towards the central bank target; the course of the negotiations on NAFTA; and the pace of monetary normalisation in the United States. In Argentina, inflation expectations suggest that this variable might end the year above 20%. The central bank, given the difficulties of meeting the inflation target set for end-2017 (12%-17%), has indicated that it deems it advisable to maintain a contractionary stance and gear its decisions to attaining the end-2018 target (10%, with lower and upper bands of 2 pp).

In the fiscal policy realm, primary budget deficits remain high and public debt as a percentage of GDP has continued to rise, with the exception of Mexico, where it has fallen, and of Argentina, where it would have stabilised. Nonetheless, the first half of 2017 has seen growth in revenue outpace that of primary expenditure in the region as a whole, for the first time since 2012.

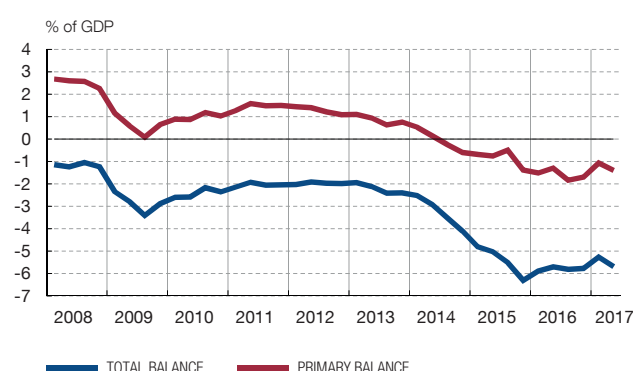
1 GOVERNMENT SURPLUS (+) OR DEFICIT (-)



2 PUBLIC DEBT



3 BUDGET SURPLUS (+) OR DEFICIT (-) IN LATIN AMERICA (b)



4 REAL PRIMARY REVENUE AND EXPENDITURE IN LATIN AMERICA (b)



SOURCE: Datastream.

a Sum of four quarters, to 2017 Q2.

b Aggregate of Brazil, Chile, Colombia, Mexico and Peru.

The most notable development during the first half of 2017 was the significant reduction in the budget deficit in Mexico (see Chart 7). The primary fiscal balance was in equilibrium in the first half of the year, assisted by the extraordinary transfer of profits by the central bank, of around 1.5% of GDP. In Brazil, the probability of the Congress approving the pension reform by means of a constitutional reform has diminished, at least when set against the ambition with which these plans were initially proposed, given the political uncertainty associated with the legal situation of President Temer. Further, the Government increased the primary deficit targets for 2017 (2.5% of GDP), 2018 (2.3%, up 0.5 pp) and 2019 (1.8%, up 1.3 pp), since tax revenue is expected to be lower than initially foreseen as a result of lower projected growth, and because the revenue from the Tax Repatriation and Recovery Programmes are also lower than expected. The Government announced its intention to reduce its share in the main State-owned electric utility, and the privatisation or concession of a series of State assets. Moreover, the reform of the interest rate on subsidised credit will mean an improvement in the fiscal accounts.

In Argentina, the gradual fiscal adjustment approach appears to be working (with a primary fiscal deficit target of 4.2% for 2017), partly thanks to the extraordinary revenue arising from the tax amnesty. However, to attain the primary deficit target for 2018 (3.2% of GDP) a greater adjustment will be necessary, which might entail bigger reductions in energy and

transport subsidies and exert an adverse effect on activity. In Chile, the fiscal deficit is expected to stand around 3% once more in 2017. This lack of correction, along with the low growth of recent years, led Standard & Poor's to downgrade (from AA to A+) the foreign currency-denominated sovereign debt rating. In Colombia, following the application of the tax reform this year (with a rise in VAT from 16% to 19%, entailing an increase of 0.7 pp of GDP in revenue), the fiscal target for the structural deficit is expected to be met in 2017. Finally, in Peru, the need for more public investment to restore the infrastructure damaged by the El Niño-related weather phenomena prompted the government to invoke the fiscal rule get-out clause and to increase the fiscal deficit targets for 2017 (from 2.5% to 3% of GDP) and 2018 (from 2.3% to 3.5%).

OUTLOOK

The outlook for the region points to moderate growth in 2017 which would, on consensus forecasts, stand at 1.6%, following the negative figure of -0.6% recorded in 2016. This behaviour is chiefly explained by the recoveries in Argentina and Brazil, which more than offset the slight declines in the growth rates of Chile, Colombia and Mexico, and the bigger reduction in Peru (see Chart 1). As a result, there would be a reduction in the dispersion of growth rates, whose range would narrow from 7.6 pp in 2016 to 2.1 pp, with the six countries considered to be growing at positive rates. In 2018, activity in the region is expected to run at quarter-on-quarter rates of increase not far from current rates, meaning the annual rate would rise to 2.4%. It should be noted, however, that these growth rates are still insufficient to move significantly forward towards convergence with the most advanced countries. In Venezuela, the recession will continue against the background of a far-reaching social and institutional crisis. In the inflation arena, convergence towards central bank targets is generally envisaged: in Brazil and Chile, as a result of the rise in inflation, and in Mexico, owing to its reduction. In the cases of Colombia and Peru, inflation is estimated to stand in 2018 close to the upper bounds of the target range.

The balance of risks to growth remains tilted towards the downside. On the external front, the main source of concern is a possible reversal of capital flows owing to an increase in global risk aversion. Among the potential events that might trigger this type of adjustment, mention should be made of a possibly swifter-than-expected tightening of US monetary policy, the materialisation of adverse geopolitical events and the possibility of a sharp adjustment to the economic re-balancing process in China. In the domestic realm, the fiscal space available to address possible slowdowns in activity is very limited. Against this backdrop, scheduled elections (between November 2017 and October 2018 presidential elections will be held in Chile, Colombia, Mexico and Brazil) pose uncertainty related to the path of reforms and the pace of fiscal consolidation needed to check the increase in public debt under way in almost all the countries. Lastly, it should be pointed out that the political situation in Venezuela is extremely delicate.

Natural interest rates and the monetary policy stance in Latin America

From 2014 to 2016, the central banks of Brazil, Chile, Colombia and Peru², all of which have inflation targets, raised policy rates to address the increase in inflation. These decisions were warranted since the second-round effects of the depreciation of their currencies from mid-2014 to early 2016 (caused principally by the decline in the prices of commodities, of which they are exporters) might prompt persistent effects on inflation and affect inflation expectations and the credibility of the monetary policy framework. However, as from 2016 Q4, projected inflation again fell into line with targets and, so that they should not bear down on growth, the monetary authorities began to cut policy rates. Conversely,

² Argentina is not included in this section since the inflation data for the period 2007-2014 are not considered reliable by the main international organisations.

the Mexican central bank continued to raise its policy rates during the first half of 2017, since the strong depreciation of the Mexican peso – which ran until the beginning of the year – and escalating inflation increased the risks of second-round effects arising.

When taking their monetary policy decisions, central banks are faced with the uncertainty that is associated with the estimation of a non-observable variable – namely, the natural or equilibrium interest rate – which is key for assessing the monetary policy stance. This interest rate is defined as that at which activity is growing at its potential rate, and inflation is stable. The aim of this section is to conduct an exercise estimating natural interest rates for the five above-mentioned countries and incorporate them into monetary policy Taylor rules in order to make a more analytical assessment of their orientation.

Debate on the level of the natural interest rate has become increasingly popular in the advanced economies. The latest evidence points to a significant decline in this rate in these economies, which hampers monetary policy action in a setting of low inflation and policy rates close to zero [Galesi *et al.* (2017)]. In principle, in the emerging economies equilibrium interest rates are still further from the zero bound, given that their potential growth is higher than that of the advanced economies, since the former are immersed in a process of convergence towards higher income levels. Nonetheless, proper measurement of the equilibrium interest rate is very important, insofar as monetary policy tends to be more active in a setting in which the structural changes related to the stage of development of these economies are far-reaching. In particular, some Latin American central banks³ have voiced concern over the possibility that the natural interest rate may have fallen considerably owing to the downward revision of potential growth brought about by lower productivity growth, attributable in part to the decline in commodities prices [Kataryniuk and Martínez Martín (2017)], the demographic transition and technological change.

To calculate the natural interest rate, the methodology habitually used involves estimating a semi-structural model after Holston *et al.* (2016). In the model, a traditional Phillips curve – equation [1] – that relates observed core inflation (π) to expected inflation (π^e) and the output gap (y) is jointly estimated with an IS-type curve – equation [2] – that links the output gap to the difference between the natural interest rate r^* and the real interest rate r .

$$\pi_t = b_1 \pi_t^e + b_2 \gamma_{t-1} + \varepsilon_{t,\pi} \quad [1]$$

$$\gamma_t = \alpha_1 y_{t-1} + \alpha_2 \gamma_{t-2} + \frac{\alpha_3}{2} \sum_{j=1}^2 (r_{t-j} - r_{t-j}^*) + \varepsilon_{t,y} \quad [2]$$

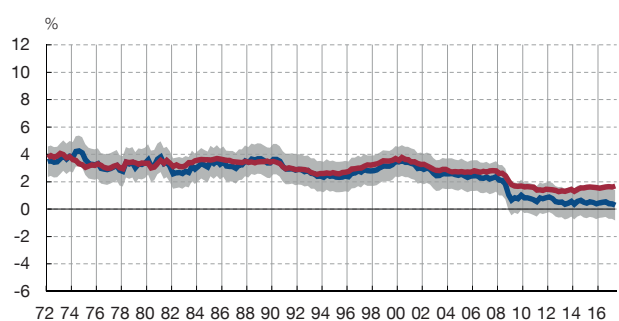
Against this background, the natural interest rate is defined as the sum of the economy's potential growth and a non-observable component, which is linked to technological, demographic and institutional changes or, in the case of emerging economies, to risk perception and to the exchange rate⁴ (insofar as these factors are not captured by potential growth and affect the natural interest rate).⁵

3 See, for example, the minutes of the 208th Monetary Policy Committee Meeting of the Brazilian central bank (COPOM), July 2017, where it was stated that “The COPOM stresses that the extension of the monetary easing cycle will depend on cyclical factors and on estimates of the Brazilian economy's structural interest rate”.

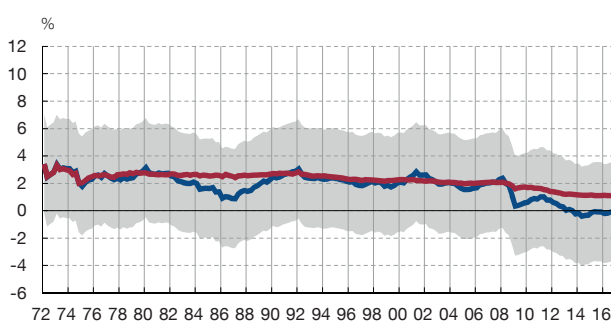
4 See Carrillo *et al.* (2017).

5 In a small and open emerging economy, the interest rate should meet the covered interest rate parity condition: the local interest rate, which includes a risk premium, is equal to the global interest rate plus movements in the real exchange rate. These factors are not included in this exercise in the estimation of the IS curve, so as to maintain the comparability with the results of the advanced economies.

1 UNITED STATES NATURAL INTEREST RATE ESTIMATES



2 EURO AREA NATURAL INTEREST RATE ESTIMATES



— NATURAL INTEREST RATE — POTENTIAL GROWTH

SOURCE: Holston *et al.* (2016). Standard deviation ranges are shown for the natural interest rate.

The results of the estimation of this model for a set of developed economies shows that the natural interest rate had been falling in the decades prior to the international financial crisis and that there was a sharp decline following the crisis (see Chart 8). For the emerging economies, and specifically for Latin America, the evidence available also points to a reduction [Magud and Tsounta (2012)], albeit starting from very much higher levels. This decline would be related to the transition to a regime of inflation targeting and of greater macroeconomic stability. Moreover, the interest rate of emerging countries open to the international financial markets is influenced by the global interest rate which, as earlier indicated, has tended to decline.

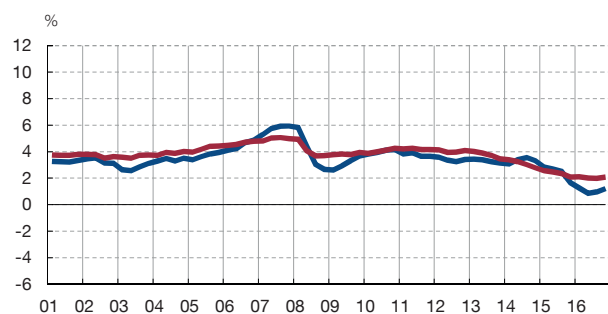
As can be seen in Chart 9, in the latest sample period and especially since 2014, the Latin American countries, with the exception of Mexico, have seen how the natural interest rates has been falling, principally as a result of the decline in potential growth. This situation is more patent in Chile, Colombia and Peru, while in Brazil the estimation of the natural interest rate is more volatile, since the recent crisis has increased uncertainty over the main economic variables. In Mexico, unlike in the other countries considered, the natural interest rate has evidenced notable stability, although in recent years it has stood at levels below its historical average.

As earlier discussed, the equilibrium interest rate is influenced by factors other than potential growth. Specifically, in some countries, such as Colombia and Chile, a negative correlation is observed between the portion of the natural interest rate not explained by potential growth and the deviations by the real effective exchange rate from its long-term level.⁶ This suggests that the equilibrium interest rate would be sensitive to changes in financial variables that may affect risk perception, as suggested by the covered interest rate parity condition in a small and open economy.

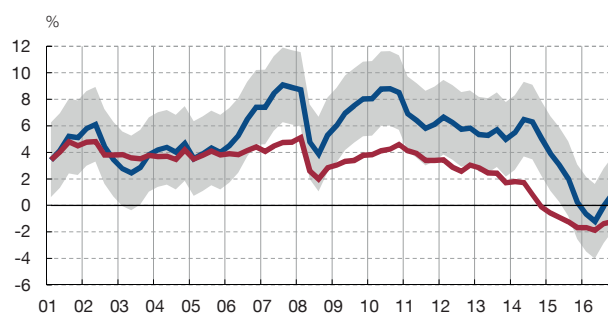
Once the natural interest rates are estimated in the five countries studied, a Taylor rule is used as a guide for studying the monetary policy stance [Taylor (1993)]. The Taylor rule – equation [3] – establishes that, in a situation with a negative output gap and/or below-

⁶ Specifically, the correlation is observed between the real effective exchange rate gap (defined as its current level less its historical average) and the portion of the natural interest rate not explained by potential growth, meaning that exchange rate depreciations relative to its long-term level are related to increases in the equilibrium interest rate.

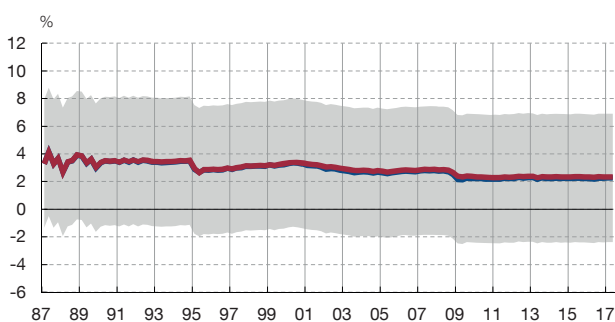
1 LATIN AMERICA 5. AVERAGE (a)



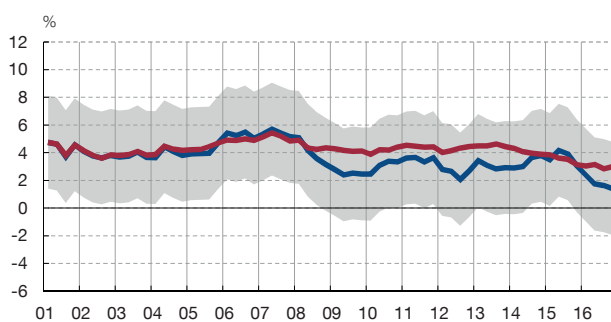
2 BRAZIL



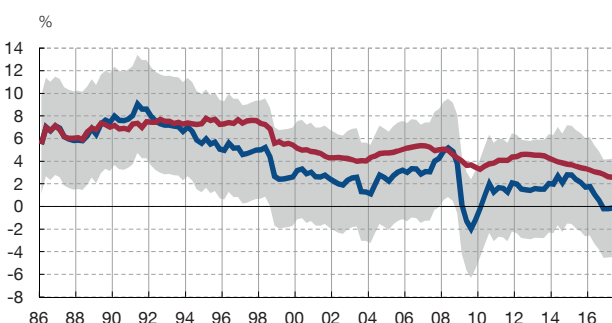
3 MEXICO



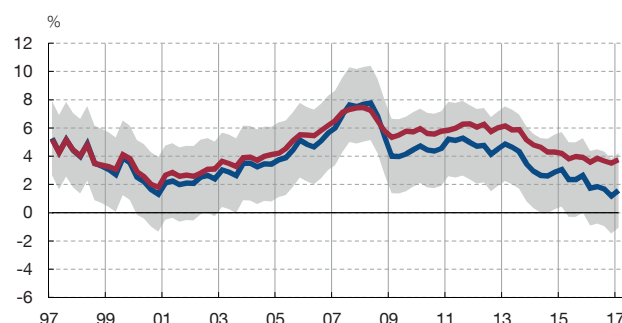
4 COLOMBIA



5 CHILE



6 PERU



— NATURAL INTEREST RATE

— POTENTIAL GROWTH

SOURCE: Banco de España. Standard deviation ranges are shown for the natural interest rate.

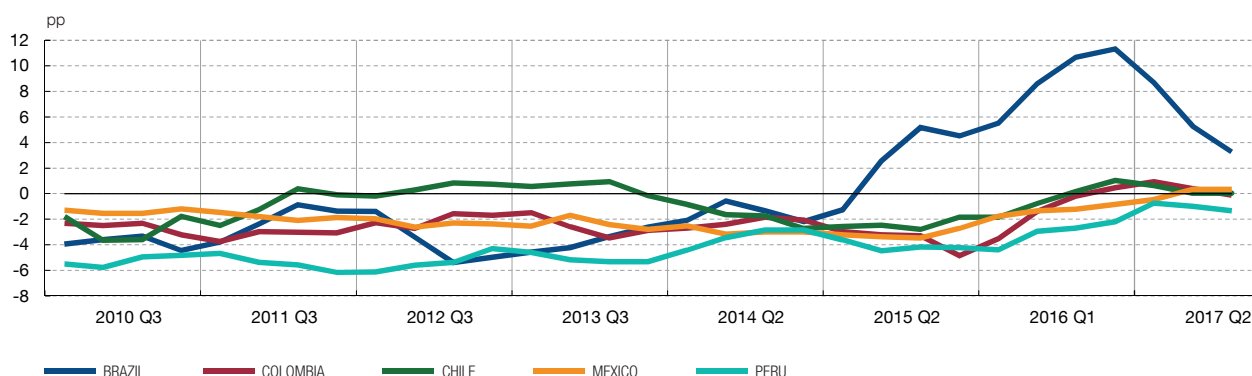
a The average of Latin America 5 is a simple average.

target inflation, a central bank should place the policy rate below its equilibrium level in order to stimulate activity and inflation. Alternatively, in the presence of a positive output gap and/or above-target inflation, the central bank would tend to place the policy rate above the natural rate to avoid overheating.

$$i_t = \pi_t^e + r_t^* + 0,5 (\pi_t^e - \bar{\pi}) + 0,5 \gamma_t \quad [3]$$

Usually, this type of rule becomes operational taking on a constant natural interest rate; but this hypothesis does not seem to be appropriate in the light of the previous analysis [see also Carlstrom and Fuerst (2016) for the case of the United States]. Accordingly, the

DIFFERENCES BETWEEN THE POLICY INTEREST RATE AND THE TAYLOR RULE IMPLICIT RATE



SOURCE: Banco de España. The chart shows the difference between the policy interest rate and the interest rate resulting from a Taylor rule, as described in the text. Positive values denote a restrictive monetary policy.

analysis below uses the previously estimated natural interest rate to calculate the policy interest rate suggested by the Taylor rule for these five countries.⁷ Chart 10 shows that the central banks of Chile, Colombia and México currently place their benchmark interest rate at a level compatible with this Taylor rule. For Peru, the exercise signals that, at present, monetary policy would have an accommodative stance.

Conversely, in Brazil, monetary policy would be notably contractionary. However, the crisis this economy underwent adds uncertainty to the estimation of its potential growth, which affects its natural interest rate and the output gap, which is one of the terms of the Taylor rule. Moreover, certain changes in the economy suggest that, in the future, lower inflation levels could be sustained; in this respect, the central bank has lowered its inflation target to 4% for 2020, a disinflationary process which, as has occurred in other economies in the region, might reduce the portion of the neutral interest rate that is not explained by potential growth, by lowering risk perception. Furthermore, the policy interest rate (SELIC) which has been used in this exercise might not be representative of the interest rate at which the Brazilian economy as a whole is financed, as there is a significant amount of credit that uses the TJLP – a rate subsidised by the government-owned bank BNDES – as a reference. These considerations would mean that monetary conditions were not as restrictive in Brazil as the Taylor rule suggests.

In sum, despite the difficulties associated with the estimation of non-observable variables in an economy, such as its natural interest rate and its potential growth, the results presented in this section point to a reduction in the natural interest rate in Latin America in recent decades, linked initially to the process of macroeconomic stabilisation, to the move to inflation-targeting regimes and, more recently, to the slowdown in productivity and to lower potential growth. These latter factors may be very persistent if in the meantime there are no structural reforms to raise the economy's growth capacity. The reforms are key not only to raising the level of welfare of society in the long run, but also to increasing the capacity of monetary policy to stimulate the economy when shortfalls in aggregate demand arise.

⁷ The Taylor rule calculated in this section uses 12-month inflation expectations instead of core inflation. For Peru, where these expectations are not available, a weighted average of core inflation in the previous quarters is used.

1 EXCHANGE RATE IN EMERGING ECONOMIES (a)



2 SOVEREIGN SPREADS (EMBI)



SOURCE: Datastream.

a A fall in the index denotes a depreciation of the currencies.

b Brazil, India, Indonesia, South Africa and Turkey. Aggregate weighted by GDP weight in PPP.

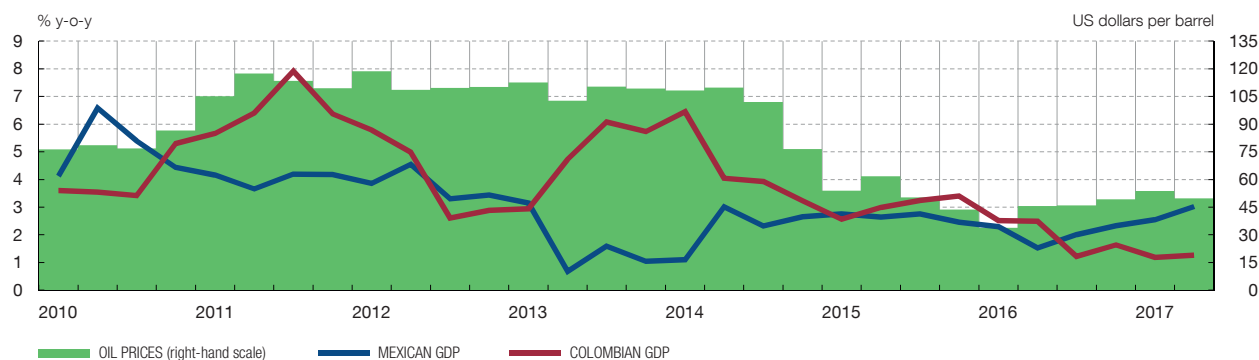
Mexico: resilience of private consumption and future challenges

After having posted GDP growth rates close to 4.5% on average from 2010 to 2012, and following strong reform momentum by the Government that emerged from the 2012 elections, the outlook for the Mexican economy was very favourable. Indeed, it was hoped the package of structural reforms approved in 2012 on energy, telecommunications, the financial sector, fiscal policy, education, competition, the labour market and the electoral system would be conducive to a qualitative leap in what was the Mexican economy's Achilles heel: its low productivity. And also, by extension, that it would boost its potential growth. Mexico was perceived as a country with a low level of vulnerability, with orthodox macroeconomic policy management, and which had the support of the multilateral agencies (reflected in the granting of a flexible credit line by the IMF for approximately \$47 billion, rolled over subsequently for higher amounts). The upshot was a high sovereign rating (BBB+) and low sovereign spreads among the emerging economies, fluid access to international bond markets and a growing presence of international investors in its local markets⁸, with evidence, indeed, that the Mexican market was being used to hedge positions in other less liquid and less deep Latin American markets. Thanks to this, the change in expectations about US monetary policy in the summer of 2013 (the "taper tantrum"), which disproportionately affected several emerging economies with high vulnerabilities, had significantly lower effects on the Mexican markets (see Chart 11).

However, following the reforms, which were expected to raise potential growth, the Mexican economy experienced a loss of dynamism (with growth of 2.4% on average from 2014 to 2016) in relation to the years immediately after the crisis. There were various reasons for this. Firstly, the collapse in oil prices in mid-2014 worsened Mexico's fiscal position, the country being one whose public finances have historically been highly dependent on oil revenues (which slumped from accounting for close to 9% of GDP in 2012 to around 4% at present); this led the authorities to implement a restrictive fiscal policy to correct the fiscal imbalance. At the same time, doubts arose over the financial position of PEMEX (the State-owned oil company), whose external debt following the 2008

⁸ Non-residents owned 45% of the public debt issued on local markets as of mid-2014.

GDP OF MEXICO AND COLOMBIA, AND OIL PRICES



SOURCE: Datastream.

crisis had increased considerably⁹, and which ultimately required government support in April 2016.

Secondly, the effectiveness of some of the key structural reforms (energy, for instance) was called into question, fuelling uncertainty over its effects on productivity and the country's long-term growth. More generally, it must be said that the results of the implementation of the reforms in the past three years have been mixed. The telecommunications and energy sectors were opened up to greater competition, which attracted new operators and led to a significant reduction in prices. However, the investment expected in the various oilfield tender rounds was diminished by the fall in oil prices. The labour market reform, for its part, was conducive to a reduction in informality, especially at SMEs, although they still remain at high levels. The financial reform, to a greater or lesser extent, is contributing to raising the levels of credit to the private sector and to greater competition. Lastly, the education reform is being rolled out with a delay.

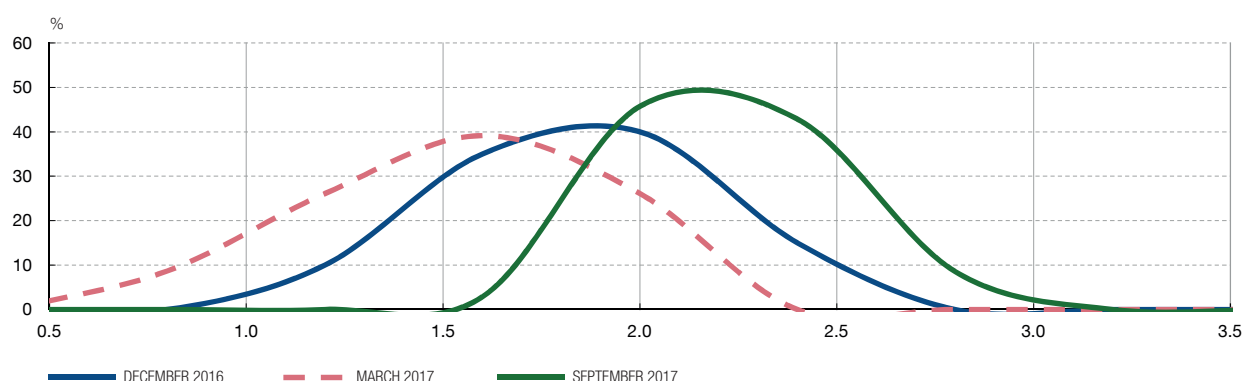
Thirdly, the economic policies of the United States, Mexico's main trade and financial partner, have had an impact on the Mexican economy. This is primarily so because of the start of the Fed's monetary policy normalisation process, in December 2015, which led the Mexican central bank to initiate a restrictive monetary cycle. Later, Donald Trump's election as President of the United States and his announcements in the electoral campaign to pursue a series of policies with a potentially very adverse outcome for the Mexican economy were reflected in a notable depreciation of the Mexican peso.

Actually, given the scale of these shocks, what is surprising is that the Mexican economy has not experienced bigger cuts in GDP growth, as has occurred in other countries of similar characteristics, such as Colombia (see Chart 12). The perception of this resilience has led the credit rating agencies to improve the sovereign rating outlook, with financial markets stabilising and the peso appreciating against the dollar.¹⁰ Moreover, in 2017, for the first time in several years, consensus growth forecasts are being revised upwards (see

⁹ From January 2009 to April 2014, the company issued more than \$38,250 million on international markets, 57% of the issuance of Mexico's non-financial corporations in that period.

¹⁰ At present, the Mexican peso has regained practically all the ground it lost after the US presidential election. The main explanatory factors behind the appreciating trend of the Mexican peso since early 2017 have been the perception that the outcome of the NAFTA negotiations would not be so adverse for the Mexican economy, and the improvements in the process of fiscal consolidation.

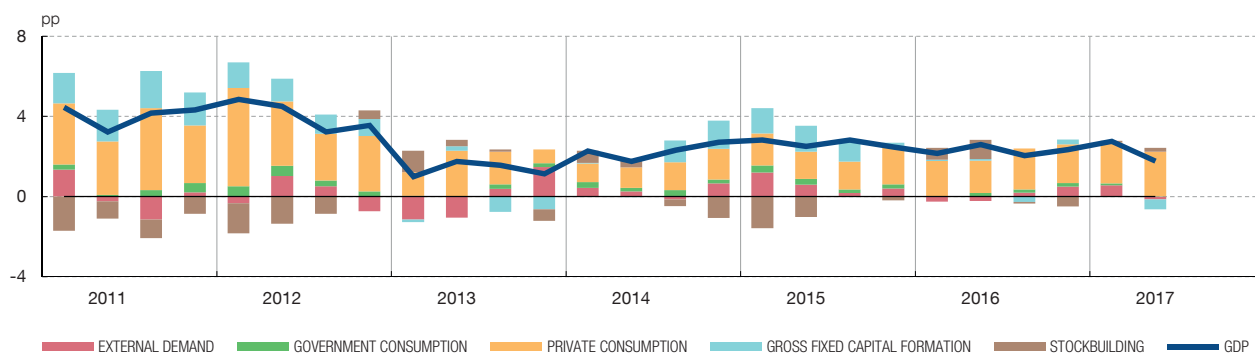
DISTRIBUTION OF MEXICAN GDP GROWTH FORECASTS FOR 2017



SOURCE: Latin American Consensus Forecasts.

MEXICAN GROSS DOMESTIC PRODUCT

MEXICO: CONTRIBUTIONS TO Y-O-Y GDP GROWTH



SOURCE: Datastream.

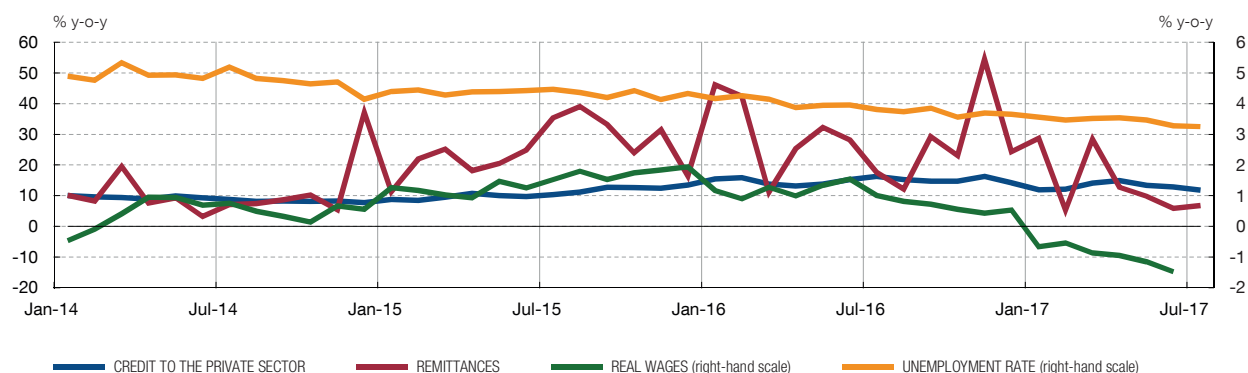
Chart 13). It is notable that in the first two quarters of the year GDP has increased robustly (by 0.7% and 0.6% in quarter-on-quarter terms, respectively), far above consensus expectations, albeit with very different contributions in terms of components. Hence, investment and public spending continue to trend negatively, while external demand and, above all, private consumption are the engines of growth, the latter standing out in particular with a weight in GDP of close to 67% (see Chart 14).

STRUCTURE AND
DETERMINANTS OF PRIVATE
CONSUMPTION

With the aim of analysing aggregate private consumption in greater detail, presented below are the results of empirical estimates that allow the relative contribution of the various determinants of consumption growth since 2002 to be quantified. The specification of the empirical model has been based on a basic Keynesian consumption function, which assumes that private consumption in real terms is determined chiefly by real disposable income. Moreover, other additional factors have been considered, such as the real interest rate, access to credit and, especially in the case of the Mexican economy, migrants' remittances.

As can be seen in Chart 15, which captures the recent course of private consumption determinants, the labour market in recent years has shown a degree of strength, with far-from-negligible job creation (and formalisation)¹¹ rates and an unemployment rate at

MAIN DETERMINANTS OF PRIVATE CONSUMPTION



SOURCE: Datastream.

relatively low levels; but real wages have remained practically flat, owing to the increase in inflation. Thus, the increase in prices that the liberalisation of petrol prices in early 2017 entailed (and which market agents and public agencies alike consider temporary), the lagged effect of the depreciation of the local currency and, to a lesser extent, the rise in the minimum wage led inflation to stand at an annual rate of around 6.7% in August, far above the end-2016 figure (3.9%) and the Mexican central bank's target range (3%). As regards other consumption determinants, the monetary tightening cycle initiated in late 2015, following 18 months at the historical minimum rate of 3%, came to its end in June this year, reaching a policy rate of 7%, against a background of anchored medium-term inflation expectations. Household spending has also been favoured by greater access to credit, showing significant increases. Lastly, migrants' remittances – mainly from the United States – have accounted for around 2% of annual GDP since 2011 and are at present at historical highs, boosted by the uncertainty over the Trump Administration's migratory policies and by the buoyancy of the US labour market.

To explain the resilience of private consumption in recent years, the empirical identification strategy¹² used envisages three possible structural shocks: i) aggregate demand and the demand for credit; ii) credit supply, and iii) monetary policy.

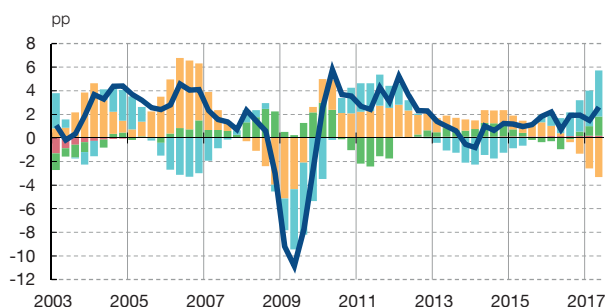
The main results in seeking to quantify the most significant factors underpinning the strength exhibited by private consumption are shown in Chart 16.¹³ Firstly, beyond exogenous factors, such as changes in remittances, the demand and credit shocks, which

11 The year 2013 saw the entry into force of the Work and Social Welfare Secretariat's Unemployment Formalisation Programme, whose objective is the change from an informal job to a formal one, which is given on providing social security to employees through their affiliation to an institution such as the IMSS (the Mexican Social Insurance Institute), the ISSSTE (the Institute of Social Security and Services for State Employees) or some other Social Security Institute. To put this into context, on the latest estimates by INEGI (the Mexican National Institute for Statistics and Geography), workers in the shadow economy currently account for 56.6% of the total, whereas in 2013 this figure was 59.6%.

12 After ruling out those indicators with less predictive power and less structural significance, the Bayesian VAR model includes four endogenous variables: a domestic market private consumption indicator, private-sector consumer credit, policy interest rates, and the spread between the monetary policy rate and the interbank interest rate on consumer credit. Further, the model includes an exogenous variable, namely the inflow of remittances from Mexicans abroad. The estimation, with quarterly data, is conducted as from 2001. Lastly, short-term structural shocks are identified by means of signs and exclusion restrictions using the algorithm of Arias *et al.* (2014), and following the empirical strategy of Gambetti and Musso (2012).

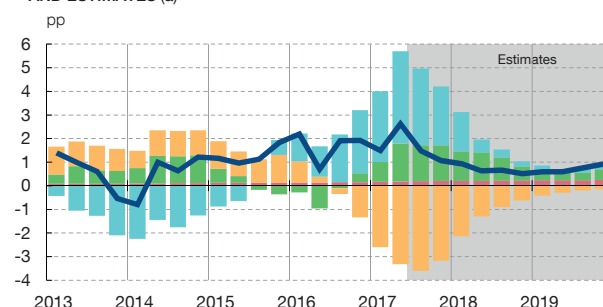
13 The results of these simulation exercises should be viewed with caution, since there is a series of factors that might affect consumption decisions and which are not explicitly included in this model.

1 HISTORICAL BREAKDOWN OF PRIVATE CONSUMPTION (a)



EXOGENOUS DEMAND MONETARY SUPPLY OF CREDIT OBSERVED

2 PRIVATE CONSUMPTION BREAKDOWN. LATEST DEVELOPMENTS AND ESTIMATES (a)



SOURCE: Banco de España based on INEGI data.

a Four-quarter cumulative data.

include the impact of the inertia of private consumption, account for a substantial portion of the course of consumption. Secondly, the relationship between private consumption and the financial fundamentals is of crucial importance in the last part of the sample. In this respect, the signs highlighted by the Mexican central bank's 2016 *Reporte de Estabilidad Financiera* (*Financial Stability Report*), on the prevalence of supply-side factors behind the recent expansion in credit, are confirmed, judging by the strong positive contribution of the credit supply shock to the growth of private consumption in recent years.¹⁴ Lastly, the favourable effects associated with an accommodative monetary policy have gradually petered out, in parallel with the process of policy rate rises, making way for less lax financial conditions, albeit with some delay, given the habitual lag in monetary policy transmission in Mexico.

In any event, according to the unconditional forecasts provided by this model, the growth of private consumption points to some moderation in the coming quarters, since, despite the continued support of demand, some of the favourable conditions of the recent quarters will gradually fade (see Chart 16).

OUTLOOK FOR THE MEXICAN ECONOMY

Analysts' consensus GDP growth outlook for 2017 and 2018 stands at similar rates to those for 2016. A competitive peso exchange rate, the lessening of external uncertainties, a timid recovery in oil prices and the ongoing implementation of structural reforms should sustain growth rates at the average level of recent years and not far off the potential growth of the Mexican economy, which, moreover, is expected to be close to closing its output gap. In the coming quarters certain risks are discernible that could reduce these projected growth rates, and which include, inter alia: i) in the very short term, the adverse effect on activity in Q3 of the earthquakes in certain parts of the country which, however, might boost activity in the following quarters; ii) a greater-than-expected marginal slowdown in private consumption in the face of the course of inflation and possible further cuts in public

¹⁴ In recent years large Mexican corporations, with access to international financial markets, have been issuing foreign currency-denominated external debt, while reducing their debt substantially with domestic banks. Accordingly, resources for loans to other resident sectors have been freed up. For further details see Carabarin *et al.* (2015).

spending (consumption and investment); iii) the return of volatility in asset prices (local currency, for example) associated with possible incidents in the renegotiation of the NAFTA; iv) diminished dynamism of private investment, also reflecting greater caution regarding the relationship with the United States, and, lastly, v) the 2018 presidential and legislative elections, which add some degree of uncertainty, given the high levels of indecision reflected in electoral polls. In this respect, many of the measures arising from the 2014 electoral reform will be set in train for the first time in these elections. The changes that will come into force in the forthcoming elections include most notably the possibility of the re-election of deputies and senators and the possibility of coalition governments, and the participation of independent candidates.

Lastly, at the end of the year the budget for 2018 must be approved. In this respect, Mexico has managed in recent years to attain its medium-term fiscal consolidation objectives, despite the strong adjustment in oil revenues. However, fulfilment of the 2017 objective is largely due to the extraordinary profits transferred by the Mexican central bank (which account for around 1.5% of GDP). The recently announced fiscal adjustments for the coming year involve a fiscal consolidation effort of 0.5% of GDP (primary surplus objective of 0.9% of GDP in 2018) and are expected to be mainly on the public spending side, given pension and retirement-related pressures, and the higher cost of debt. In any event, the fiscal space to face future adverse developments is limited, given the debt burden and the modest fiscal buffers accumulated.

Data cut-off date: 13.10.2017.

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REFERENCES

- ARIAS, J., J. F. RUBIO-RAMÍREZ and D. F. WAGGONER (2014). *Inference based on SVARs identified with sign and zero restrictions: Theory and applications*, Board of Governors of the Federal Reserve System Working Papers, 1100.
- CARABARÍN, M., A. DE LA GARZA and O. H. MORENO (2015). "Global liquidity and corporate financing in Mexico", *mimeo*.
- CARLSTROM, C. T., and T. S. FUERST (2016). "The natural rate of interest in Taylor rules", *Economic Commentary*, Federal Reserve of Cleveland.
- CARRILLO, J. A., R. ELIZONDO, C. A. RODRÍGUEZ-PÉREZ and J. ROLDÁN-PEÑA (2017). "What determines the Neutral Rate of Interest in an Emerging Economy?", *mimeo*.
- GALES, A., G. NUÑO and C. THOMAS (2017). "The natural interest rate: concept, determinants and implications for monetary policy", *Economic Bulletin*, no. 1/2017, Banco de España.
- GAMBETTI, L., and A. MUSSO (2012). *Loan supply shocks and the business cycle*, Working Paper Series, 1469, European Central Bank.
- GRANGER, C. W. J. (1969). "Investigating causal relations by econometric models and cross-spectral methods", *Econometrica*, 37 (3), pp. 424-438.
- HOLSTON, K., T. LAUBACH and J. C. WILLIAMS (2016). "Measuring the natural rate of interest: International trends and determinants", *Journal of International Economics*.
- KATARYNIUK, I., and J. MARTÍNEZ-MARTÍN (2017). *TFP growth and commodity prices in emerging economies*, Documentos de Trabajo, n.º 1711, Banco de España.
- MAGUD, N. E., and E. TSOUNTA (2012). *To Cut or Not to Cut? That is the (Central Bank's) Question. In Search of the Neutral Interest Rate in Latin America*, International Monetary Fund Working Paper 12-243.
- TAYLOR, J. B. (1993). "Discretion versus policy rules in practice", *Carnegie-Rochester Conference Series in Public Policy*, 39, pp. 195-214.

