INFLATION REPORT

September 2018

Recent trends and macroeconomic forecasts 2018-2019

CENTRAL RESERVE BANK OF PERU

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Recent Trends and Macroeconomic Forecasts 2018 - 2019

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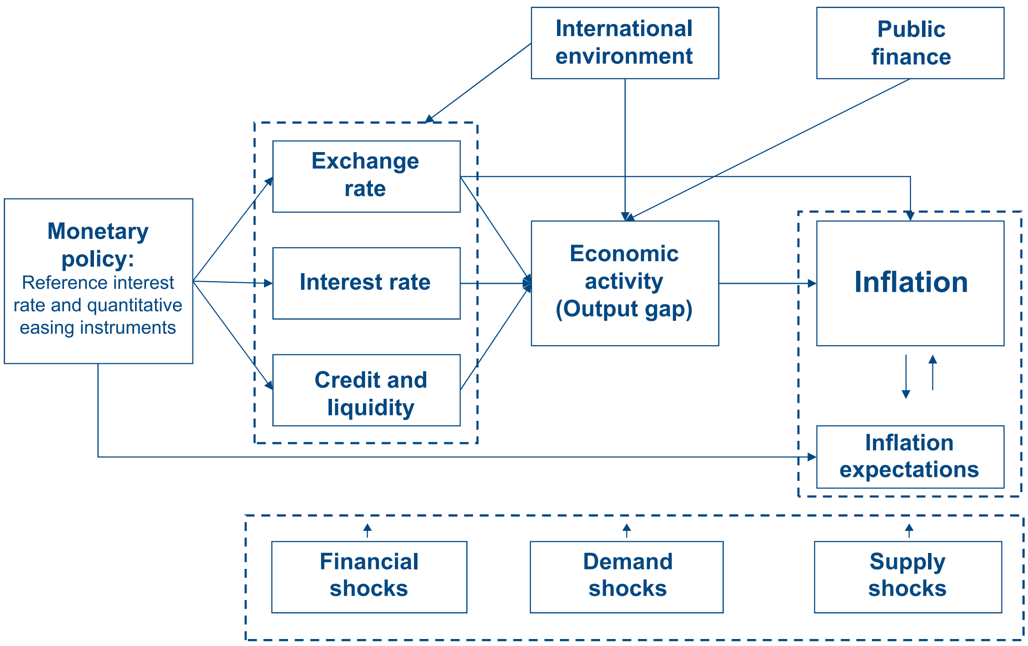

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BOXES

This ***Inflation Report*** was prepared using data on the balance of payments and the gross domestic product as of the second quarter of 2018, data on monetary accounts, the operations of the non-financial public sector, inflation, financial markets, and the exchange rate as of August 2018.

Foreword

- According to the Constitution of Peru, the Central Reserve Bank of Peru (BCRP) is a public autonomous entity whose role is to preserve monetary stability. The BCRP is responsible for regulating the money supply and credit in the financial system, for managing the country's international reserves, and for reporting on the nation's finances.

- In order to consolidate this goal, the Bank's monetary policy is based on an inflation targeting scheme, with an inflation target of 2.0 percent, plus or minus one percentage point (between 1.0 and 3.0 percent). The Central Bank's inflation target is aimed at anchoring inflation expectations at a similar level to the inflation rate observed in developed economies and reflects the BCRP's permanent commitment with monetary stability.

- Each month, and according to a previously announced schedule, the Board of BCRP sets a benchmark rate for the interbank lending market. Since this interest rate, which is the monetary operational target, affects the rate of inflation through several channels with time lags, this rate is set on the basis of inflation forecasts and forecasts of inflation determinants.

- Inflation may transitorily deviate from the target range due to shocks that may temporarily affect the supply of goods and services, such as fluctuations in the prices of imported products or domestic climate factors. It should also be pointed out that the effectiveness of monetary policy is also assessed in terms of the success in returning and maintaining inflation expectations within the target range.

- Additionally, the Central Bank implements preventive actions to preserve financial stability and monetary policy transmission mechanisms. Through interventions in the foreign exchange market, the Central Bank reduces excessive volatility in the exchange rate and accumulates international reserves in periods of capital inflows or high export prices, thus developing strengths to face negative events in an economy with still high levels of financial dollarization. The Central Bank also uses other monetary policy tools that affect the volume and composition of credit in a more direct manner, such as reserve requirements in domestic currency and in foreign currency, to avoid excessive credit or credit constraints.

- This Inflation Report includes macroeconomic forecasts that support the monetary policy decisions of BCRP as well as an analysis of the risk factors that can modify such forecasts.

- This Inflation Report was approved by the Board of Directors of BCRP on September 13, 2018.

Summary

i. Although recent indicators of **global economic activity** continue to point to the growth rate foreseen for this year (3.8 percent), as anticipated in our Inflation Report of June, global growth will be less synchronized and will show higher risks. Slightly lower growth rates than those observed this year are expected for 2019 due mainly to a lower dynamism in the United States and in other developed economies, in line with lower monetary stimulus and the convergence of their growth rates to their potential growth levels.

ii. The **terms of trade** grew 7.5 percent in the first half of 2018, reflecting the higher prices of commodity exports (14.8 percent). However, between July and mid-September, the prices of minerals have registered a downward correction, affected by increased uncertainty as a result of the intensification of trade tensions (particularly tensions between the US and China), the appreciation of the dollar, and fears of lower growth in China. In this context, the projected growth of the **terms of trade** in 2018 has been revised on the downside, from 4.9 to 1.0 percent. In 2019, the terms of trade are expected to decline by 2.9 percent, although they still would show higher levels than those observed in 2017.

iii. In the first half of 2018, the deficit in the **current account of the balance of payments** was 1.9 percent of GDP, higher than the rate recorded in the same period of 2017, mainly as a result of the higher factor income (associated with the higher profits obtained from the high prices of minerals) and service income (due to extraordinary income for insurance and reinsurance in 2017). On the other hand, the trade balance continued to be favored by a positive international context (higher terms of trade and sustained growth in global trade) and showed a surplus 1.1 percentage points of GDP higher than that recorded in the same period in 2017.

    In the forecast horizon, the downward correction of metal prices observed since July of this year will imply a lower surplus in the trade balance and a higher current account deficit than projected in the Inflation Report of June. The current account deficit would reach 1.6 percent of GDP in 2018 and 1.5 percent of GDP in 2019, lower than the levels observed in 2012-2016. In line with the projected levels of private investment, the **long-term flow of external private capital** (5.0 percent of GDP in 2018 and 4.0 percent of GDP in 2019) will continue to be the main source of financing the balance of payments, exceeding largely the requirements of the current account.

iv. **Economic activity** grew 4.3 percent in the first half of 2018, driven by the favorable evolution of domestic demand which grew 5.3 percent, in line with the growth of formal jobs and the payroll. The improvement observed in the prices of minerals contributed to accelerate private investment, particularly that associated with mining. A faster pace of growth was also observed in public expenditure due to the implementation of infrastructure, reconstruction, and maintenance projects after El Niño Costero. Moreover, because the primary sectors are foreseen to show a transitory slowdown associated with a lower mining production in the third quarter, GDP in 2018 is estimated to grow 4.0 percent.

The same GDP growth rate is expected in 2019 (4.0 percent). Private investment will continue to be driven by the execution of mining and infrastructure projects, while public expenditure will slow down due to the change of government in the subnational governments.

v. After reaching a peak of 3.1 percent of GDP in 2017, the **fiscal deficit** in annual terms (last twelve months) fell to 2.1 percent of GDP in August 2018, the main factor explaining this improvement in the fiscal balance being the increase in the current revenues of the general government as a result of increased revenue from the regularization of the income tax. In 2018 and 2019 the fiscal deficit would decline to 2.8 and 2.6 percent of GDP respectively. This projection implies a positive weighted fiscal impulse of 0.3 percent of GDP in 2018 and a slightly negative fiscal impulse in 2019, which would coincide with the reduction in the output gap.

The revenue expected in 2018 has been corrected on the upside due to the better performance of tax revenue observed so far this year. On the other hand, current expenditure will continue to show the rising pace of growth observed early in the year while public investment will be determined by the implementation of the projects considered in the Reconstruction with Changes Plan, the progress in the implementation of Line 2 of Lima's Metro, and the projects for the Pan American Games. In 2019, tax revenues are expected to increase in line with the measures announced by the government to increase tax collection, with a moderation in tax refunds, and with an increase in excise tax revenues.

vi. **Credit to the private sector** recorded a YoY growth rate of 8.7 percent in August 2018, in line with the recovery of household consumption and private investment. In the forecast horizon, credit to the private sector is expected to evolve in line with the pace of growth of domestic demand, with growth rates of 9.0 percent being expected for both 2018 and 2019. This is consistent with the monetary easing measures implemented in terms of lowering both the benchmark interest rate and the rates of reserves requirements in domestic currency and in foreign currency.

vii. The Board of BCRP maintained the **benchmark rate** at 2.75 percent. This rate is equivalent to a real interest rate of 0.4 percent, which reflects an expansionary monetary policy stance in a context with a negative output gap and in which no demand pressures are foreseen.

viii. **Inflation** returned to the target range in June 2018 showing a rate of 1.1 percent in August as a result of the gradual normalization of food prices, while the CPI without food and energy recorded a rate in the midpoint of the target range, 2.0 percent. Expectations of inflation, which have remained within the inflation target range since March 2017, showed a rate of 2.4 percent in August. It is estimated that the rates of both inflation and inflation expectations will continue to converge gradually to 2 percent in the forecast horizon.

ix. The balance of the **risk factors** considered in this Report – external demand shocks (lower global growth due to the new trade protectionist measures of the United States and China), higher volatility in international financial markets, and domestic demand shocks (lower-than-expected growth of private and public investment) translates into a positive bias in the inflation forecast.

SUMMARY OF INFLATION REPORT FORECAST

	2016	2017	2018[1/]		2019[1/]	
			IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
Real % chg.						
1. Gross Domestic Product	4.0	2.5	4.0	4.0	4.2	4.0
2. Domestic demand	1.1	1.4	4.2	4.4	4.4	4.0
a. Private consumption	3.3	2.5	3.4	3.8	3.7	3.6
b. Public consumption	0.2	0.2	3.8	3.4	2.5	3.2
c. Fixed private investment	-5.4	0.2	5.5	5.5	7.5	6.5
d. Public investment	-0.2	-2.3	12.6	9.9	5.0	2.8
3. Exports (good and services)	9.4	7.8	4.4	3.5	3.9	4.6
4. Imports (good and services)	-2.2	4.1	5.1	5.0	4.5	4.7
5. Economic growth in main trading partners	2.8	3.6	3.8	3.8	3.6	3.6
Memo:						
Output gap [2/] (%)	-0.3 ; 0.2	-1.4 ; -0.8	-0.9 ; -0.2	-0.9 ; -0.2	-0.4 ; 0.4	-0.6 ; 0.2
% chg.						
6. Inflation	3.2	1.4	2.2	2.2	2.0	2.0
7. Expected inflation [3/]	-	-	2.2	2.2	2.5	2.5
8. Expected depreciation [3/]	-	-	1.6	1.9	1.5	0.8
9. Terms of trade [4/]	-0.4	7.2	4.9	1.0	1.3	-2.9
a. Export prices	-3.4	13.0	11.6	7.4	1.9	-2.2
b. Import prices	-3.0	5.4	6.4	6.3	0.6	0.7
Nominal % chg.						
10. Currency in circulation	6.5	6.7	7.6	8.1	8.5	8.5
11. Credit to the private sector [5/]	5.6	6.6	8.5	9.0	8.8	9.0
% GDP						
12. Gross fixed investment	22.9	21.8	22.1	22.3	22.7	22.9
13. Current account of the balance of payments	-2.7	-1.1	-1.2	-1.6	-1.2	-1.5
14. Trade Balance	1.0	3.1	3.9	3.1	4.1	2.4
15. Long-term external financing of the private sector [6/]	4.6	5.7	4.8	5.0	4.8	4.0
16. Current revenue of the general government	18.7	18.1	18.7	19.1	18.8	19.3
17. Non-financial expenditure of the general government	20.0	20.1	20.4	20.5	20.3	20.4
18. Overall balance of the non-financial public sector	-2.5	-3.1	-3.1	-2.8	-2.9	-2.6
19. Balance of total public debt	23.8	24.9	25.2	25.7	26.1	26.9
20. Balance of net public debt	6.8	9.5	11.8	11.4	14.1	13.5

IR: Inflation Report.
1/ Forecast.
2/ Differential between GDP and potential GDP (as a percentage of potential GDP).
3/ Survey on expectations to the analysts and financial entities.
4/ Average.
5/ Includes loans made by banks' branches abroad.
6/ Includes net direct investment, portfolio investment and private sector's long term disbursement.

I. International Environment

World Economy

1. Since the last Inflation Report was published in June, indicators have confirmed the sustained growth of the economy of the United States and showed signs of deceleration in several developed economies. Expectations of rises in the Fed rates and trade tensions have led to corrections in commodity prices and to capital outflows from the emerging economies, generating in some cases depreciation pressures.

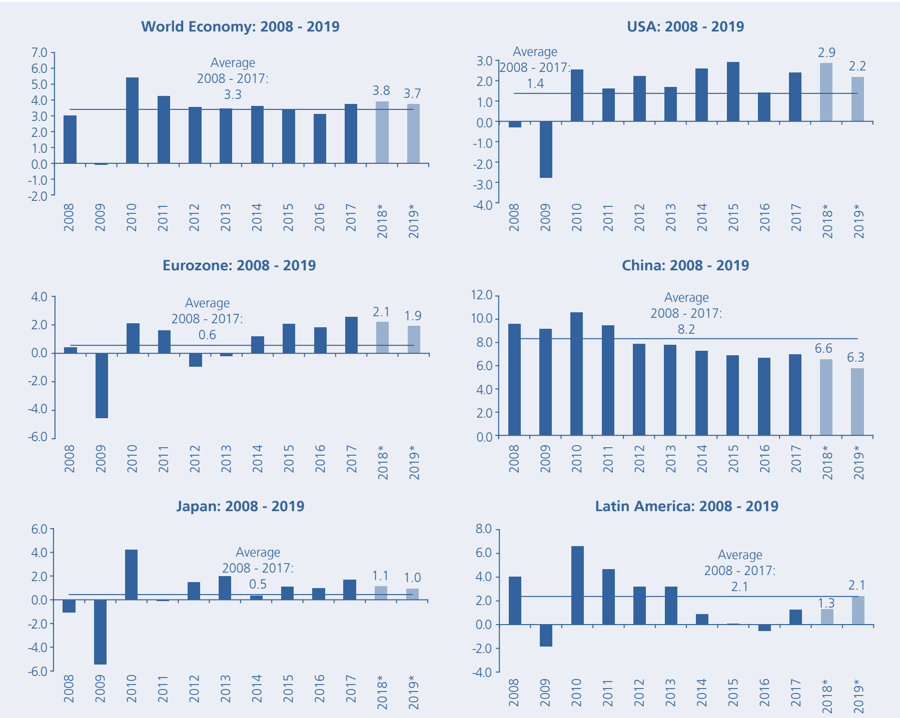
Table 1
GLOBAL GDP GROWTH
(Annual % change)

	PPP% 1/	Trading Peru % 1/	2017	2018*		2019*	
				IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
Developed economies	**41.3**	**42.9**	**2.3**	**2.3**	**2.3**	**2.0**	**2.0**
Of which:							
1. USA	15.3	20.2	2.3	2.8	2.9	2.2	2.2
2. Eurozone	11.6	12.8	2.5	2.2	2.1	2.0	1.9
Germany	3.3	2.7	2.5	2.2	2.0	2.0	1.9
France	2.2	0.8	1.9	1.9	1.7	1.8	1.6
Italy	1.8	1.8	1.5	1.3	1.2	1.2	1.1
Spain	1.4	4.0	3.1	2.5	2.7	2.2	2.2
3. Japan	4.3	4.0	1.8	1.3	1.1	1.0	1.0
4. United Kingdom	2.3	1.3	1.8	1.4	1.4	1.4	1.4
5. Canada	1.4	2.6	2.8	2.0	2.0	1.9	1.9
Developing economies	**58.7**	**57.1**	**4.7**	**4.9**	**4.9**	**5.0**	**4.9**
Of which							
1. Emerging and developing Asia	32.4	34.9	6.6	6.6	6.6	6.6	6.4
China	18.2	27.9	6.9	6.6	6.6	6.4	6.3
India	7.4	3.8	6.7	7.4	7.4	7.8	7.5
2. Commonwealth of Independent States	4.5	0.5	2.2	2.2	2.2	2.2	2.2
Russia	3.2	0.5	1.8	1.7	1.7	1.7	1.7
3. Latin America and the Caribbean	7.7	21.6	1.4	2.2	1.3	2.7	2.1
Brazil	2.6	5.4	1.0	2.5	1.4	2.9	2.5
Chile	0.4	3.3	1.5	3.6	4.0	3.5	3.6
Colombia	0.6	2.9	1.8	2.6	2.7	3.0	3.2
Mexico	1.9	3.0	2.0	2.2	2.2	2.3	2.1
Argentina	0.7	1.5	2.9	1.7	-2.2	2.5	-0.1
Peru	0.3	-	2.5	4.0	4.0	4.2	4.0
World Economy	**100.0**	**100.0**	**3.7**	**3.8**	**3.8**	**3.7**	**3.7**
Memo:							
Peru's trading partners 2/	65.9		3.6	3.8	3.8	3.6	3.6

1/ The weights correspond to the year 2017.
2/ Basket of Peru's 20 main trading partners.
* Forecast.
Source: Bloomberg, IMF, and Consensus Forecast.

2. In line with these developments, a rate of global growth of 3.8 percent is projected for 2018. This projection assumes that trade tensions will not escalate and that the central banks of the developed economies will gradually withdraw their monetary stimulus. At the country level, and taking into account the developments observed until the second quarter as well as the recent indicators, the growth of the United States has been revised up, supported by corporate profits and by the fiscal impulse. On the other hand, the growth of the Eurozone and of some emerging economies particularly affected by volatility in international markets has been revised slightly down. Slightly lower rates are expected in 2019, mainly due to lower growth rates estimated in the US and in other developed economies. It is expected that growth in these countries will decrease and converge towards their potential rates.

Graph 1
GDP GROWTH
(Annual % change)



* Forecast.
Source: Bloomberg. IMF, and Consensus Forecast.

3. The risks of the growth forecast are on the downside and are related, first, to the evolution of trade negotiations between the United States and its main trading partners (particularly China). Higher-than-expected rises in the Fed interest rates, an abrupt slowdown in the Chinese economy, or a lack of agreement in the implementation of the Brexit are also downside risks in this projection.

4. In the **United States**, the economy's growth rate in the second quarter of 2018 (4.2 percent) has not only exceeded that of the previous quarter (2.2 percent), but also has

been the highest rate observed since the third quarter of 2014 (4.9 percent). In line with these results, the growth forecast for 2018 has been revised up from 2.8 to 2.9 percent.

Domestic demand has been showing strength in recent quarters. After a temporary slowdown in the first quarter, consumption rebounded in the second quarter accounting for 61 percent of the growth of the output. On the other hand, investment was supported by the favorable evolution of corporate profits and by continued accommodative financial conditions, offset in part by the contraction of residential investment and the decrease of inventories.

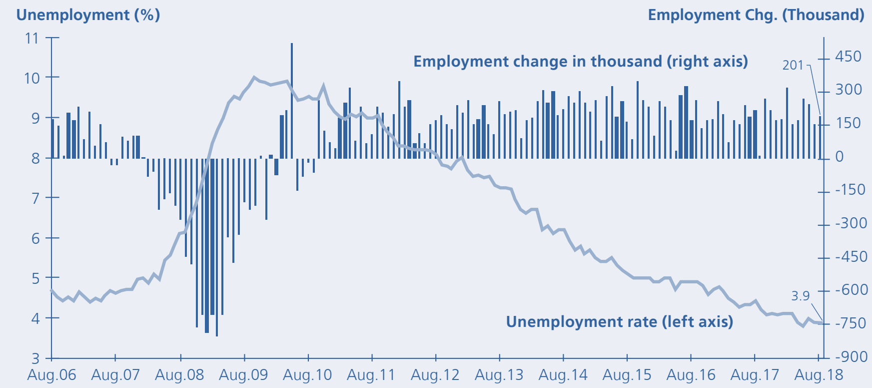
Table 2
USA: GDP
(Annual % change[1/])

	2017					2018	
	Q1	Q2	Q3	Q4	Year	Q1	Q2
Personal consumption	1.8	2.9	2.2	3.9	2.8	0.5	3.8
Gross private investment	4.9	5.7	8.8	0.8	3.3	9.6	0.4
Non-residential investment	9.6	7.3	3.4	4.8	4.7	11.5	8.5
Change on inventories[2/]	-0.8	0.2	1.0	-0.9	-0.1	0.3	-1.0
Exports	5.0	3.6	3.5	6.6	3.4	3.6	9.1
Imports	4.8	2.5	2.8	11.8	4.0	3.0	-0.4
Government expenditure	-0.8	0.0	-1.0	2.4	0.1	1.5	2.3
GDP	1.8	3.0	2.8	2.3	2.3	2.2	4.2

1/ Compared to the previous quarter.
2/ Contribution to growth.
Source: Bureau of Economic Analysis (BEA).

The improvement observed in the US economy and domestic demand has been supported by favorable conditions in the labor market: 201 thousand jobs were created in August and unemployment recorded 3.9 percent.

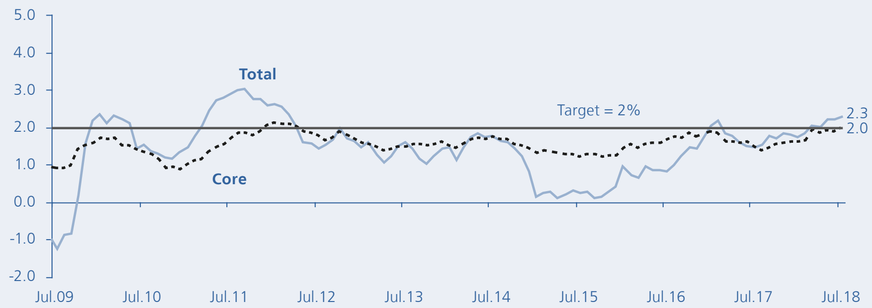
Graph 2
USA: JOBS AND UNEMPLOYMENT RATE



Source: Bloomberg.

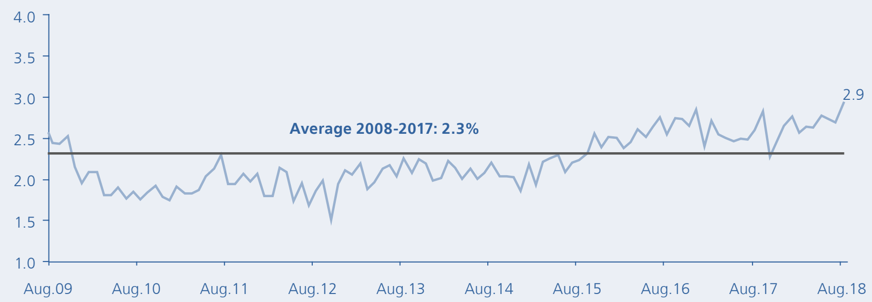
This dynamism of activity continues to be accompanied by a moderate rise in inflationary pressures. In July, the personal consumption expenditure price index (PCE) recorded an annual rate of 2.3 percent, showing levels above the target since May, while the core PCE price index reached the 2.0 percent target in July. On the other hand, the average wage per hour in August increased 2.9 percent compared to the same month in 2017 and remains above the average level of the last 10 years.

Graph 3
USA: PCE PRICE INDEX
(Annual % change)



Source: Bloomberg.

Graph 4
USA: AVERAGE WAGE PER HOUR IN THE PRIVATE SECTOR
(Annual % change)



Source: Bloomberg.

Since growth has been above its potential level and given the upward trend observed in inflation and the strength of the labor market, the Fed continued adjusting its interest rates and reducing its assets gradually. Thus, at its June meeting, the Fed raised its interest rate range to 1.75-2.00 percent. In addition, the projections of growth and inflation of the committee members were revised up, whereas the projected rate of unemployment was corrected down. The Fed is expected to raise the rate range by 25 bps at its next meeting of September 25-26.

Table 3
PROJECTIONS OF THE FED*

	2018		2019		2020		Long-term	
	Mar.18	Jun.18	Mar.18	Jun.18	Mar.18	Jun.18	Mar.18	Jun.18
GDP growth	2.7	2.8	2.4	2.4	2.0	2.0	1.8	1.8
Unemployment rate	3.8	3.6	3.6	3.5	3.6	3.5	4.5	4.5
PCE price index	1.9	2.1	2.0	2.1	2.1	2.1	2.0	2.0
Core Inflation (Core PCE)	1.9	2.0	2.1	2.1	2.1	2.1	-	-
Interest rate (%)	2.1	2.4	2.9	3.1	3.4	3.4	2.9	2.9

* Adds data from 15 individual projections of the Committee members at the end of period.
Memo: Core PCE excluding food and energy.

The gradual withdrawal of monetary stimulus, together with a lower fiscal impulse, are consistent with lower growth rates estimated for 2019 (2.2 percent). The downside risks in the forecast are associated with a worsening of trade tensions, a more accelerated withdrawal of monetary stimulus, or a sharp correction in asset markets.

5. In the **Eurozone**, the GDP showed a lower growth rate in the first half of the year. Thus, after five quarters with an average growth rate of 0.7 percent, economic activity grew 0.4 percent in the first and second quarters of the year.

This lower growth is explained both by temporary factors during the first quarters of 2018 (adverse weather conditions and labor conflicts) and by the increased trade tensions, the higher prices of oil, uncertainty about the *Brexit,* and the political situation in Italy and Spain. The indicators of economic activity in July and August –business confidence, the PMI indices on future conditions, and activity in the sector of services, among other indicators– seem to confirm this lower drive for growth in the third quarter. Because of this, the growth rate projected for 2018 has been revised slightly down, from 2.2 to 2.1 percent.

In 2019, the Eurozone is estimated to grow around 1.9 percent. This forecast considers the convergence of GDP growth to its potential level of growth in a context in which the ECB is expected to gradually withdraw monetary stimulus.

The ECB has announced that it will reduce the amount of its asset purchases from September and that its purchase program will be completed by December. In addition, the first interest rate increase is expected in June-August 2019. These announcements are consistent with the moderate but sustained upward trend in inflation, this trend reflecting in part the higher wage pressures observed. In July, inflation in the Eurozone increased for the third consecutive month and reached 2.1

percent. On the other hand, showing a moderate upward trend so far this year, core inflation reached 1.1 percent.

This growth projection is subject to a series of downside risks. There is high uncertainty regarding the conditions under which the United Kingdom will withdraw from the European Union. A worsening of trade tensions –particularly in sensitive sectors such as the automotive sector– would also affect growth in the coming years.

6. In **China**, the output grew at a year-on-year rate of 6.7 percent in the second quarter, slightly less than in the previous quarter (6.8 percent), but in line with the gradual slowdown observed in this economy. It should be pointed out, however, that the main indicators of activity in recent months have shown a more pronounced slowdown. The lower dynamism of investment in fixed assets stands out, as this indicator has gone from showing a rate of 7.5 percent in March to a rate of 5.5 percent in July, which is explained mainly by the significant slowdown of investment in infrastructure (5.7 percent in July vs. 13.0 percent in March).

The forecast for 2018 is still that China will show a more moderate pace of growth with a growth rate of 6.6 percent (vs. 6.9 percent in 2017). However, due to the impact of trade tensions with the USA on the dynamism of economic activity (as well as of the trade policy measures already adopted), the growth forecast for 2019 has been revised down slightly, from 6.4. percent in the previous Report to 6.3 percent.

Table 4
CHINA'S ECONOMIC INDICATORS

Indicators	2017	2018		
		Mar.	Jun.	Jul.
Annual GDP	6.9	6.8	6.7	--
Industrial Production	6.2	6.0	6.0	6.0
Investment in fixed assets	7.2	7.5	6.0	5.5
Investment in infrastructure	19.0	13.0	7.3	5.7
Retail sales	9.4	10.1	9.0	8.8
Exports	10.9	-2.7	11.2	12.2
Imports	4.5	14.4	14.1	27.3
Copper imports	-0.8	-1.6	25.1	33.3
Total new financing	12.3	10.5	9.8	10.3
Consumer Price Index	1.8	2.1	1.9	2.1

Source: Bloomberg and IMF.

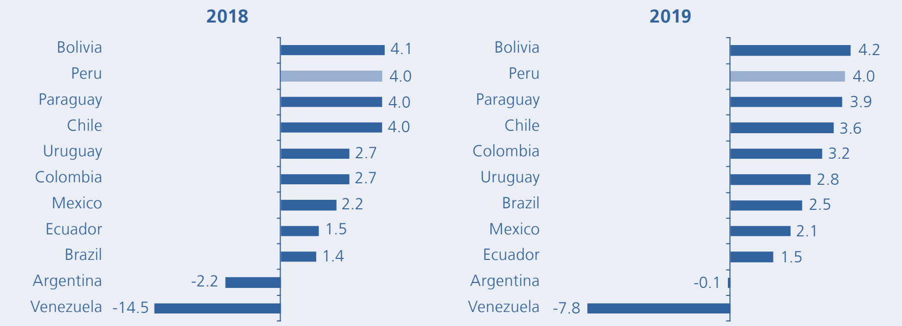
7. It is estimated that **Latin America** would grow 1.3 percent in 2018 and 2.1 percent in 2019 (lower rates than those projected in the previous Inflation Report). It should

be pointed out that the region has been affected by the volatility in international markets associated with commercial tensions and expectations of an adjustment in the monetary policy position of the developed economies. These factors have brought about not only a fall in the prices of most commodities (particularly, in the prices of basic metals), but also lower capital inflows to the region.

Different conducts are observed at the country level. On the one hand, the growth forecasts for Chile and Colombia have been revised upwards. Factors supporting higher growth in Chile include the dynamism of private investment (mainly mining investment), the improvement of confidence, and fewer labor conflicts. In the case of Colombia, economic growth in the second quarter has been greater than expected and the economy has been favored by higher oil prices and by the reduction of uncertainty (after the elections process finished). In addition, the drop in inflation has allowed the authorities to implement a more expansionary monetary policy in the short term.

The growth forecast for Mexico in 2018 remains unchanged and the forecast for 2019 has been revised down in a context marked by the completion of both the electoral period and the renegotiation of the trade agreement with the United States.

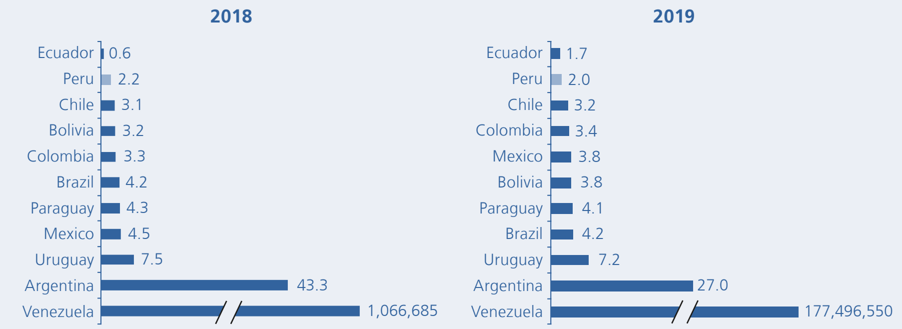
Graph 5
GDP GROWTH
(% change)



Source: Latin American Consensus Forecast (September 2018) and BCRP (Peru).

On the other hand, the growth forecasts for Brazil and Argentina have been revised down. Both economies have been particularly affected by volatility in international markets: at August, the real has depreciated 18 percent against the dollar and the Argentine peso has weakened 50 percent, which in turn has increased inflation and expectations of inflation. The application of expansionary policies has been impossible due to the high rates of depreciation, the increase in inflation, and the weak external position (and all of this has even led authorities to increase the interest rate and to announce fiscal adjustments, as in the case of Argentina) . Brazil, on the other hand, is affected by uncertainty about the results of the presidential elections that will take place in October.

Graph 6
INFLATION
(Dec./Dec.)

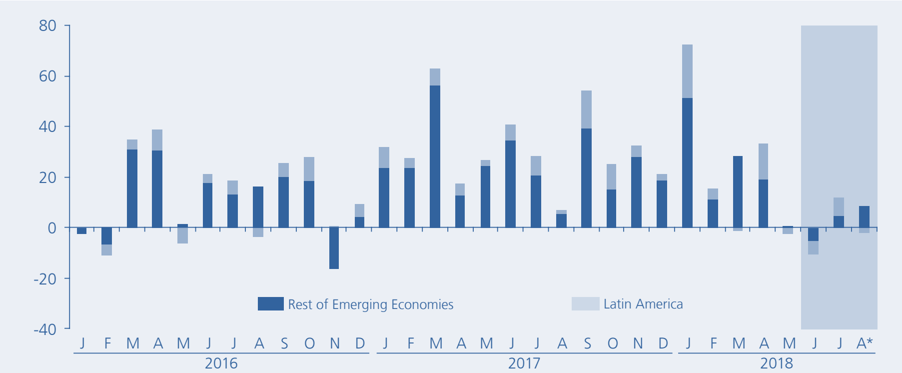


Source: Latin American Consensus Forecast (September 2018) and BCRP (Peru).

Financial Markets

8. Expectations of rate adjustments and commercial tensions generated a liquidation of emerging market assets –both fixed income and variable income assets–, affecting especially some economies that have greater external vulnerabilities, such as Argentina and Turkey.

Graph 7
FLOW OF FIXED AND VARIABLE INCOME FROM NON-RESIDENTS TO EMERGING MARKETS: 2016-2018
(Billion US$)



* August data are estimated.
Source: The Institute of International Finance (IIF).

9. The US **variable-income markets** posted gains and reversed the slight downward trend observed in the first half of the year. The stock exchange markets were driven by positive indicators of economic activity and by corporate earnings in the second quarter (associated with the tax cut adopted at the beginning of the year), which

offset the adverse effect of commercial tensions and expectations of hikes in the Fed interest rates. In contrast, some European stock markets registered falls as a result of political uncertainty (*Brexit*) and economic uncertainty (fiscal policy in Italy), of lower than expected economic indicators, and of the exposure of European banks to Turkish assets.

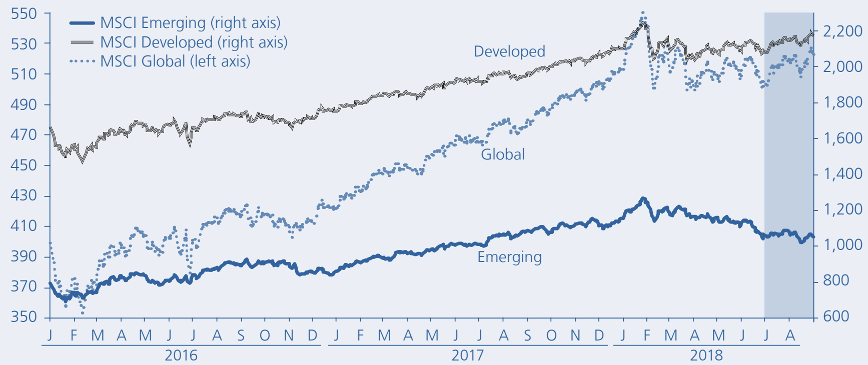
The stock markets of emerging countries showed a clear downward trend since the second week of July as a result of the worsening of trade tensions, the fall in the prices of commodities, capital outflows, and the currency crises in Turkey and Argentina. Year-to-date, the Chinese stock market shows an accumulated loss of 18 percent as a result of the uncertainty created by the trade war between the United States and China.

Table 5
STOCK MARKETS

		Dec.17	Jun.18	Aug.18	% change	
					Aug./Jun.	Aug./Dec.
VIX*	S&P 500	11.04	16.09	12.86	-3.2	1.8
USA	DOW JONES	24,719	24,271	25,965	7.0	5.0
Germany	DAX	12,918	12,306	12,364	0.5	-4.3
France	CAC 40	5,313	5,324	5,407	1.6	1.8
Italy	FTSE MIB	21,853	21,626	20,269	-6.3	-7.2
Spain	IBEX 35	10,044	9,623	9,399	-2.3	-6.4
Greece	ASE	802	758	730	-3.7	-9.1
United Kingdom	FTSE 100	7,688	7,637	7,432	-2.7	-3.3
Japan	NIKKEI 225	22,765	22,305	22,865	2.5	0.4
Brazil	BOVESPA	76,402	72,763	76,678	5.4	0.4
Colombia	IGBC	11,478	12,500	12,255	-2.0	6.8
Chile	IGP	27,981	26,843	26,590	-0.9	-5.0
Mexico	IPC	49,354	47,663	49,548	4.0	0.4
Argentina	MERVAL	30,066	26,037	29,294	12.5	-2.6
Peru	GENERAL INDEX	19,974	19,800	19,443	-1.8	-2.7
South Africa	JSE	59,505	57,611	58,668	1.8	-1.4
India	CNX NIFTY	10,531	10,714	11,681	9.0	10.9
Turkey	XU100	115,333	96,520	92,723	-3.9	-19.6
Russia	INTERFAX	1,152	1,154	1,092	-5.4	-5.2
China	Shangai C.	3,307	2,847	2,725	-4.3	-17.6
South Korea	Seul Composite	2,467	2,326	2,323	-0.1	-5.9
Indonesia	JCI	6,356	5,799	6,018	3.8	-5.3
Thailand	SET	1,754	1,596	1,722	7.9	-1.8
Malaysia	KLSE	1,797	1,692	1,820	7.6	1.3
Philippines	PSEi	8,558	7,194	7,856	9.2	-8.2

* VIX is the implied volatility of the options market in the S&P'500 index values. The change is in basis points.
Source: Bloomberg.

Graph 8
MSCI STOCK INDICES
(2016 - 2018)



Source: MSCI, Bloomberg.

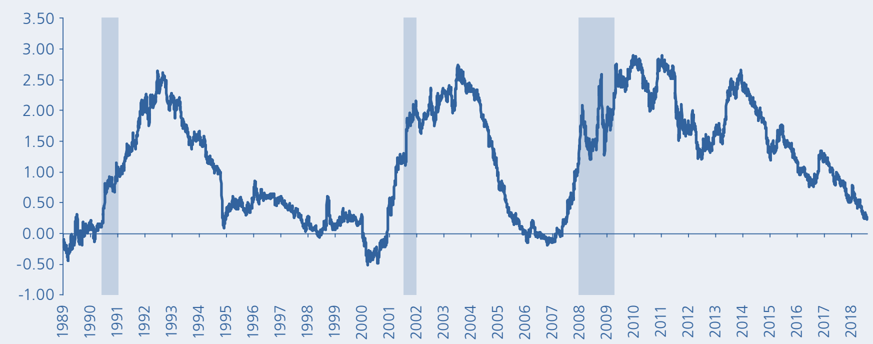
10. In the **fixed income markets**, US yields remained unchanged between June and August: upward pressures (associated with the favorable evolution of activity and with expectations of interest rate adjustments) were offset by the trade tensions between the US and China and its main partners as well as by geopolitical factors (conflicts with Turkey and Iran). As a result of this, so far this year the yield on the 10-year bond shows an increase of 46 bps (from 2.4 to 2.9 percent).

Graph 9
US DOLLAR FED INDEX AND YIELD ON THE 10-YEAR US TREASURY BOND
(2016 - 2018)

Source: Bloomberg and Fed.

It is worth pointing out that the yields on the US bonds have risen more in the shorter term tranches –the yield on the 2-year bond has risen 77 bps so far this year–, in line with expectations of higher Fed interest rates. The spread between the 10-year Treasury bond and the 2-year Treasury bond has fallen to 21 bps, reaching the level observed prior to the 2008 crisis.

Graph 10
SPREAD OF THE YIELD ON THE 10-YEAR TREASURY BOND AGAINST TO THE 2-YEAR BOND



Source: St. Louis Fed.

In the Eurozone, the increases in the yields of Italian and Greek bonds stand out. This is explained by fears about an expansionary fiscal policy in the case of the former and by uncertainty regarding the completion of Greece's agreement with the European Stability Mechanism (ESM). Moreover, the exposure of commercial banks to Turkish assets boosted the yields of sovereign bonds, particularly those of Italy, France, and Spain.

In the emerging economies, on the other hand, the yields of most securities increased in line with a more cautious position of international investors (which reflected in capital outflows in most of these countries). The rise in the yields of the bonds of Turkey (458 bps), Brazil (52 bps), Indonesia (41 bps), Mexico (31 bps), and Colombia (25 bps) stands out between June and August.

Table 6
YIELDS ON THE 10-YEAR TREASURY BONDS

	Dec.17	Jun.18	Aug.18	Change (bps.)	
				Aug./Jun.	Aug./Dec.
USA	2.41	2.86	2.86	0	46
Germany	0.42	0.30	0.33	3	-10
France	0.78	0.66	0.68	2	-10
Italy	2.01	2.67	3.23	56	122
Spain	1.56	1.32	1.47	15	-9
Greece	4.07	3.93	4.37	44	29
United Kingdom	1.19	1.28	1.43	15	24
Japan	0.04	0.03	0.10	7	6
Brazil	10.26	11.68	12.20	52	194
Colombia	6.48	6.58	6.83	25	35
Chile	4.55	4.59	4.28	-31	-27
Mexico	7.65	7.60	7.91	31	26
Peru	4.87	5.27	5.09	-17	22
South Africa	8.86	9.06	9.21	16	36
India	7.33	7.90	7.95	5	63
Turkey	11.35	16.12	20.70	458	936
Russia	3.87	4.79	4.97	18	110
China	3.90	3.48	3.60	12	-31
South Korea	2.47	2.73	2.73	0	26
Indonesia	6.29	7.74	8.16	41	187
Thailand	2.32	2.58	2.74	15	41
Malaysia	3.91	4.20	4.04	-16	13
Philippines	5.70	6.42	6.37	-5	67

Source: Bloomberg.

11. In the same period, the **dollar** appreciated 0.7 percent against the basket of major currencies, accumulating an appreciation of 3.3 percent in the year.

Table 7
EXCHANGE RATE

		Dec.17	Jun.18	Aug.18	Change (bps.)	
					Aug./Jun.	Aug./Dec.
Dollar index	US Dollar Index	92.12	94.47	95.14	0.7	3.3
Euro	Euro	1.200	1.168	1.160	-0.7	-3.3
United Kingdom	Pound sterling	1.351	1.321	1.296	-1.9	-4.1
Japan	Yen	112.670	110.660	111.020	-0.3	1.5
Brazil	Real	3.312	3.877	4.055	-4.4	-18.3
Colombia	Peso	2,982	2,929	3,046	-3.8	-2.1
Chile	Peso	615	654	681	-4.0	-9.7
Mexico	Peso	19.65	19.91	19.08	4.3	3.0
Argentina	Peso	18.59	28.88	36.80	-21.5	-49.5
Peru	Sol	3.237	3.276	3.293	-0.5	-1.7
South Africa	Rand	12.36	13.72	14.68	-6.5	-15.8
India	Rupee	63.83	68.45	71.00	-3.6	-10.1
Turkey	Lira	3.79	4.59	6.52	-29.6	-41.9
Russia	Ruble	57.66	62.79	67.47	-6.9	-14.5
China	Yuan (Onshore)	6.51	6.62	6.83	-3.1	-4.7
South Korea	Won	1,066.4	1,113.9	1,115.5	-0.1	-4.4
Indonesia	Rupee	13,555	14,075	14,637	-3.8	-7.4
Thailand	Bath	32.55	33.02	32.75	0.8	-0.6
Malaysia	Ringgit	4.04	4.04	4.11	-1.7	-1.6
Philippines	Peso	49.98	53.31	53.47	-0.3	-6.5

* A positive (negative) variation means appreciation (depreciation) of the respective currency against the dollar.
Source: Reuters.

The appreciation of the dollar against the currencies of the developed economies was mainly associated with expectations that the Fed would carry out a more accelerated withdrawal of monetary stimulus than other central banks. Thus, the euro weakened 0.7 percent against the dollar compared to June. Because of some slowdown observed in the pace of growth recently, markets expect that the European Central Bank, after completing its asset purchase program in December this year, will start the cycle of rate rises only towards the third quarter of 2019. On the other hand, the pound sterling registered a greater depreciation, influenced mostly by the divergence of monetary policy between the Fed and the Bank of England as well as by uncertainty associated with the withdrawal of the United Kingdom from the European Union (*Brexit*).

Most of the currencies of the emerging market economies depreciated against the dollar, the depreciation of the Turkish lira and the Argentine peso standing out. In these cases, the appreciation trend of the dollar in international markets was reinforced by other factors such as external imbalances (high current account deficits), fiscal deficits, high inflation, loss of confidence, and threats to the independence of the respective central banks of these countries. Political pressures to avoid an increase in interest rates and the political and trade tensions with the U.S. also contributed to this.

The currencies of other emerging countries were affected by the fall in the price of commodities (Chilean peso), commercial tension (yuan) or political tensions (ruble), and by greater degrees of external vulnerability (Indian rupee and Indonesian rupiah). The Brazilian real, on the other hand, was affected by uncertainty surrounding the October elections and by the government's difficulty of implementing its fiscal reform. In the case of Argentina, factors that contributed significantly included the high amounts of short-term bills (Lebacs) of the central bank that had to be renewed, the likelihood of not reaching the inflation target set for 2018, and fears of a default in 2019. To offset these pressures, the BCRA raised its rate by 2,000 bps to 60 percent and raised reserve requirements in pesos, while increased tax adjustments were proposed by the government for the following years.

12. In the months of July and August, several central banks increased their **interest rates**. In the developed economies (Canada and the United Kingdom), the aim of this rise is to gradually reduce monetary stimulus in a context in which gaps in the labor market and in installed capacity are closing. It should be mentioned that the Fed raised its interest rate in June and that a similar decision is expected in the September meeting.

    This cycle of rate rises, together with greater risk aversion associated with commercial tensions, generated depreciatory pressures on emerging currencies and, in many cases, increased inflation and inflation expectations. In this context, several central banks raised their interest rates. Rate rises worth pointing out within this group of countries include the rise in rates in Turkey, Argentina, Ukraine, the Philippines, Pakistan, and Indonesia, which are countries affected by their external position (high current account deficits, high external debt or high exposure of their corporate sector to depreciation).

In contrast with what was observed in the previous Inflation Report, no economy in the sample reduced its interest rate in the months of July and August.

Table 8
POLICY INTEREST RATES
(%)

				Change (bps.) respect to:	
	Dec.17	**Jun.18**	**Aug.18**	**Jun.18**	**Dec.17**
Argentina	28.75	40.00	60.00	2,000	3,125
Pakistan	5.75	6.50	7.50	100	175
Philippines	3.00	3.50	4.00	50	100
Ukraine	14.50	17.00	17.50	50	300
India	6.00	6.25	6.50	25	50
Indonesia	4.25	5.25	5.50	25	125
Czech Republic	0.50	1.00	1.25	25	75
United Kingdom	0.50	0.50	0.75	25	25
Canada	1.00	1.25	1.50	25	50
Turkey	8.00	17.75	17.75	0	975
Romania	1.75	2.50	2.50	0	75
USA	1.50	2.00	2.00	0	50
Mexico	7.25	7.75	7.75	0	50
Malaysia	3.00	3.25	3.25	0	25
Australia	1.50	1.50	1.50	0	0
Chile	2.50	2.50	2.50	0	0
South Korea	1.50	1.50	1.50	0	0
Eurozone	0.00	0.00	0.00	0	0
Hungary	0.90	0.90	0.90	0	0
Iceland	4.25	4.25	4.25	0	0
Israel	0.10	0.10	0.10	0	0
Japan	-0.10	-0.10	-0.10	0	0
Norway	0.50	0.50	0.50	0	0
Poland	1.50	1.50	1.50	0	0
Sweden	-0.50	-0.50	-0.50	0	0
China	4.35	4.35	4.35	0	0
New Zealand	1.75	1.75	1.75	0	0
Switzerland	-0.75	-0.75	-0.75	0	0
Thailand	1.50	1.50	1.50	0	0
Taiwan	1.38	1.38	1.38	0	0
South Africa	6.75	6.50	6.50	0	-25
Brazil	7.00	6.50	6.50	0	-50
Colombia	4.75	4.25	4.25	0	-50
Peru	3.25	2.75	2.75	0	-50
Russia	7.75	7.25	7.25	0	-50
Serbia	3.50	3.00	3.00	0	-50

Source: Bloomberg.

Box 1

TRADE TENSIONS: RECENT DEVELOPMENTS AND TRANSMISSION CHANNELS

Since tariffs were imposed on Chinese washing machines and solar panels in January of this year, trade tensions between the United States and the rest of the world have escalated steadily. At the time of completing this Report, the amount of international trade involved in these actions is not significant, but the possibility that additional measures will be adopted has increased risk aversion and affected a series of stock exchanges, commodity prices, and the currencies of emerging economies. Analysts and investment firms estimate that the escalation of the trade war could imply up to one point in the annual rate of global growth.

USA: TRADE BALANCE OF 2017
(Billion US$)

	Exports	Imports	Trade Balance
China	130	506	-375
European Union	284	435	-151
Mexico	243	314	-71
Japan	68	137	-69
India	28	49	-21
Canada	282	300	-18
Rest	511	602	-91
TOTAL	**1,546**	**2,342**	**-796**

Source: United States International Trade Commission (USITC).

Description of actions taken

The table below lists the main actions taken so far this year by the United States and the retaliatory measures adopted by the countries involved in this trade war.

TIMELINE OF TRADE MEASURES

	Affected country	February	March	June	July	August
USA	**China**		Announcement of the imposition of tariffs to US$ 50 billion. China announced similar retaliatory measures.		US$ 34 billion (first part) become effective between the USA and China.	The remaining US$ 16 billion become effective between both countries.
	Global	10 percent tariffs on **steel** and 25 percent on **aluminum** (measure initially excludes the USA, Canada and Mexico)		Tariffs on steel and aluminum become effective from the EU, Canada and Mexico.		Sanctions to Turkey double the tariff on steel and aluminum (raised to 20% and 50%, respectively).
Retaliatory measures				**EU** announces measures on steel, bourbon, orange juice and motorcycles. **India** announces tariffs on 30 USA products (agricultural, motorcycles).	**Canada** applies tariffs on iron and steel (25%) and aluminum, ketchup, pizza, detergents and others (10%). **Mexico** applies tariffs between 15% and 25% to steel, agricultural (20%) and others.	

The main measures already adopted include the following:

(i) US imposed tariffs on US$ 50 billion of imported Chinese goods and similar retaliatory measures were adopted by China.

(ii) 10 percent tariffs on aluminum and 25 percent tariffs on steel set on aluminum and steel imported from any country (including Mexico and Canada). Moreover, the tariff rate on Turkish aluminum and steel was raised to 20 and 50 percent as part of the US trade sanctions imposed to that country.

The following measures could be implemented in the short and medium term:

(i) US could impose tariffs on US$ 200 billion of imported Chinese goods. On July 10, the US government announced the list of items potentially subject to these measures and hearings were held to evaluate the position of the sectors involved.

(ii) At the time of completing this report, US announced that a 10 percent tariff would become effective on September 24. In retaliation, China announced the imposition of tariffs on US$ 60 billion of goods imported from the US for the same date.

(iii) The imposition of tariffs on cars, the main argument being that the US tariff (2 percent) is lower than the tariffs of other regions or countries (the tariff is 10 percent in the European Union).

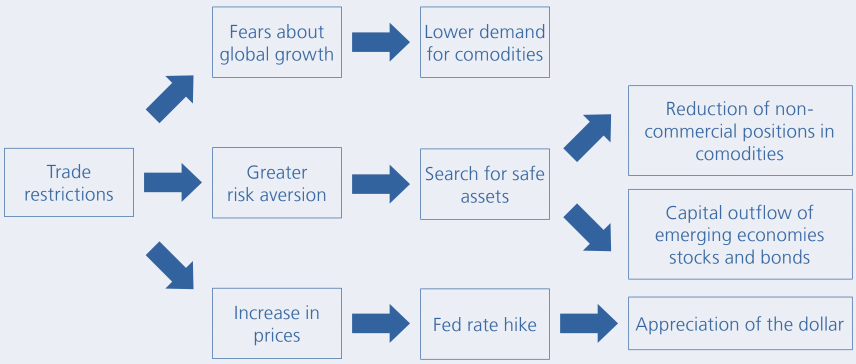
Scope of the measures

The measures applied to Chinese imports represent US$ 50 billion in goods, which is equivalent to 0.24 percent of the U.S. GDP. In terms of the Chinese economy, the proportions are also minimal. The list of goods affected by the US tariffs includes products that could be provided by other countries, so the impact on the productive chains would be limited. If we add the US$ 200 billion, the amount involved in US imports would represent 1.2 percent of the US GDP.

However, beyond the direct impact that these measures will have on the amounts of trade, there are several second-round impacts that affect the economy through the commercial and financial channels.

Impact on the emerging economies in the short term

The main transmission channels are included in the following diagram. In addition to their direct impact –so far limited–, trade restrictions increase global risk aversion as well as the risks that may affect global growth (especially China's growth, which is particularly relevant since this country embodies the main demand for commodities).



The main effects of this trade war in the short term have been:

a. A fall in commodity prices: the prices of commodities (particularly the prices of basic metals) have fallen after the worsening of trade tensions. Industrial metals (basic metals) have dropped the most: 15 percent since the end of June (vs. a 4 percent decrease recorded in the aggregate index).

COMMODITIES INDEX: AGGREGATE AND INDUSTRIAL METALS (COMMODITIES)

Source: Bloomberg.

There are several factors that explain this decrease. First, non-commercial positions of commodities have declined significantly and have gone from a net purchase position to a net sale position, as in the case of copper. Second, the trade war is having an impact on the yuan: the Chinese currency has depreciated 4 percent since June of this year. Since China is the main consumer of metals –this country accounts for approximately 50 percent of the world's copper demand–, the depreciation of the yuan increases the price of its imports, which reduces the demand for metals. Third, as a result of these events, the outlook for global growth has declined, which implies a lower expected demand for commodities.

EXCHANGE RATE (YUANES PER US$) AND COPPER PRICE (US$/LB)

Source: Bloomberg.

b. Capital outflows: the increase in risk aversion has generated a greater demand for assets considered safe (such as the US, German, UK, or Japanese sovereign bonds) and a lower demand for emerging market assets. As mentioned above, since July, when commercial tensions worsened, capital flows to both the fixed-income and variable-income bond markets have decreased and this has been reflected in a fall of 6 percent in the emerging stock market index (15 percent from the March levels). On the other hand, the average yield of sovereign bonds in domestic currency stands at 5.2 percent (vs. 4.8 percent in March).

EMERGING STOCK INDEX (MSCI) AND SOVEREIGN BOND YIELD IN DOMESTIC CURRENCY

Source: Bloomberg.

c. Depreciation pressures on the currencies of the emerging economies: capital outflows from the emerging economies have generated depreciatory pressures in these countries. In addition to this, the emerging commodity-exporting economies have also seen lower inflows of dollars due to the fall in prices. In this context, the dollar has strengthened 5 percent against the basket of the emerging currencies (and 15 percent from the maximum levels observed in February) since the worsening of trade tensions. As previously pointed out, increased depreciation pressures have been observed in those economies with greater external vulnerabilities associated with high current account deficits, strong short-term debts, or low levels of international reserves.

Box 2

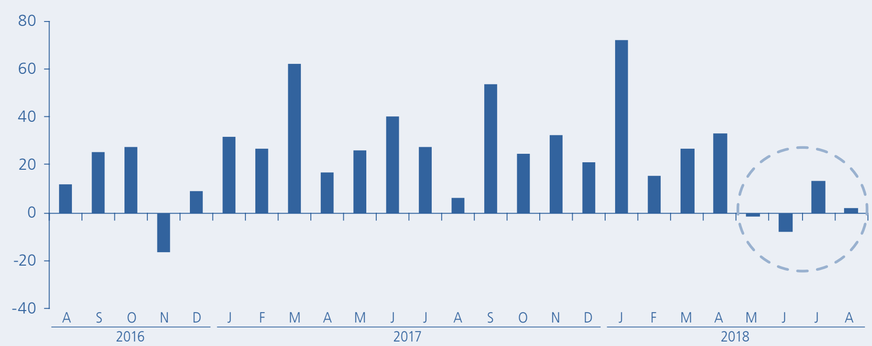
MACROECONOMIC FUNDAMENTALS AND VULNERABILITIES IN THE EMERGING ECONOMIES IN PERIODS OF UNCERTAINTY

In recent months there has been greater uncertainty regarding global economic growth due mainly to the negative effects of the escalation of trade tensions between the United States and its trading partners, particularly China[1]. As a result, greater volatility has been seen in the emerging financial markets due to the downward revision of growth expectations in the emerging countries and the fall in the prices of the main commodities.

However, the impact of this increased uncertainty on the emerging economies is not uniform, the degree of the impact being rather determined by the evolution of macroeconomic fundamentals which are intimately associated with the implementation of macroeconomic policies in each country in the past. This box analyzes the evolution of the financial assets and currencies of the main emerging economies, assessing the effects observed in connection to the macroeconomic fundamentals of these countries.

Today global growth is foreseen to continue showing its current pace of growth although it is also estimated that it will be less synchronized than initially expected. Global growth would be driven by economic recovery in the United States as a result of fiscal stimulus in that country, which has led to a higher increase in interest rates in dollars and to an appreciation of the dollar, as it is expected that the Federal Reserve will continue to withdraw its monetary impulse. In addition to this, it is also expected that the central banks of the world's leading economies will continue to pursue a more expansionary monetary policy.

FLOW OF PORTFOLIO CAPITAL TO EMERGING ECONOMIES
(Billion US$)



Source: Institute of International Finance (IIF).

1 The current US Administration has begun to impose tariffs on imports of goods from its main trading partners (China, Canada, Mexico, the European Union, and Japan), which has led these countries –except Japan– to response with retaliatory measures, imposing also tariffs to US goods.

Historically, periods in which interest rate rises for operations in dollars are seen together with an appreciation of the dollar have been challenging episodes for the emerging economies. The reason explaining this is that, in such contexts, the emerging economies face potential capital outflows motivated by the better returns offered by investments in dollars. Thus, in the current scenario of uncertainty observed, the flow of capital to the emerging economies has decreased significantly.

In this context, the most affected countries have been the ones showing relatively weaker macroeconomic fundamentals, which makes them more vulnerable to external shocks. The most important macroeconomic fundamentals based on which one can prepare an appropriate diagnosis for each country include the following: (i) the current account balance, (ii) the ratio of debt in foreign currency and short-term debt, (iii) the level of international reserves, (iv) fiscal soundness, and (v) the resilience of the financial system.

Thus, the higher capital outflows and the greater probability of occurrence of speculative attacks during stress periods in international financial markets tend to be seen in the emerging economies in which there is a deterioration in these variables. The domestic assets and the value of the currency in these economies are subject to a significant level of pressure since they are considered overvalued in relation to their fundamentals.

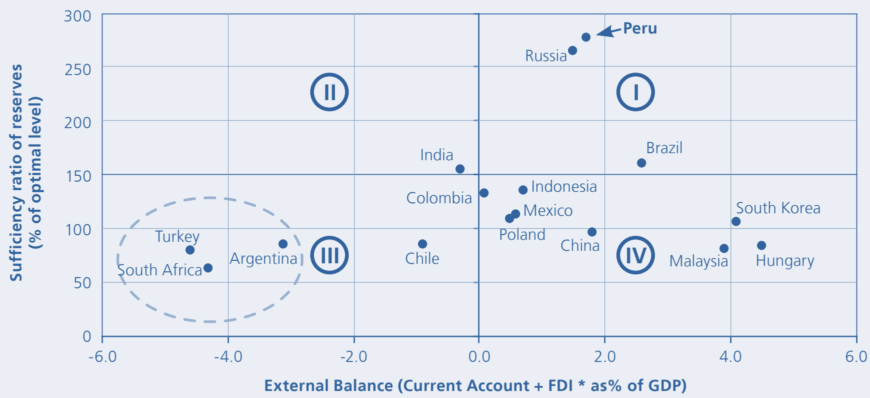
EMERGING ECONOMIES: VULNERABILITY INDICATORS

	Brazil	Colombia	Mexico	Argentina	South Africa	India	Turkey	Indonesia	Peru
Current Account (% GDP), 2018*	-0.1	-3.1	-1.4	-5.0	-3.7	-2.4	-6.2	-2.1	1.6
External Debt CP + Maturity Debt Ext. LT + Deposits (1 year) Non-Resident (% of RIN), 2018 *	44.0	89.6	52.9	135.9	96.9	64.9	228.2	51.3	22.1
Short-term Ext. Debt (% Ext. Debt), 2018 *	9	14	14	25	21	15	25	15	11
Ext. Debt (% GDP), 2018 *	32	40	39	41	48	23	57	35	34
Fiscal Deficit (% GDP), 2018*	-7.0	-1.7	-2.5	-4.9	-4.1	-3.3	-2.0	-2.6	-2.8
Gross Public Debt (% GDP), 2018 *	87.3	49.3	53.5	54.1	54.9	68.9	27.8	29.6	25.7
Holding foreigners in local government debt *	12%	27%	33%	n.d.	41%	4%	19%	40%	42%
CPI (%)**	4.2	3.1	4.9	34.4	5.1	3.7	17.9	3.2	1.1
Parliamentary or Presidential Elections	Oct.18	-.-	Jul.18	Oct.19	Aug.19	May.19	-.-	-.-	-.-

* Information available (in some cases at December 2017 and in others at July or August 2018).
** Forecast: Moody's, IIF, FMI y BCRP (Perú).
Source: Moody's, FMI, IIF y Bloomberg.

The following graph illustrates the external vulnerabilities faced by the main emerging economies according to the most relevant variables mentioned above. Because of its favorable external balance and its high level of international reserves, the position of Peru stands out in terms of soundness.

SUFFICIENCY RATIO OF INTERNATIONAL RESERVES (IMF) AND EXTERNAL BALANCE
(2017)

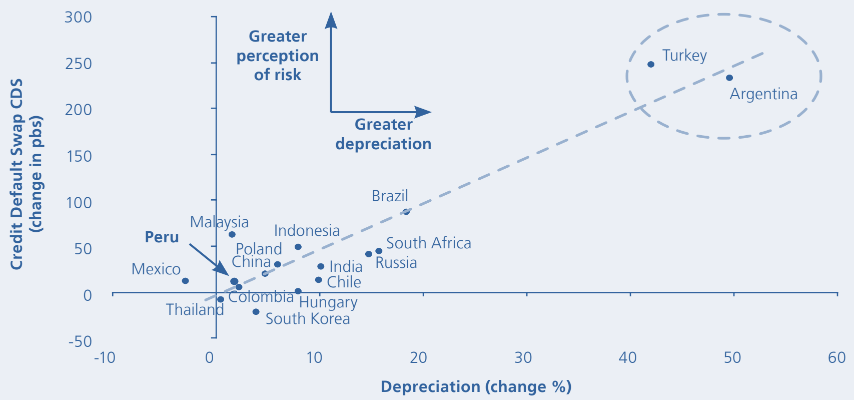


* FDI: Foreign direct investment.
Source: FMI y Moody's.

Similarly, the following graph captures international financial markets' perception of risk through Credit Default Swaps (CDS)[2]. As illustrated in the graph, the countries with the weaker economic fundamentals show the higher perceptions of risk and their currencies have gone through significant depreciations, with Turkey and Argentina standing out as the most affected countries.

It is also worth highlighting the risk of a possible contagion effect through financial markets to the rest of the emerging economies should this negative scenario worsen. This could occur in countries in which there is a greater perception of risk, either due to their greater external vulnerability or due to the greater commercial or financial interrelation they have with the affected economies in the first place.

DEPRECIATION AND SPREAD 5-YEAR CDS
(2018*)



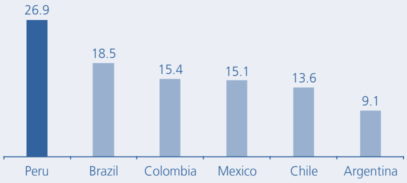
* 31 August.
Source: Bloomberg.

2 The CDS is a derivative instrument used to cover the risk of default on a bond. Thus, a higher premium (price) to obtain such an instrument implies a greater perception of risk of a country's probability of default.

Peru is among the least vulnerable emerging countries. A strong external position, a relatively small current account deficit, stable financing, and a high level of reserves account for its strong macroeconomic position. Moreover, the expected reduction in the fiscal deficit would help to increase savings. Peru is the only country of the six largest economies in Latin America whose risk rating or outlook has not been changed in recent years. Peru's exports are relatively diversified and, besides copper, include other relevant metals such as gold and zinc.

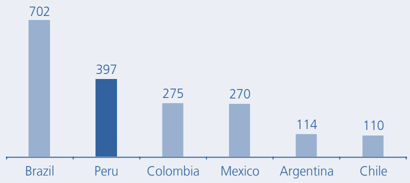
Furthermore, Peru's level of reserves is equivalent to 27.2 percent of its GDP, the largest ratio observed among the six largest Latin American economies. In addition, its international reserves represent 4 times the balance of its short-term external debt. On the other hand, the balances of Peru's gross and net public debt reached 25 and 10 percent of GDP in 2017, respectively, ratios exceeded only by Chile. Finally, it is worth mentioning that the current account deficit of the Peruvian economy in 2017 (1.1 percent of GDP) was the second lowest in the region.

Net International Reserves, 2018 *
(% GDP)



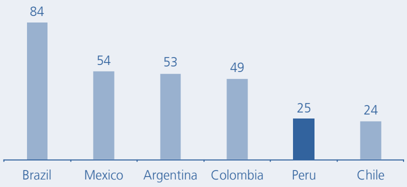
* Peru: projection at the end of the year. For the rest of the countries, the reserve balance for August 2018 is used over the GDP of 2017.
Source: The Economist. Moody's Statistical Handbook and BCRP.

Net International Reserves, 2018 *
(% Short term external debt)



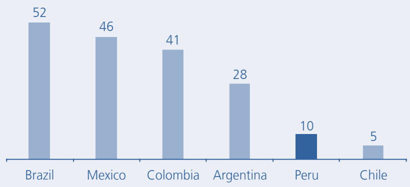
* Peru: projection at the end of the year. For the rest of the countries, the reserve balance as of August 2018 is used for short-term external debt in 2017.
Source: The Economist. Moody's Statistical Handbook and BCRP.

Gross Public Debt, 2017
(% GDP)



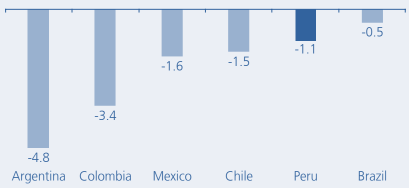
Source: WEO Apr.l,2018 (IMF) and BCRP.

Net Public Debt, 2017
(% GDP)



Source: WEO Apr.l,2018 (IMF). Infobae (Argentina) and BCRP.

Current Account of Balance of the Payments, 2017
(% GDP)



Source: WEO Apr.l,2018 (IMF) and BCRP.

It should also be pointed out that, in recent years, the Central Bank of Perú has been implementing additional macro prudential measures to promote the de-dollarization of credit to the private sector, as a result of which this indicator has dropped from 80 percent at the end of 2000 to 28 percent as of August 2018. This has not only reduced the country's vulnerability, but also increased the resilience of the financial system vis-à-vis the occurrence of external financial shocks and greater global uncertainty.

II. Balance of Payments

Current Account

13. The forecast scenario in this Report considers a less favorable international context than the one considered in the previous report. On the one hand, even though the projected growth of our trading partners and global growth remain unchanged, it is less synchronized and involves higher risks on the downside. On the other hand, it considers a downward correction in the projection of export prices to price levels that are still above the average prices observed in the last five years.

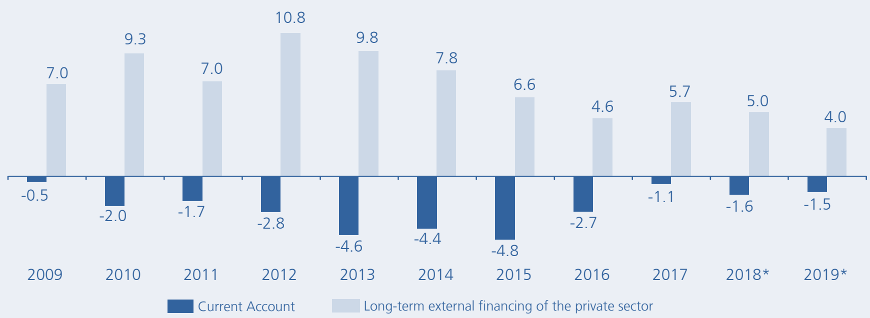
    In this context, moderate **current account deficit** levels of 1.6 and 1.5 percent of GDP are expected for 2018 and 2019, respectively, in line with a surplus in the trade balance that would decrease from nearly US$ 7 billion in 2018 to nearly US$ 6 billion in 2019. Long-term external capital flows to the private sector would continue to be the main source of financing the balance of payments (5.0 percent of GDP in 2018 and 4.0 percent of GDP in 2019).

Table 9
BALANCE OF PAYMENTS
(Million US$)

	2017		2018*			2019*	
	H1	Year	H1	IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
I. CURRENT ACCOUNT BALANCE	**-1,351**	**-2,414**	**-2,000**	**-2,742**	**-3,579**	**-2,785**	**-3,468**
% GDP	*-1.3*	*-1.1*	*-1.9*	*-1.2*	*-1.6*	*-1.2*	*-1.5*
1. Trade Balance	2,490	6,571	3,896	9,025	6,944	10,011	5,794
a. Exports	20,700	45,275	24,434	52,058	49,887	55,181	51,095
Of which:							
i) Traditional	15,272	33,446	17,969	37,903	35,981	39,706	35,738
ii) Non Traditional	5,366	11,699	6,390	14,005	13,743	15,316	15,182
b. Imports	-18,210	-38,704	-20,538	-43,033	-42,943	-45,170	-45,301
2. Services	-422	-1,434	-1,225	-2,227	-2,308	-2,436	-2,411
3. Investment income	-5,283	-11,263	-6,418	-13,134	-11,746	-14,097	-10,520
4. Current transfers	1,864	3,712	1,747	3,594	3,532	3,738	3,669
Of which: Remittances	1,476	3,051	1,550	3,204	3,204	3,364	3,364
II. FINANCIAL ACCOUNT	**2,267**	**4,350**	**-2,542**	**1,692**	**1,098**	**4,595**	**4,244**
1. Private Sector	-1,069	1,100	-1,018	1,031	-364	3,394	2,813
a. Long-term	-238	1,653	1,776	1,892	2,018	4,314	3,208
b. Short-term 1/	-831	-553	-2,794	-861	-2,381	-920	-396
2. Public Sector 2/	3,336	3,249	-1,523	661	1,462	1,201	1,432
III. CHANGE ON NIRs	**916**	**1,936**	**-4,542**	**-1,050**	**-2,480**	**1,811**	**777**
Memo: Long-term external financing of the private sector 3/ (% GDP)	3.9	5.7	6.5	4.8	5.0	4.8	4.0

1/ Includes net errors and omissions, and NIR's effect valuation.
2/ Includes exceptional financing.
3/ Includes net foreign investments, portfolio investment, and private sector's long-term disbursement.
* Forecast.
IR: Inflation Report.

Graph 11
CURRENT ACCOUNT AND LONG-TERM EXTERNAL FINANCING OF THE PRIVATE SECTOR: 2009-2019 1/
(% GDP)



1/ Includes net foreign investments, portfolio investment, and private sector's long-term disbursement.
* Forecast.

14. The **trade balance**, which showed a surplus of US$ 3.9 billion in the first half of 2018, is foreseen to continue showing a positive balance in the forecast horizon. A surplus of US$ 6.9 billion is projected for 2019, with exports reaching US$ 49.9 billion, mainly due to higher export prices. On the other hand, in 2019, the trade surplus would amount to US$ 5.8 billion in 2019, considering a reduction in export prices, but offset by the growth of the volume of exports.

Table 10
TRADE BALANCE
(% change)

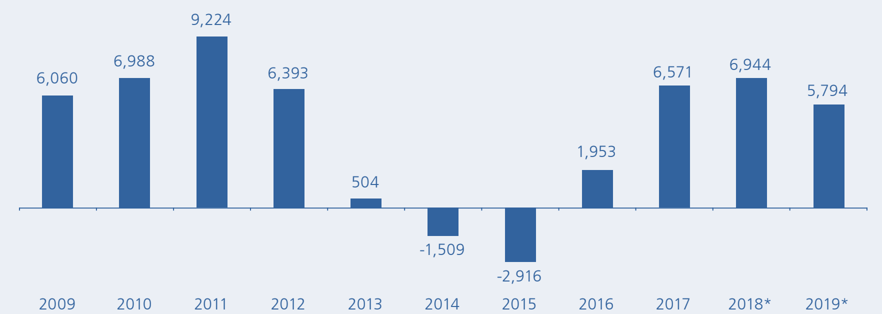
	2017	2018*	2019*
1. Value:			
Exports	22.1	10.2	2.4
Traditional products	27.7	7.6	-0.7
Non-traditional products	8.3	17.5	10.5
Imports	10.2	11.0	5.5
2. Volume:			
Exports	8.1	2.6	4.8
Traditional products	8.4	-1.0	3.8
Non-traditional products	7.2	13.3	6.3
Imports	4.5	4.4	4.8
3. Price:			
Exports	13.0	7.4	-2.2
Traditional products	17.8	8.6	-4.3
Non-traditional products	1.1	3.7	3.9
Imports	5.4	6.3	0.7

* Forecast.

Higher volumes of **exports**, especially exports of non-traditional products are expected for this year, including exports of agricultural and fishing products as they would continue to be favored by the normalization of weather conditions, and higher volumes of exports of textile, chemical, and iron&steel products, in line with the recovery of external demand. The volume of exports of traditional exports, on the other hand, would be affected mainly by a lower mining output due in part to lower mineral grades. As for exports in 2019, the positive impact of global growth on the demand for our non-traditional export products is expected to continue next year (although with a slight moderation) and a slight recovery of mining production which would have a positive impact on exports of traditional products is also foreseen.

Imports, on the other hand, are expected to grow in line with the anticipated evolution of domestic demand and with higher oil prices.

Graph 12
TRADE BALANCE: 2009-2019
(Million US$)



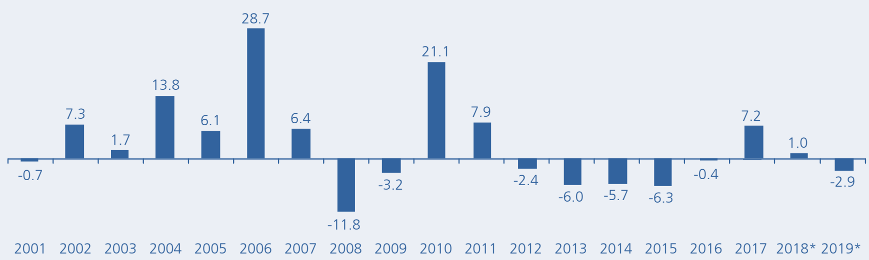
* Forecast.

Terms of Trade

15. In 2018, the **terms of trade** are estimated to increase 1.0 percent. The prices of exports would increase 7.4 percent compared to 2017, in line with the higher prices of basic metals and gold, while the prices of imports would increase 6.3 percent compared to 2017.

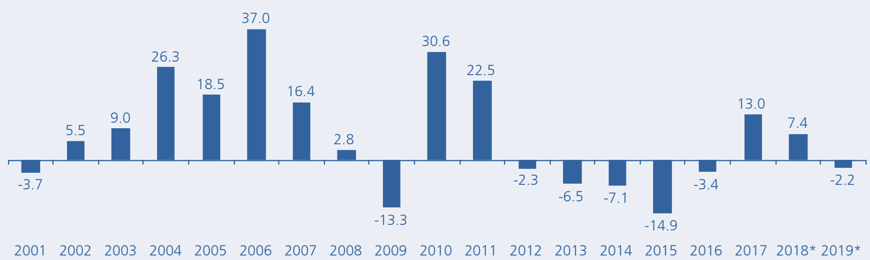
    This estimate of the terms of trade is lower than that considered in the June Inflation Report and reflects the recent evolution of prices, which were affected by trade tensions between the United States and its main trading partners and by a further increase in the price of oil (due to supply constraints). In 2019, the terms of trade would show an average annual reduction of 2.9 percent considering a fall of 2.2 percent in the prices of exports (the latter would continue to show levels above the average observed in the period 2013 – 2017).

Graph 13
TERMS OF TRADE: 2001 - 2019
(Annual average % change)



* Forecast.
Source: BCRP.

Graph 14
PRICE OF EXPORTS: 2001 - 2019
(Annual average % change)



* Forecast.
Source: BCRP.

Table 11
TERMS OF TRADE: 2017 - 2019

	2017	2018*		2019*	
		IR Jun.	IR Sep.	IR Jun.	IR Sep.
Terms of Trade (Annual % chg.)	**7.2**	**4.9**	**1.0**	**1.3**	**-2.9**
Price of exports (Annual % chg.)	**13.0**	**11.6**	**7.4**	**1.9**	**-2.2**
Copper (US$ cents per pound)	280	319	295	329	275
Zinc (US$ cents per pound)	131	146	131	142	111
Lead (US$ cents per pound)	105	112	103	113	94
Gold (US$ per troy ounce)	1,257	1,314	1,264	1,335	1,225
Price of imports (Annual % chg.)	**5.4**	**6.4**	**6.3**	**0.6**	**0.7**
Oil (US$ per barrel)	51	65	67	63	66
Wheat (US$ per ton)	145	186	192	198	207
Maize (US$ per ton)	131	145	135	162	151
Soybean oil (US$ per ton)	707	674	640	713	653
Soybean grain (US$ per ton)	348	402	381	384	354

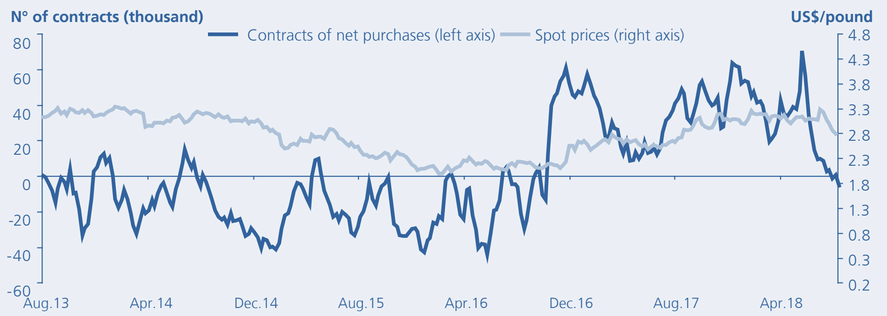
* Forecast.
IR: Inflation Report.
Source: BCRP.

a. Copper

In August, the price of **copper** reached a monthly average of US$ 2.74 a pound, a price 13 percent lower than that recorded in June. As a result, the price of copper reverses the upward trend observed in the first half of the year and accumulated a decline of 11 percent so far this year.

During the last two months, the price of copper was affected by commercial tensions that increased risk aversion and led to lower speculative demand: the number of non-commercial net purchase contracts decreased drastically and showed negative levels for the first time since October 2016.

Graph 15
COPPER: SPECULATIVE NET POSITIONS



Note: Copper Speculative Net Positions of the Commodities Futures Trading Commission reflects the difference between the total volume of long (or purchase) and short (or sales) copper positions existing in the market and open by non-commercial operators (speculative). It only includes the futures markets of the USA (Chicago and New York Stock Exchanges).
Source: Bloomberg.

This fall in speculative demand was accompanied by a better evolution of the supply than that foreseen in the previous Inflation Report. An unexpected period of stability was observed in mine production in recent months, production recoveries being even recorded in Chile and Indonesia. Contrary to expectations, most labor negotiations concluded satisfactorily, the agreement reached in Chilean mine Escondida standing out. It is worth mentioning that the workers of this mine –the most important open pit mine in the world– held a strike during 44 days in 2017.

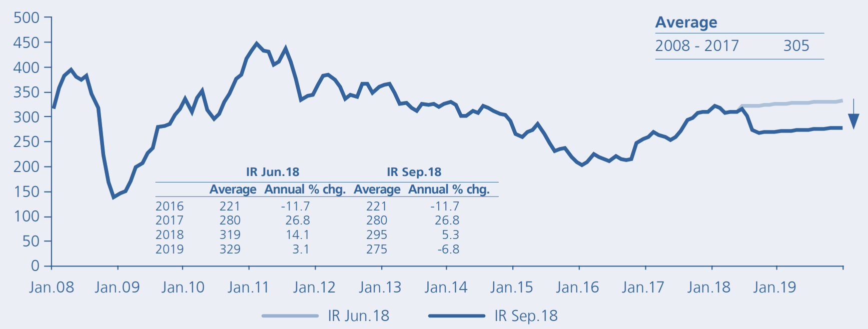
Table 12
WORLD REFINED COPPER USAGE AND SUPPLY
(Thousand metric tonnes, copper)

	2014	2015	2016	2017 2/	2018 2/	2019 2/	Jan.-May. 2017	Jan.-May. 2018	% chg.
World Mine Production	18,426	19,168	20,357	20,000	20,670	20,758	7,885	8,336	5.7%
World Refined Production (Primary+Secondary)	22,491	22,871	23,337	23,504	24,511	24,664	9,589	9,784	2.0%
World Refined Usage	22,922	23,077	23,600	23,755	24,468	24,995	9,655	9,763	1.1%
Refined Balance 1/	-431	-206	-263	-250	43	-331	-66	21	

1/ The balance is calculated using the total production of refined products minus the use of refining.
2/ Estimation of April and August 2018.
Source: International Copper Study Group (ICSG).

In line with these developments, the average prices of copper estimated for 2018 and 2019 have been revised down. It is estimated that the prices will correct slightly the fall observed in recent months, but nevertheless they will be below the levels foreseen in our June Inflation Report.

Graph 16
COPPER: JANUARY 2008 - DECEMBER 2019
(US$ cents/pd.)



Source: Bloomberg and BCRP.

b. Zinc

The international price of **zinc** decreased 19 percent between June and August 2018. As a result, the zinc price accumulates a fall of 21 percent in the first eight months of the year.

The fall in the price of zinc was associated with fears of lower demand associated with increased commercial tensions. It is worth mentioning that the demand for zinc had already been lower than expected in the first half of the year, among other factors due to the lower production of galvanized steel (as a result of environmental restrictions in China and of the United States imposition of a tariff of 25 percent on imports of this product).

On the supply side, the strong growth of the production of concentrates (due to the start of new projects) and the resumption of paralyzed mines have generated additional downward pressures on zinc prices. Low levels of inventories and some limitations in Chinese refinery operations offset these pressures

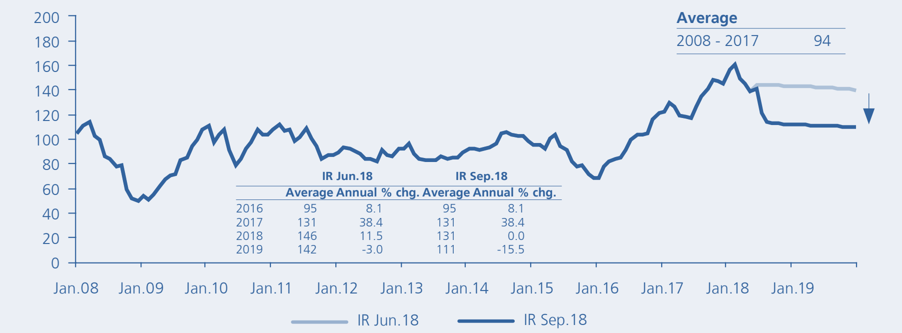
Table 13
WORLD REFINED ZINC USAGE AND SUPPLY
(Thousand metric tonnes, zinc)

	2014	2015	2016	2017	2018	Jan.-Jun. 2017	Jan.-Jun. 2018	Annual % chg.
World Mine Production	13.47	13.68	12.82	12.98	13.62	6.22	6.07	-2.4%
World Refined Production	13.40	13.81	13.55	13.22	13.71	6.49	6.63	2.1%
World Refined Usage	13.67	13.64	13.67	13.68	13.97	6.69	6.64	-0.6%
Refined Balance (in thousand)	-276	171	-127	-460	-263	-193	-17	

Source: International Lead and Zinc Study Group (ILZSG).

In line with these developments, the price projection of zinc has been revised down. The deficit in the zinc market should decline in 2018 and in 2019 the expansion of supply due to the onset of new projects would be reflected in a global surplus.

Graph 17
ZINC: JANUARY 2008 - DECEMBER 2019
(US$ cents/pd.)



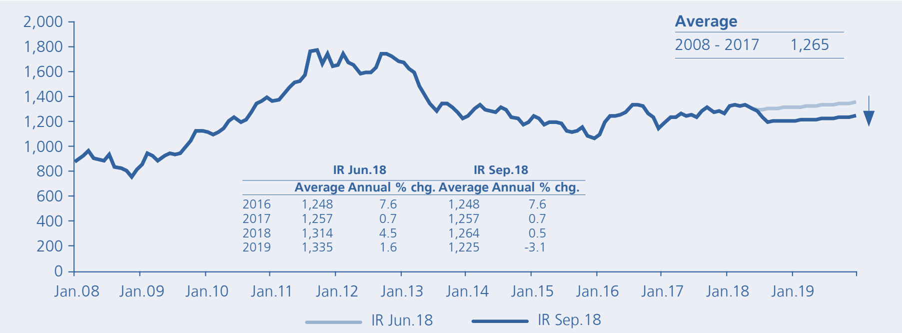
Source: Bloomberg and BCRP.

c. Gold

Between June and August, the price of **gold** fell 6 percent, reaching an average price of US$ 1,201 a troy ounce in August. Year-to-date, the price of gold shows a drop of 5 percent.

The price of gold continued to be affected by the factors pointed out in our previous report: the appreciation of the dollar and the likelihood that the Fed will continue adjusting its interest rates in view of the favorable evolution of economic activity and the upward pressures on prices observed. Currency depreciations in the main emerging gold importing countries (particularly Turkey, India, and China) also affected the price of this precious metal. This trend was offset by the demand for gold as a hedge asset given the worsening of commercial tensions.

Graph 18
GOLD: JANUARY 2008 - DECEMBER 2019
(US$/tr. ounce)



Source: Bloomberg and BCRP.

In line with this, the projections for the price of gold in 2018 have been revised down from those projected in the June Report.

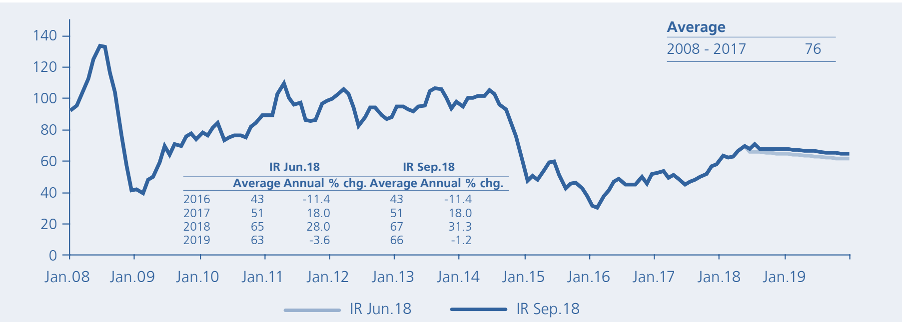
d. Crude Oil

The average price of **WTI oil** increased 16.7 percent in the first half of 2018 due to the supply constraints of the OPEC and Russia amid a context with a relatively stable demand.

However, the price of oil has had a slight downward correction since July (the price of oil reached US$/bl. 68 in August). The supply restrictions imposed by the OPEC have recently been relaxed to counterbalance the unplanned production cuts in Venezuela and the lower expected supply in Iran (this country being affected by the sanctions imposed by the United States). In addition, commercial tensions have led investors to liquidate their non-commercial positions, generating expectations of lower demand in the coming months.

In the forecast horizon, the price of oil is estimated to decrease slightly with the flexibilization of the OPEC supply and with the expected growth of shale oil production in the United States.

Graph 19
WTI OIL: JANUARY 2008 - DECEMBER 2019
(US$/bl.)



Source: Bloomberg and BCRP.

e. Imported Food

The price of **maize** fell 3 percent compared to June 2018 and posted an average price of US$ 128 per ton in August. With this fall, the average international price of maize has accumulated an increase of 2 percent in the first eight months of the year.

The fall in the price of maize in recent months is explained by the deepening of commercial tensions. More particularly, there were fears that the renegotiation of the North American Free Trade Agreement would affect the access of US corn to the Mexican market (its main export destination), but at the time this Report was closed, the US and Mexico had reached a commercial agreement that practically eliminates this risk. On the supply side, conditions for the cultivation of this crop have been favored by better weather conditions than expected in the Midwest of the United States, raising the production forecast for the 2018/2019 season. On the other hand, however, the rise in the price of wheat and uncertainty about the result of harvests in South America have offset the fall in the price of this crop.

In line with these developments, the projection of the average price of maize has been revised down in the forecast horizon.

Graph 20
MAIZE: JANUARY 2008 - DECEMBER 2019
(US$/ton)

	IR Jun.18		IR Sep.18	
	Average	Annual % chg.	Average	Annual % chg.
2016	135	-4.4	135	-4.4
2017	131	-2.3	131	-2.3
2018	145	10.6	135	2.5
2019	162	11.8	151	12.1

Source: Bloomberg and BCRP.

Since June, when our last Inflation Report was published, the price of **wheat** has risen 10 percent, accumulating an increase of 45 percent in the year and reaching an average price of US$ 213 per ton in August. With this, the price of wheat continues showing the upward trend observed in 2017 when the price went up 20 percent.

The rise in the price of wheat was influenced by projections of lower wheat production in the main exporting countries in the 2018/2019 season. The world production of wheat would reach its lowest level since the 2012/13 season, after exceeding successive world peaks over the past five years. The projections of harvests in the European Union, Russia, Ukraine, Australia, and China have been revised down. In addition, the strong and unexpected fall in world production is accompanied by a strong growth in the demand for wheat for food in the emerging economies, which is rapidly reducing the amount of wheat available for exports.

It is estimated that the price of wheat will reach levels higher than those considered in the previous Inflation Report due to the greater supply constraints foreseen in the forecast horizon. The magnitude of the price increase will depend on the final results of harvests in the Northern Hemisphere, especially on the level of the Russian surplus, because this result could modify the volume of its exports.

Graph 21
WHEAT: JANUARY 2008 - DECEMBER 2019
(US$/ton)

	IR Jun.18		IR Sep.18	
	Average	Annual % chg.	Average	Annual % chg.
2016	143	-23.1	143	-23.1
2017	145	1.5	145	1.5
2018	186	28.0	192	32.1
2019	198	6.1	207	7.8

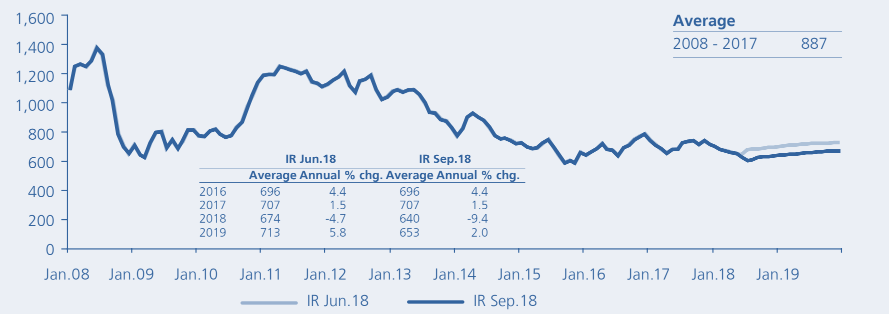
Source: Bloomberg and BCRP.

As of August, the average price of **soybean oil** was US$ 607 per ton; 3 percent lower than the average price in June and 15 percent lower than in December 2017. Thus, the average price of soybean oil continued showing the downward trend observed in the previous year.

The fall in the price of soybean oil is explained by the uncertainty generated by commercial tensions, the increase in world soybean production (to record levels), and the fall in the price of palm oil (its main substitute). It is worth remembering that the retaliatory measures applied by China on July 6 included a tariff of 25 percent on imports of soybean from the United States.

Taking into account these recent developments as well as prospects for higher production in the 2018/19 season, it is estimated that prices will be slightly below those estimated in the previous Inflation Report. In addition, a recovery of production in Argentina and Brazil as well as a greater supply of palm oil are expected in the forecast horizon.

Graph 22
SOYBEAN OIL: JANUARY 2008 - DECEMBER 2019
(US$/ton)



Source: Bloomberg and BCRP.

External Financing

16. Private long-term capital is expected to continue to be the main source of financing the balance of payments in the forecast horizon, exceeding by far the current account requirements for that period. **Foreign direct investment** will continue to be the main source of financing as profit reinvestment is foreseen to increase, in line with the recovery of activity and with the still high prices of our minerals in 2018. The main investment projects expected in the forecast horizon are mining projects, which this year would include, among other projects, the completion of the expansion of Southern's Toquepala mine as well as the already announced start of the projects of Quellaveco (Anglo American), Mina Justa (Marcobre), the expansion of Toromocho (Chinalco), Quecher Main (Yanacocha), and Relaves B2 San Rafael (Minsur). Other projects expected to start in 2019 include Pampa del Pongo (Jinzhao Mining) and Corani (Bear Creek). All of these new projects, which represent total investments of around US$ 11.7 billion until the year 2022, would be carried out in the following years.

Table 14
FINANCIAL ACCOUNT OF THE PRIVATE SECTOR
(Million US$)

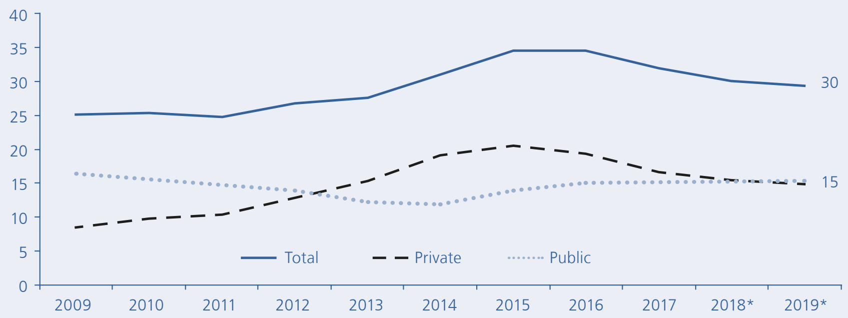
	2017	2018*	2019*
PRIVATE SECTOR (A + B)	**1,100**	**-364**	**2,813**
% GDP	*0.5*	*-0.2*	*1.2*
A. LONG-TERM	**1,653**	**2,018**	**3,208**
1. Assets	**-2,929**	**-3,775**	**-2,715**
2. Liabilities	**4,582**	**5,793**	**5,923**
Foreign direct investment in the country	6,769	7,093	6,242
Long-term loans	-3,906	-2,541	-1,819
Portfolio loans	1,719	1,241	1,500
B. SHORT-TERM [1/]	**-553**	**-2,381**	**-396**

1/ Includes net errors and omission, and FX revaluation effect.
* Forecast.

On the other hand, the net capital inflow would be lower due to greater investment in external portfolio assets and deposits, and to the lower inflow of portfolio investments in the country in a context marked by tighter external financial conditions for the emerging economies, as reflected in higher long-term interest rates and a higher dollar.

17. Private external indebtedness would show a declining trend during the forecast horizon and represent 15.0 percent of GDP in 2019. This projection is consistent with a greater use of local financing foreseen and rising international interest rates.

Graph 23
BALANCE OF MEDIUM- AND LONG-TERM EXTERNAL DEBT: 2009 - 2019
(% GDP)



* Forecast.

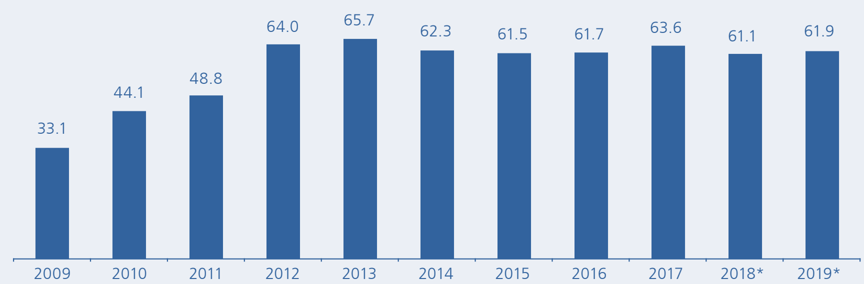
18. The soundness of the balance of payments to face negative external events is reflected in the position of Peru's international reserves relative to the balance of its short term external liabilities or comparing the total of these liabilities with the country's current account deficit. The high-levels the Peruvian economy shows in the region in terms of these indicators was pre-emptively achieved during a period of years characterized by positive capital inflows and the high prices of raw materials.

Table 15
NIR INDICATORS

	2017	2018*	2019*
NIR as a % of:			
a. GDP	29.7	26.9	26.2
b. Short-term external debt [1/]	453	397	445
c. Short-term external debt plus current account deficit	386	322	356
Medium- and long-term external debt (as a % GDP)	32.1	30.5	29.7
a. Private	16.7	15.4	14.6
b. Public	15.4	15.1	15.1

1/ Includes short-term debt balance plus redemption (1 year) of private and public sector.
* Forecast.

Graph 24
NET INTERNATIONAL RESERVES: 2009 - 2019
(Billion US$)



* Forecast.

19. Between January and August, the level of net international reserves (NIRs) decreased by US$ 3.35 billion, due to the withdrawal of banks' deposits in foreign currency (US$ 3. 22 billion) and the withdrawal of public sector deposits, which was offset in part by the increase in the BCRP foreign exchange (US$ 702 million). In 2018, the level of NIRs would be lower than that recorded at the end of 2017, athough this trend would be reversed in 2019.

III. Economic Activity

Expenditure-Side GDP

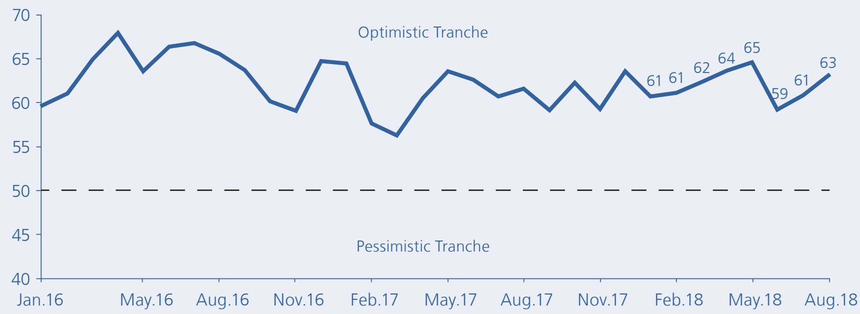
20. In the first half of 2018, economic activity grew 4.3 percent compared to the first half of 2017, driven by the increase in domestic demand (5.3 percent). Both rates have been the highest rates recorded since the second half of 2013. As a result of this, domestic demand accumulated five quarters of continuous growth, after the slowdown caused by the effects of El Niño Costero.

    This evolution of domestic demand is mainly explained by the recovery of private expenditure as a result of the improvement of the terms of trade, income, and the increase in formal employment. Moreover, public expenditure accumulated a growth rate of 4.0 percent in the first half of the year, driven by infrastructure, rehabilitation and maintenance projects and works. On the contrary, net external demand was affected by the contraction of exports of traditional goods (given the decline in mining production) and by a greater dynamism in imports of capital goods and durable consumer goods, in line with the recovery of the private expenditure.

21. Recent indicators of **private consumption** show a moderate pace of growth. Consumer confidence shows remains on the optimistic side and has improved recently, even though it still has not recovered the levels reached in May, and formal employment –measured by the electronic payroll– shows growth rates of over 4.0 percent. Credit to households continues to shown growth rates of more than 10.0 percent since March.

    a) In August 2018, the **consumer confidence index**, measured as the expected economic situation of the household in a year, showed a recovery for the second consecutive month after falling in June.

Graph 25
EXPECTATION OF ECONOMIC SITUATION OF THE HOUSEHOLD IN 12 MONTHS
(INDICCA. Lima Metropolitana)



Source: Apoyo.

b) **Consumer loans** have been showing greater dynamism since the fourth quarter of 2017, recording growth rate of over 10.0 percent since March of this year.

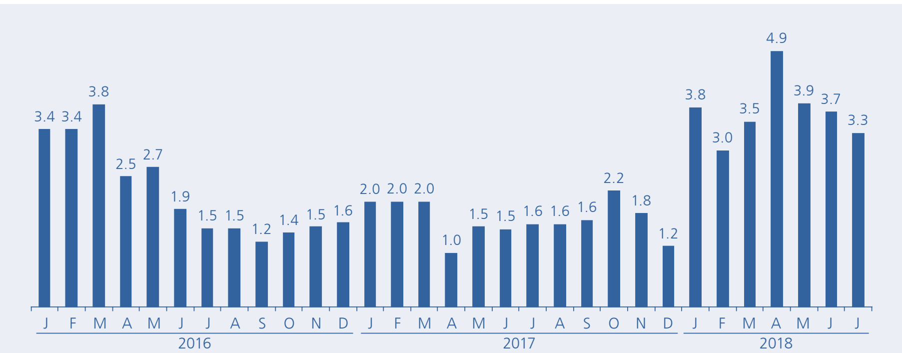
Graph 26
REAL CONSUMER LOAN
(12 month % change)

c) After high growth rates in January and May of this year, **imports of durable consumer goods** fell in June and July.

Graph 27
VOLUME OF IMPORTS OF DURABLE CONSUMER GOODS
(12 month % change)

d) According to information of SUNAT's Electronic Payroll System, which records data on the number of workers employed in all the formal companies and in the public sector of Peru, the number of **formal jobs** in the country increased in the first months of the year showing a growth rate of 4.9 percent in April (the highest rate recorded since December 2015).[3] However, this rising trend showed a slower pace of growth in the months thereafter and recorded a growth rate of 3.3 percent in July.

Graph 28
FORMAL JOBS
(12 month % change)

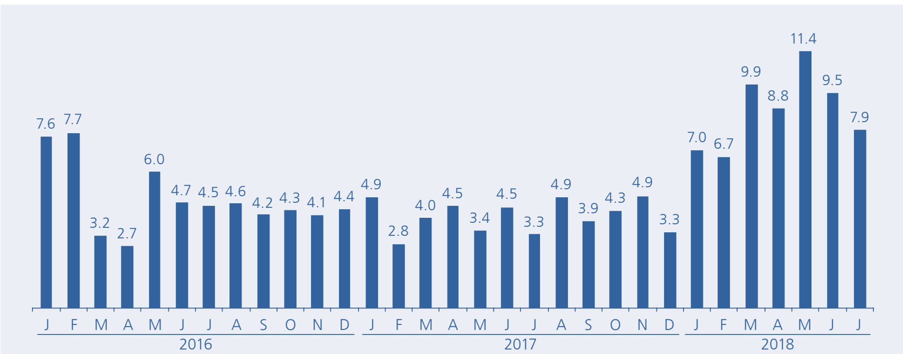


Source: Sunat-Electronic payroll.

3 These positions are considered jobs given that a worker may work for more than one work center.

e) In line with the evolution of formal employment, the **total payroll** of formal workers registered a growth rate of 7.9 percent in July. Thus, in the first seven months of this year, the total payroll grew 8.7 percent compared to the same period in 2017, this growth being associated mainly with higher incomes, especially in the sectors of services, mining, and manufacturing.

Graph 29
TOTAL PAYROLL OF FORMAL WORKERS
Electronic payroll
(12 month % change)

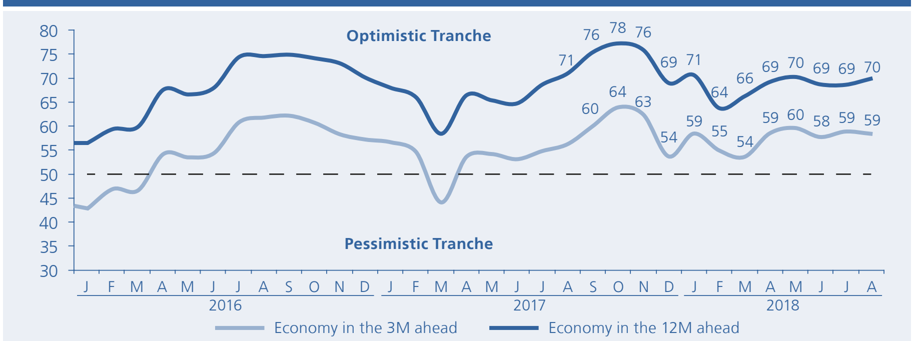


Source: Sunat-Electronic payroll.

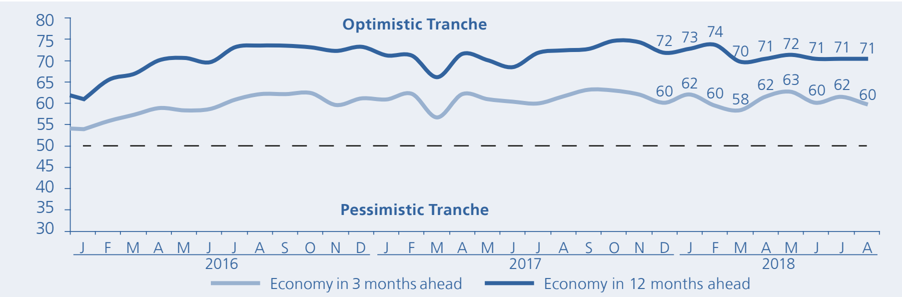
22. As regards **private investment**, current and advanced indicators show the following trends:

a) **Expectations about the economy** in three months and in twelve months have remained almost constant since May and remain on the optimistic side. Moreover, entrepreneurs' expectations about the situation of their companies in three months and in twelve months continue to show higher levels –60 and 71 points, respectively– than those recorded in March 2018.

Graph 30
EXPECTATIONS ABOUT THE ECONOMY IN 3 AND 12 MONTHS AHEAD

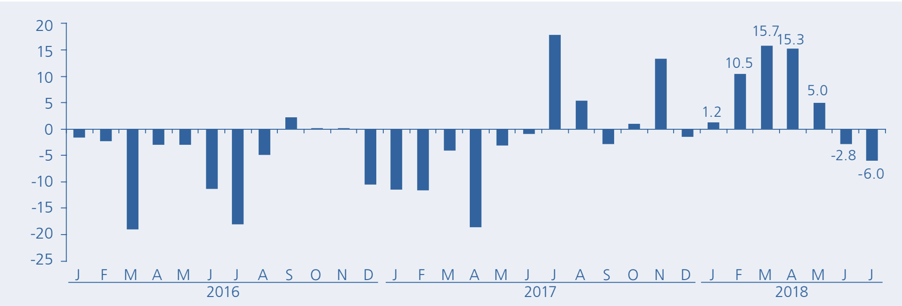


Graph 31
EXPECTATIONS ABOUT YOUR COMPANY'S SITUATION IN 3 AND 12 MONTHS AHEAD



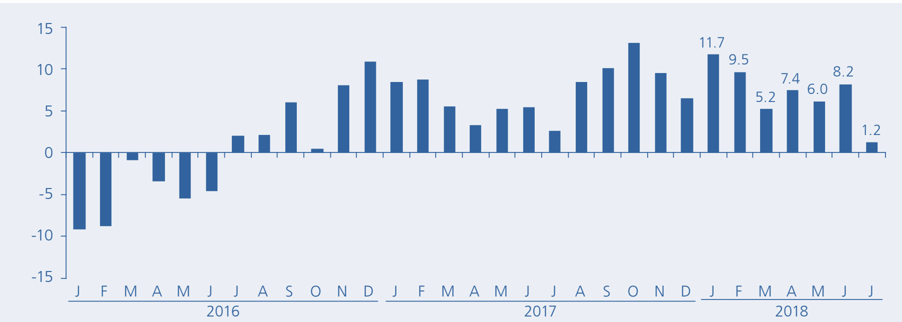
b) The volume of **imports of capital goods**, excluding construction materials, fell in the months of June and July to -2.8 and -6.0 percent, respectively, after having shown increases for five consecutive months.

Graph 32
VOLUME OF IMPORTS OF CAPITAL GOODS
(12 month % change)



c) Having registered an increase of 1.2 percent in July, the **terms of trade** anticipate a slower pace of growth in private expenditure.

Graph 33
TERMS OF TRADE
(12 month % change)



23. Moreover, expectations about the growth of GDP in 2018 and 2019 have been revised up. The representatives of non-financial firms maintain the projections they mentioned in our previous report, while economic analysts and the representatives of financial entities have raised their growth forecasts for both 2018 and 2019. Thus, the former expect a GDP growth rate of 4.0 percent this year and the latter expect a rate of 3.8 percent. Both groups forecast a growth rate of 4.0 percent in 2019.

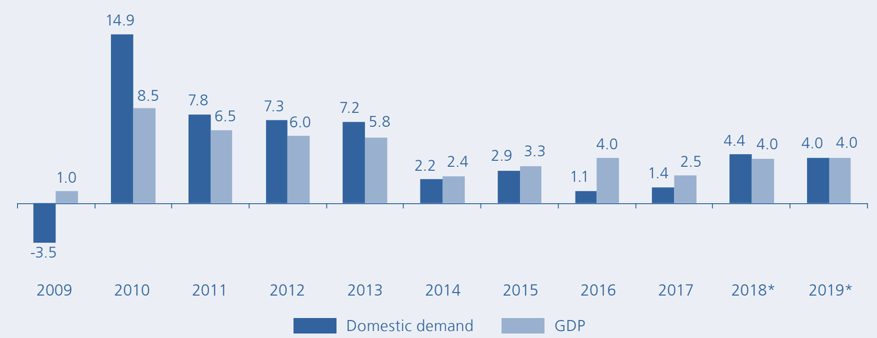
Table 16
MACROECONOMIC EXPECTATIONS SURVEY: GDP GROWTH
(% change)

	IR Dec.17	IR Mar.18	IR Jun.18	IR Sep.18*
Financial entities				
2018	3.8	3.5	3.5	3.8
2019	3.8	3.7	3.8	4.0
Economic analysts				
2018	4.0	3.5	3.6	4.0
2019	4.0	3.8	3.8	4.0
Non-financial firms				
2018	3.8	3.0	3.5	3.5
2019	4.0	4.0	3.8	3.8

* Survey conducted on August 31.

24. The GDP growth forecast for 2018 in this Inflation Report remains at 4.0 percent. The same growth rate is foreseen for 2019 as economic growth would continue to be driven by domestic demand. In 2018, the higher growth rate of consumption would be counterbalanced by the lower growth of public expenditure, in line with the trend observed until mid-2018. On the other hand, the growth forecast for 2019 takes into account the estimated impact of the terms of trade on private expenditure (especially in investment) as well as the impact that the new administrations taking office in the subnational governments will have on public investment.

Graph 34
DOMESTIC DEMAND AND GDP: 2009 - 2019
(Real % change)



* Forecast.

Table 17
DOMESTIC DEMAND AND GDP
(Real % change)

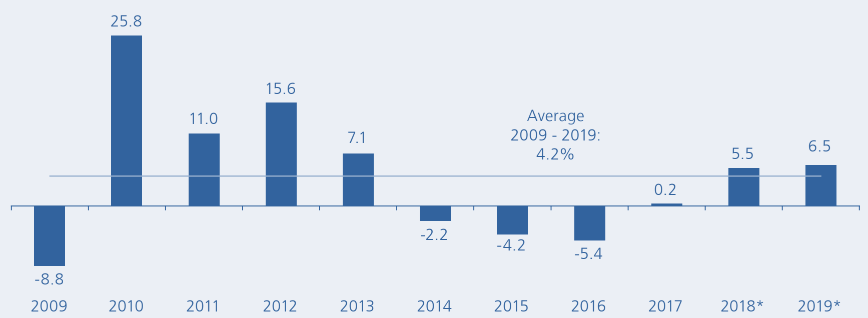
	2017		2018*			2019*	
	S1	**Year**	**S1**	**IR Jun.18**	**IR Sep.18**	**IR Jun.18**	**IR Sep.18**
Domestic demand	**-0.2**	**1.4**	**5.3**	**4.2**	**4.4**	**4.4**	**4.0**
Private consumption	2.4	2.5	3.8	3.4	3.8	3.7	3.6
Public consumption	-5.3	0.2	3.0	3.8	3.4	2.5	3.2
Private investment	-4.0	0.2	6.9	5.5	5.5	7.5	6.5
Public investment	-10.9	-2.3	7.6	12.6	9.9	5.0	2.8
Change on inventories (contribution)	0.0	-0.2	0.8	0.0	0.0	0.0	0.0
Exports	**12.6**	**7.8**	**3.2**	**4.4**	**3.5**	**3.9**	**4.6**
Imports	**2.5**	**4.1**	**6.8**	**5.1**	**5.0**	**4.5**	**4.7**
GROSS DOMESTIC PRODUCT	**2.4**	**2.5**	**4.3**	**4.0**	**4.0**	**4.2**	**4.0**
Memo:							
Public expenditure	*-6.6*	*-0.5*	*4.0*	*6.2*	*5.2*	*3.2*	*3.1*
Domestic demand excluding inventories	*-0.2*	*1.6*	*4.4*	*4.2*	*4.3*	*4.4*	*4.0*

IR: Inflation Report.
* Forecast.

25. As regards **private consumption**, it is foreseen to show a slower pace of growth in the following quarters, in line with the trends observed in the indicators of confidence, employment, income, and imports, which have been slowing down. Despite this, the positive evolution observed in the first half of the year, which reflects the positive impact of higher terms of trade, implies raising the growth forecast for this year. On the other hand, the growth of economic activity is expected to slow down in 2019 due to the impact of lower terms of trade.

26. As for **private investment**, it is expected to grow at a rate of 5.5 percent in 2018, as forecast in our June report. However, the growth forecast for 2019 has been revised down due to the impact of lower terms of trade and of tighter global financial conditions.

Graph 35
PRIVATE INVESTMENT: 2009 - 2019
(Real % change)



* Forecast.

The **main private investment projects announced** to be carried out in 2018-2019 amount to US$ 18 billion. Most of these projects will be carried out in the mining sector.

Table 18
MAIN ANNOUNCEMENTS OF PRIVATE INVESTMENT PROJECTS: 2018-2019
(Billion US$)

	IR Jun.18	IR Sep.18
Mining	7.4	8.0
Hydrocarbons	1.9	1.2
Energy	0.9	0.8
Industry	0.8	0.8
Infrastructure	3.9	3.5
Other sectors	4.1	4.1
TOTAL	**18.8**	**18.5**

Source: Information on companies, newspapers and specialized media.

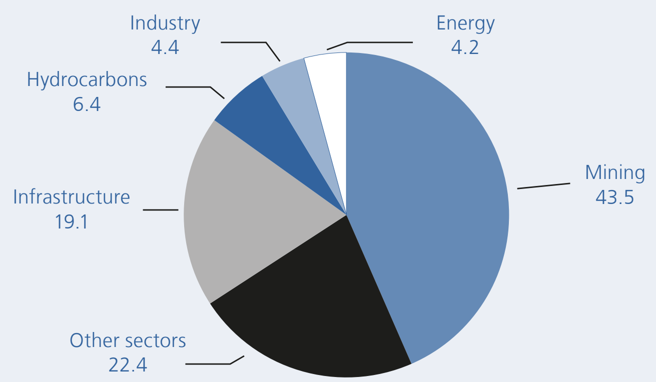
Table 19
MAIN ANNOUNCEMENTS OF PRIVATE INVESTMENT PROJECTS: 2018-2019

SECTOR	INVESTOR	PROJECTS
MINING	Angloamerican	Quellaveco
	Marcobre	Mina Justa
	Aluminium Corp. of China (Chinalco)	Expansion of Mina Toromocho
	Jinzhao Mining	Pampa del Pongo
	Minsur	Proyecto B2
	Bear Creek Mining	Corani
HYDROCARBONS	Calidda Gas Natural del Perú	Massive use of gas
	Karoon Gas	Exploration of Lote Z-38
	Pluspetrol Perú Corp.	Expansion of transportation capacity
ENERGY	Interconexión Eléctrica	Mantaro-Nueva Yanango connection
	Luz del Sur	Santa Teresa 2
INDUSTRY	Corporación Lindley	Storages and infrastructures
	Corporación Aceros Arequipa	Expansion of Pisco plant
	Precor	Mega Planta in Chilca
INFRASTRUCTURE	Grupo Volcan	Chancay Port Terminal Project
	Consorcio Nuevo Metro de Lima	Line 2 of the Metro network of Lima and Callao
	Lima Airport Partners	Expansion of International Airport (Jorge Chavez)
	Graña y Montero	Line 1: Supplement works and new trains
	APM Terminals	Modernization Muelle Norte
	Consorcio Paracas	San Martin Port Terminal Project
OTHER SECTORS	Grupo Telefónica	Expansion and facilities of net LTE-4G
	Entel	Development of services 4G
	América Móvil	Expansion of net 4G
	Grupo Falabella	Expansion of new shopping centers
	Inversiones Centenario	Real Estate investments and expansion of shopping centers
	Armas Domo	Real Estate investments
	Grupo Interbank	Expansion and new shopping centers
	Grupo Breca	Expansion and new hotels, medical centers, and shopping malls
	Cencosud	Shopping center
	Futura Schools	National schools network

Source: Information on companies, newspapers and specialized media.

At the sector level, it is estimated that investment in the sectors of mining and infrastructure will concentrate over 60 percent of the private investment announced.

Graph 36
MAIN ANNOUNCEMENTS OF PRIVATE INVESTMENT PROJECTS: 2018-2019
(% share)



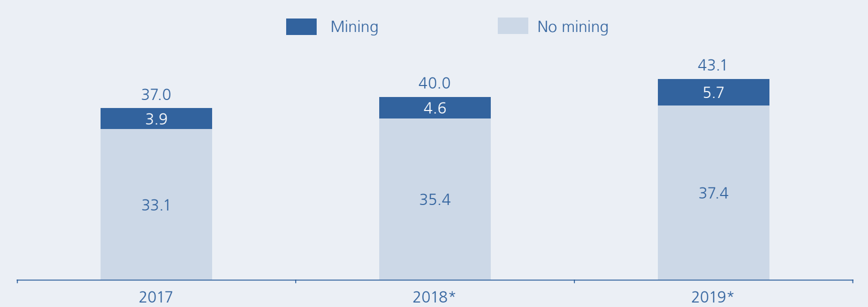
Source: Information on companies, newspapers and specialized media.

In 2018-2019, important **mining projects** are expected to complete their expansion works and new projects should start their construction stages. It is worth mentioning that Southern Perú Copper Corporation reported in July that it had already carried out 95 percent of its expansion project of Toquepala, with an estimated investment of US$ 1.2 billion. Likewise, the operation tests of the expansion project of Marcona (Shougang Hierro Perú) that started in July should be completed at the end of the year. The expansion of Marcona will allow an increase in the production of iron concentrates of 10 million tons, as a result of which production would reach 20 million tons. The second stage of the expansion project included the ore beneficiation plant and the desalination plant. Total investment in this project was US$ 1.3 billion.

On the other hand, other projects announced so far this year that should start their construction stages include Quellaveco (Anglo American), Mina Justa (Marcobre), the expansion of Toromocho (Chinalco), Quecher Main (Yanacocha), and Relaves B2 San Rafael (Minsur). In addition, other projects such as Pampa del Pongo (Jinzhao Mining) and Corani (Bear Creek) would begin construction in 2019 after carrying out early works by the end of 2018. All of these new projects, which would be running in the next years, represent an investment of around US$ 11.7 billion. It should be pointed out that Quellaveco mining project has announced investments of around US$ 5 billion. The project would start production in 2022 and reach maximum production in 2023 with approximately 300 thousand tons of copper. On its side, last August Minsur announced the start of construction of its Mina Justa project, with an estimated investment of US$ 1.6 billion.

Moreover, projects standing out in the sector of **infrastructure** include the expansion of Jorge Chávez International Airport, the works being expected to start in 2019 after remedying the observations pointed out in the environmental impact assessment (EIA) and solving the problem of the delivery of land. The estimated investment is US$ 1.5 billion. In addition, Lima Airport Partners has already determined the companies that will be responsible for developing the project: a group integrated by FCC Construcción, Salini Impregilo, and AECOM. As regards the project of Line 2 of the Lima Metro, the Ministry of Transport estimates that addendum No. 2 to the concession contract will be signed in October of this year, which will speed up project implementation. The main objective of the addendum is to redefine the deadlines of this project with the goal of having 12 stations and 10 trains operating on 12 kilometers of this line by 2021. So far, civil works have been completed in three stations (Evitamiento, Óvalo Santa Anita, and Colectora Industrial), in addition to having approved the studies to start architectural and electromechanical works in five stations.

Graph 37
PRIVATE INVESTMENT
(Billion US$)



* Forecast.
Source: BCRP and MINEM.

As for investments in **other sectors**, investments in telephony stand out, including the development of services, extensions of coverage and infrastructure and implementation of 4G services by Entel, Telefónica, and Viettel. On the other hand, the real estate sector continues to develop new housing projects in Lima and provinces.

The estimated investment of **projects to be awarded in concession** in 2018-2019 is US$ 3.4 billion, according to Proinversión's schedule. In the first quarter of the year, the Michiquillay mining project was awarded to Southern Peru. In addition, at the end of May the Modernization of the Salaverry Port Terminal was awarded to the Consorcio Transportadora Salaverry, integrated by the companies Tramarsa and Naviera Tramarsa, both of the Romero Group. This project will require an investment of US$ 229 million.

In the remainder of 2018, Proinversión would also award the contracts for the implementation of the following projects: (i) in the sector of telecommunications, the implementation of Broadband (Ancash, Arequipa, Huánuco, La Libertad, Pasco and San Martín), with an investment of US$ 359 million; (ii) in the energy sector, projects include the projects entitled *Masificación de Gas Natural*, *Línea de Transmisión Carabayllo*, and *Compensador en subestación Trujillo*, involving investment for US$ 490 million, and (iii) in the sector of water and sanitation, the PTAR Titicaca project, with investment amounting to US$ 263 million.

Table 20
MAIN PROJECTS TO BE IMPLEMENTED THROUGH CONCESSION ARRANGEMENTS IN 2017-2019
(Million US$)

		Estimated investment
A.	**Awarded**	**2 729**
	Michiquillay mining Project	2500
	Salaverry Port Terminal	229
B.	**Called**	**3 366**
	Wide-scale use of natural gas in central and southern	400
	Broadband for Comprehensive Connectivity and Social Development for Ancash, Arequipa, La Libertad, Huanuco, Pasco and San Martin regions.	359
	1000 MVA Upgrading of the Carabayllo-Chimbote-Trujillo 500 kW Transmission Line and Variable reactive compensator (SVC or similar) +400 / -150 MVAR in the 500 kW Trujillo Substation	90
	Sewage system and treatment for wastewater of Titicaca lake	263
	Longitudinal of the Sierra road project, Section 4: Huancayo-Izcuchaca-Mayocc-Ayacucho/Ayacucho-Andahuaylas-Puente Sahuinto/Dv. Pisco-Huaytará-Ayacucho.	464
	Huancayo - Huancavelica Railway.	235
	500 kV La Niña-Piura connection and associated sub stations, 220 kV Pariñas-Nueva Tumbes connection and associated sub stations, and 220 kV Tingo Maria-Aguaytia connection and associates sub stations	200
	Piura Nueva-Frontera 500 kV Electric transmission Line and sub stations	144
	Improvement of the Sewage System and Treatment for wastewater of the city of Puerto Maldonado	23
	Improvement of the Sewage System and Treatment for wastewater of the city of Huancayo, El Tambo and Chilca	90
	New San Juan de Marcona Port Terminal	582
	220 kV Nueva Carhuaquero and associated sub stations Chinca Nueva, and associated sub stations Nazca Nueva, and Variable Reactive Compensator	66
	New hospital of high complexity in Piura and Chimbote	254
	Comprenhensive management of hospital waste in Metropolitan Lima and Callao-MINSA	36
	Specialized health services in Piura and reestructuring of the hospital services in Sullana III.	160

Source: Proinversión.

Within the framework of the powers delegated by Congress to the Executive through Law 30823, as of September 17, 2018, the Executive has enacted a total of 89 Legislative Decrees. The measures taken in the field of Economic Management and Competitiveness and in the area of Modernization of the State are expected to have a positive effect on investment, their aim being to contribute to and/or facilitate the development of private activity. Some measures worth pointing out include the following:

- **Promotion of Aquaculture**: An income tax rate of 15 percent (similar to that applied to agriculture) and accelerated depreciation have been established.

- **Cabotage**: Maritime transport between local ports is facilitated.

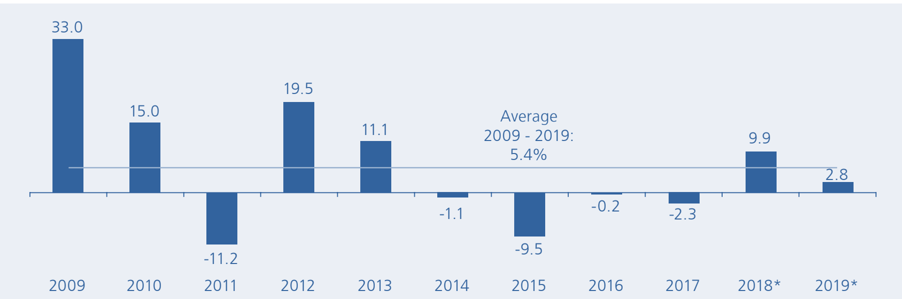
- **Capital Market**: the tax framework for investments in FIRBI funds (Investment Funds for Real Estate Investment) and FIBRA (Securitization Trusts for Investment in Real Estate) is improved. The measure also makes it easier to recover loans through security interests.

- **Promotion of small businesses**: Measures aimed at improving the efficiency of funds to finance small businesses (*Crecer*), especially exporter firms. It also facilitates the constitution of companies through the modality *Sociedad por Acciones Cerrada Simplificada* and improves the framework of government procurement through Execution Units.

- **Administrative Simplification and Modernization of State Procedures**: The measure enhances the establishment of single windows and facilitates the procedures required to obtain building permits. This measure improves in general the interaction with the private sector through the simplification of general administrative processes.

27. Due to the lower pace of growth of **public expenditure** during January-August 2018 as a result of delays in the reconstruction works in the north of the country as well as in infrastructure works (e.g. Line 2 of Lima's Metro), the projected growth of public investment has been revised down from 12.6 to 9.9 percent in 2018 and from 5.0 to 2.8 percent in 2019. It is expected that the works in the north of the country and the projects for the Pan American Games will continue next year.

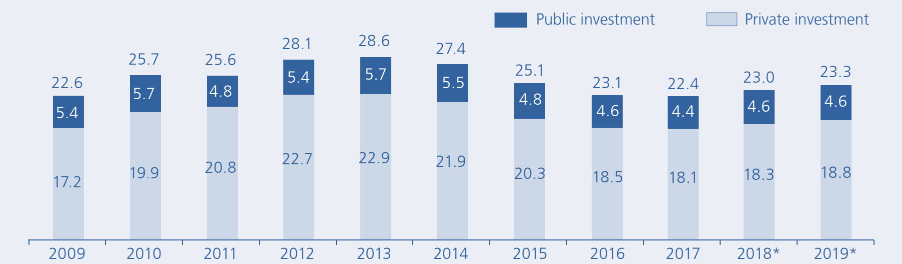
Graph 38
PUBLIC INVESTMENT: 2009 - 2019
(Real % change)



* Forecast.

The evolution of private investment and public investment will imply that the gross fixed investment-to-GDP ratio will increase from 23.0 percent in 2018 to 23.3 percent in 2019.

Graph 39
GROSS FIXED INVESTMENT: PRIVATE AND PUBLIC SECTORS: 2009-2019
(% real GDP)



* Forecast.

Sector GDP

28. The recovery of GDP during the first half of the year (4.3 percent) is explained mainly by the growth of the output in the non-primary sectors (4.4 percent), in line with the recovery of domestic demand during this period. The growth of the output in the sectors of services (4.6 percent), construction (6.1 percent), and the recovery of non-primary manufacturing stand out within the non-primary sectors.

Table 21
GDP BY PRODUCTION SECTOR
(Real % change)

	2017		2018*			2019*	
	S1	Year	S1	IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
Agriculture and livestock	**0.2**	**2.6**	**8.4**	**4.8**	**6.0**	**4.0**	**4.0**
Agriculture	-1.1	2.3	10.0	5.1	7.1	4.1	4.1
Livestock	2.5	3.1	5.6	4.4	4.4	3.8	3.8
Fishing	**82.9**	**4.7**	**20.4**	**30.0**	**30.0**	**-4.2**	**-4.2**
Mining and hydrocarbons	**3.1**	**3.4**	**-0.1**	**0.1**	**-1.1**	**4.0**	**4.6**
Metallic mining	3.9	4.5	-0.4	0.5	-1.1	3.5	5.0
Hydrocarbons	-1.3	-2.4	1.3	-2.0	-0.4	7.6	2.2
Manufacturing	**3.4**	**-0.2**	**5.7**	**5.1**	**5.6**	**3.8**	**3.6**
Based on raw materials	21.2	1.9	11.7	9.9	10.7	4.1	4.1
Non-primary industries	-2.4	-0.9	3.5	3.5	3.8	3.8	3.4
Electricity and water	**1.3**	**1.1**	**3.3**	**3.3**	**3.4**	**4.0**	**4.0**
Construction	**-4.4**	**2.1**	**6.1**	**7.5**	**6.0**	**8.0**	**7.0**
Commerce	**0.5**	**1.0**	**3.0**	**3.7**	**3.3**	**3.8**	**3.1**
Services	**3.0**	**3.3**	**4.6**	**4.1**	**4.5**	**4.2**	**3.9**
GROSS DOMESTIC PRODUCT	**2.4**	**2.5**	**4.3**	**4.0**	**4.0**	**4.2**	**4.0**
Memo:							
Primary GDP	5.5	3.1	4.0	2.9	2.6	3.8	4.2
Non-Primary GDP	1.5	2.3	4.4	4.3	4.3	4.3	4.0

* Forecast.
IR: Inflation Report.

On the other hand, the primary sectors grew at lower rates than in the same period of the previous year due to lower mining production, although the sectors of agriculture and fishing showed significant higher growth rates due to the recovery of its main products in comparison with the first half of 2017.

On September 10, the NOAA Climate Prediction Center updated its report on the alert status for El Niño in the Pacific area. According to most models, the probability of occurrence of El Niño in the Central Pacific area (zone 3.4) during the 2018 fall season (September-November) is 60 percent, this probability increasing to 70 percent in the 2018-19 winter season. In its Communiqué of September 2018, the ENFEN Commission updated the status of El Niño in the Eastern Pacific area (zones 1 + 2), the relevant area for the development of a Niño event in Peru, from "Not Active" to "Surveillance" as there are favorable conditions for the occurrence of a mild event: the probabilities of occurrence of a Niño event in the summer are 57 percent, versus 42 percent with neutral conditions. Based on this forecast, normal or slightly above average rainfall is expected on the north coast of Peru, but in no case should there be extraordinary rainfall.

Table 22
PROBABILITY OF OCCURRENCE OF EL NIÑO EVENT IN THE SUMMER 2019

Magnitude of the event December 2018 - March 2019	Probability of occurrence
El Niño (strong - extraordinary)	0%
El Niño (moderate)	9%
El Niño (weak)	48%
Neutral	42%
La Niña (weak)	1%
La Niña (moderate - strong)	0%

Source: ENFEN.

In the forecast horizon, the momentum of non-primary activity is expected to continue although some sectors (such as construction) would show some moderation, in line with the expected evolution of domestic demand and the impact of lower terms of trade. Moreover, a recovery is projected in the primary sectors in 2019 mainly due to increased mining activity. As a result of this, GDP is expected to grow 4.0 percent in 2018 and 2019.

a) The **agricultural sector** grew 8.4 percent in the first semester of 2018 due to the normalization of weather conditions, the incorporation of new cultivation areas for agro-export crops, the increased cultivation of rice favored by the greater availability of water, and the higher production of poultry meat.

   The growth forecast of this sector for 2018 has been revised from 4.8 to 6.0 percent due to the greater recovery of the crops that were affected by El Niño on the north coast in the same period of 2017 as well as due to increased areas of cultivation of agro-export crops.

   Moreover, normal weather conditions are expected in 2019, a growth rate of 4.0 percent being estimated.

b) During the first semester of 2018, the **fishing sector** grew 20.4 percent, reflecting mainly a greater catch of anchovy associated with the higher quota established for the first fishing season of the year in the north-central zone (3.3 million MT vs. 2.8 million MT in 2017). The volume of anchovy catch in this season was favored by an adequate level of biomass and by the absence of anomalous weather and oceanographic conditions, which resulted in a total catch of 95.0 percent of the quota set for the first season (this volume of fish catch was 85.0 percent higher than that recorded in the first season of the previous year).

The growth of this sector's output projected for 2018 remains unchanged at 30.0 percent because a second fishing season with an adequate level of biomass is anticipated. Moreover, as mentioned in the previous Report, a normalization of fishing conditions is expected in 2019, so the growth projection for that year remains unchanged (-4.2 percent).

c) In the first half of 2018, activity in the subsector of **metal mining** decreased 0.3 percent due to the lower copper and gold production resulting from lower mineral grades, from maintenance in some mining units, and from a lower production of molybdenum. On the other hand, a higher production of zinc was observed. In line with this, the growth of the subsector has been revised downwards, from 0.5 to -0.7 percent.

A recovery in mining production is expected in 2019 mainly due to a higher production of copper and gold.

Table 23
MINING PRODUCTION
(% change)

	2015	2016	2017	2018*	2019*
Copper	25.8	40.1	4.5	-0.4	6.1
Gold	4.8	4.2	-0.7	-7.3	1.1
Zinc	8.0	-5.9	10.2	2.7	-1.3

* Forecast.

c) Production in the **hydrocarbons** subsector grew 1.3 percent in the first half of 2018 due to higher oil production in lot 192 as a result of normal operations in the Norperuano pipeline (unlike what happened in 2017). In contrast, however, there was a lower extraction of natural gas and natural gas liquids, in both cases due to lower production in lot 56 of Pluspetrol. The growth forecast in the sub-sector for 2018 has been revised up (from -2.0 percent to -0.4 percent) as the impact of Camisea maintenance on production has been lower than previously estimated.

d) Output in **non-primary manufacturing** grew 3.5 percent in the first semester of 2018 due to the higher production of goods associated with exports and mass consumption, as well as to the higher production of machinery and equipment due to the higher investment registered in the period.

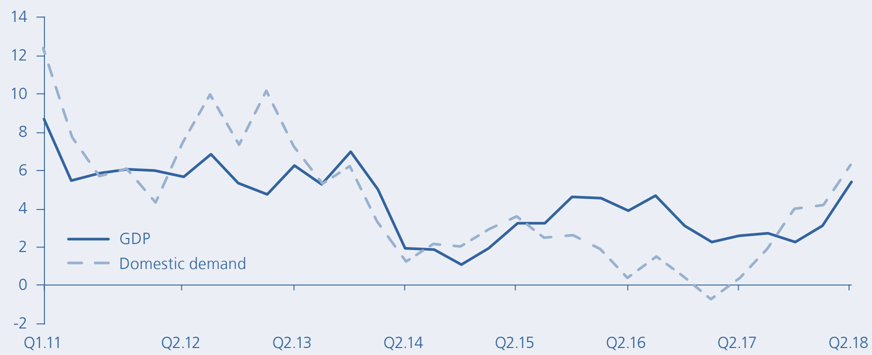
This trend is expected to continue in the rest of the year, so the subsector is projected to grow 3.8 percent in 2018. On the other hand, it would show a growth rate of 3.4 percent, in line with a lower growth of domestic demand due to the lower production of mass consumer goods, inputs, and capital goods expected.

Box 3

RECENT RECOVERY OF ECONOMIC ACTIVITY

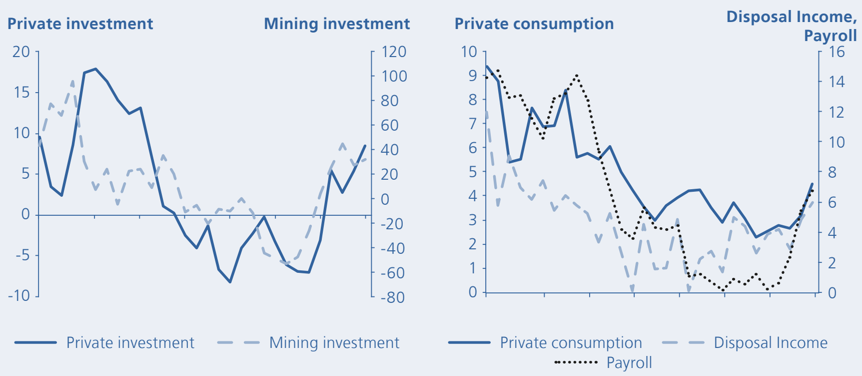
A similar behavior between the growth rates of both demand and GDP has been observed until the second quarter of 2018. Domestic demand slowed down consistently from 2011 until it showed a negative growth rate in the first quarter of 2017, after which it started to show a recovery. GDP growth rates in 2018 show a recovery with respect to the rates observed in 2016.

GDP AND DOMESTIC DEMAND
(% change respect to the same quarter of the previous year)



The greater dynamism observed in mining investment, which had registered its lowest level in the third quarter of 2016, is consistent with the growing trend seen in private investment since the first quarter of 2017. In terms of private consumption, which recorded its lowest growth rate in the first quarter of 2017, the faster pace observed is associated with a higher disposable income and with a higher wage bill, both of which accelerated their growth rates from the first and second quarter of 2017, respectively.

INVESTMENT AND PRIVATE CONSUMPTION
(12-month % change)



In general, a series of indicators of economic activity show signs of greater dynamism: business confidence, consumer loans, imports of durable consumer goods, among others. Although the output is still below its potential level of growth, the greater dynamism of the aforementioned indicators is consistent with the gradual recovery of the output gap in the forecast horizon.

ECONOMIC ACTIVITY INDICATORS
(% change respect to the same quarter of the previous year)

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18
Business confidence *	55.3	58.0	58.1	59.3	56.9	58.7
Formal employment	2.0	1.3	1.6	1.7	3.1	3.6
Income Tax - 5th. Category	-2.5	-0.5	-1.6	2.9	2.2	9.8
Consumer loans	4.4	4.5	4.6	6.3	8.8	10.5
Import of durable consumer goods	-5.3	5.2	-3.9	-0.8	16.0	7.0
Terms of trade	5.9	3.4	5.7	8.1	9.1	7.7
Export prices	15.3	9.8	11.2	15.5	14.4	16.3
Copper prices	24.9	19.6	33.0	29.2	19.4	21.3

* Index number, where values above 60 indicate an equal or better economic situation of the companies of the sector to which the respondent belongs.

In GDP terms, these results may coincide with the higher prices of copper, which after falling 12 percent in 2016, grew 27 percent in 2017 and maintained thereafter a growth rate ranging between 19 and 22 percent until the second quarter of 2018. Small open economies such as the Peruvian and the Chilean economies tend to receive exogenous shocks of competitiveness in the form of better prices and could modify their consumption and investment patterns due to the high participation that copper has in the exports of both countries.

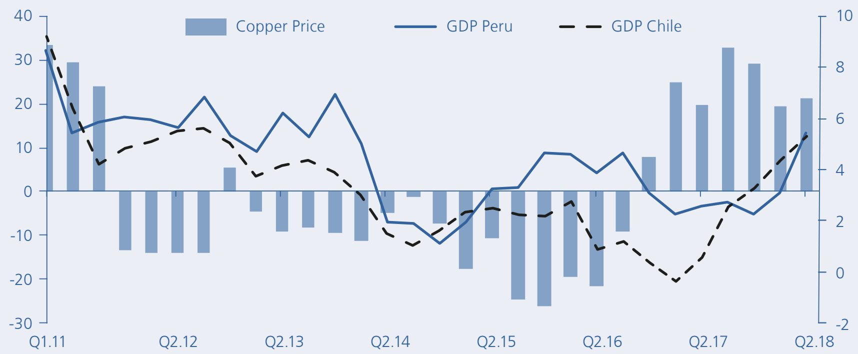
The evolution of the growth rates of the most important variables of aggregate expenditure in the second quarter of 2018 shows very similar results in both Peru and Chile: private consumption grew 4.5 percent in both Peru and Chile; private investment increased by 8.5 percent in Peru and 7.1 percent in Chile, and domestic demand grew 6.2 percent in Peru and 6.0 percent in Chile.

COMPONENTS OF AGGREGATE EXPENDITURE: SECOND QUARTER 2018
(% change respect to the second quarter of 2017)

	Peru	Chile
GDP	5.4	5.3
Private investment	8.5	7.1
Private consumption	4.5	4.5
Domestic demand	6.2	6.0

In fact, if we look at the GDP growth rate of both countries in the medium term we may find a convergence in the growth path. While Peru showed a GDP growth rate of 5.4 percent during the second quarter of 2018, Chile registered a rate of 5.3 percent. The correlation coefficient for quarterly growth rates in Peru and Chile is 0.79, which suggests a fairly close co-movement between the two countries (see the graph below).

INTERNATIONAL COPPER PRICE AND GDP OF PERU AND CHILE
(% change respect to the same quarter of the previous year)

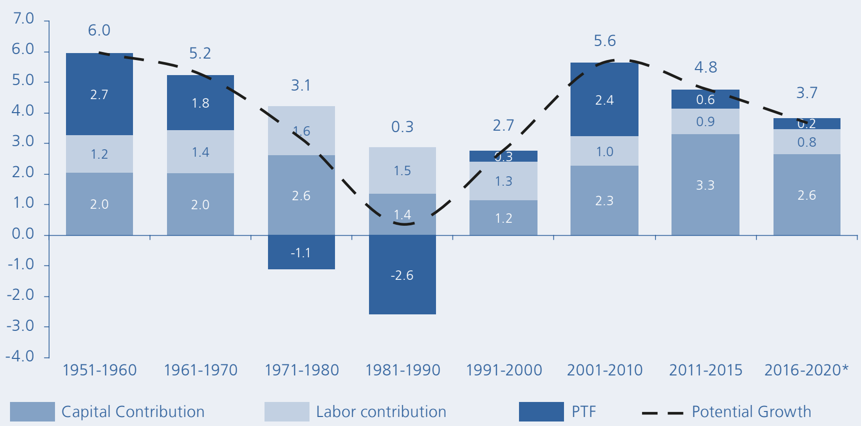


Box 4

DETERMINANTS OF POTENTIAL GROWTH

Potential gross domestic product (GDP) is defined as the level of output that can be generated from the volume of employment and capital installed. Its growth reflects, therefore, the growth of employment, the accumulation of capital, and advances in productivity. When a country's level of economic activity coincides with the potential level of the output, it is understood that there are no inflationary or deflationary pressures.

POTENTIAL GROWTH ACCOUNTING, PERU 1951-2020
(Contributions in % points of potential GDP)



* Forecast.

Total factor productivity (TFP) has had a changing evolution in the last 70 years. Thus, in the 50s and 60s, TFP had a positive evolution associated with a favorable internal and external environment, whereas the interventionist and protectionist policies of the 70s and 80s caused TFP to deteriorate significantly. As from the 1990s, as a result of the structural reforms that were implemented to promote the market economy and stabilize the economy, TFP began to recover and registered an important boom in the 2000s and early in the 2010s. On the other hand, more recently, increasing labor rigidity and excessive regulations have not allowed TFP to show the levels observed in the past decade.

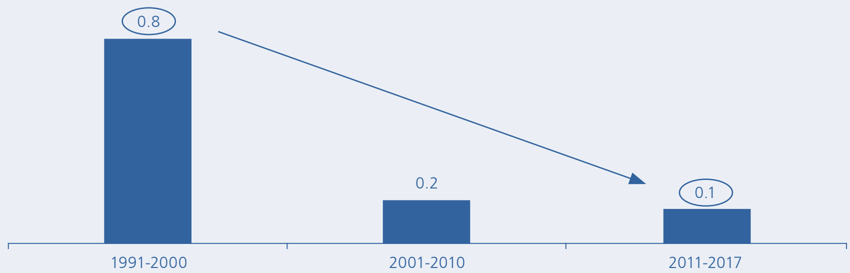
Although the lower potential growth of the output is associated with a lower contribution of TFP, it is important to identify the main macroeconomic factors determining its evolution. Thus, the equation of TFP determinants is used to identify the impact that structural reforms have had on the growth of TFP.

DETERMINANTS OF TOTAL FACTOR PRODUCTIVITY
(Inflation Report December 2015)

Growth of FTP	Coefficient [1/]	
Constant	-0.003	
Index of Structural Reforms [2/]	0.170	*
Macroeconomic Instability [3/]	-0.013	***
Terms of trade	0.071	**

1 / * is significant at 20 percent, ** significant at 10 percent, and *** significant at 5 or 1 percent.
2 / ISR: Index of Structural Reforms.
3 / Standard deviation of the growth rate (4 quarters) of the GDP within one year.
Source: BCRP (2015) Inflation Report, December.

CONTRIBUTION OF THE STRUCTURAL REFORMS TO THE GROWTH OF THE TFP*
(% points)



* Contribution calculated from the variation of the Reform Index weighted by the estimated coefficient in the Inflation Report December 2015. The index is calculated in Lora (2012), "" The structural reforms in Latin America: What has been formed and how measure Q1 (updated version) ", working document n ° 346. Inter-American Development

Regarding the previous graph, it is important to highlight that structural reforms not only have contributed significantly to potential growth in the decades of the 90s and 2000s, but also have allowed the increase in commodity prices to have a significant impact on potential growth until the beginning of the 2010s due to greater capital accumulation. This contribution to growth has been gradually fading out because excessive regulation has been imposed on the economy, as has been reflected in a decline of 11 positions in the past 11 years in the ranking of the Global Competitiveness Report published by the World Economic Forum (WEF[4]).

It is therefore essential to accelerate the adoption of reforms to stimulate potential growth. Some of the areas where less progress has been observed in recent decades, even though they have a high impact on total factor productivity, are associated with the functioning of the labor market, the quality of education, and the quality of infrastructure and institutions. In order to achieve progress in these areas, reforms are needed that allow to:

4 Peru ranked 72nd in the WEF Global Competitiveness Report 2017-2018, which includes 137 countries. In 2012, Peru reached position 61 in the ranking.

- **Promote greater flexibility in the labor market to promote formal employment.** Ranking in position 129 in a sample of 137 countries, Peru is among the 10 countries with the greatest difficulties in terms of the procedures associated with hiring and/or firing workers. Therefore, reforms aimed at reducing the rigidity of hiring and firing workers while reducing labor costs and thus encouraging formal jobs at the same time could have an impact on workers' productivity, generating substantial gains in competitiveness.

- **Promote quality in education and better align training mechanisms to productive needs**. For example, expanding the supply of quality technical training.

- **Strengthen institutions and raise the quality of regulations**. It is necessary to deepen the reform initiated with the Unified System of Procedures and standardize the texts of public sector entities' Uniform Administrative Procedures (TUPA). Moreover, the Regulatory Quality Analysis should be extended to all the entities of public administration. It is also urgent to improve the administration of justice and to strengthen the fight against corruption.

- **Deregulate and simplify procedures.** Private investment faces a number of environmental, civil defense, sector, and municipal regulations that make it complicated and discourage it.

- **Undertake the reform of the justice system.** A predictable, expeditious, and transparent judicial system is required to ease and promote private investment.

- **Close infrastructure gaps.** In order to do this, it is urgent to reform the Public Sector Procurement Act to improve its efficiency. Many initiatives may be implemented, including, for example, incorporating the mechanism of a Public Trust as a modality for the execution of public investment projects. It is also imperative to enact regulations that ease the execution of public works as well as projects under concessions.

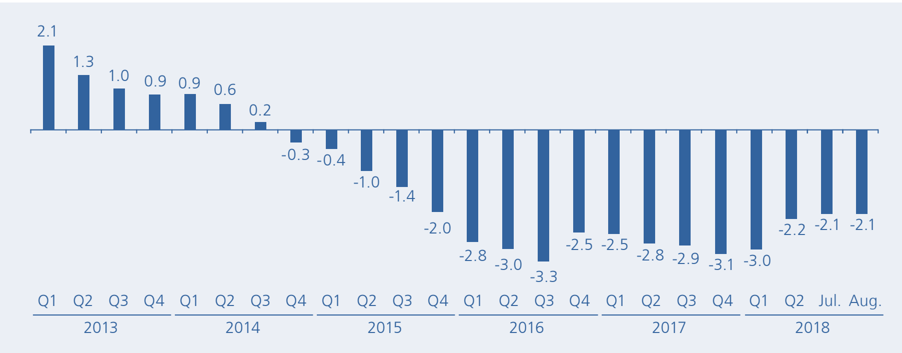
- **Reduce the cost of logistics.** It is necessary to integrate port and airport infrastructure with cold chain services to facilitate trade.

- **Promote the digitization of documents in public sector procedures.** This would allow expanding the scope of public services with lower costs and with a higher quality, which would also benefit efficiency in the private sector.

IV. Public Finances

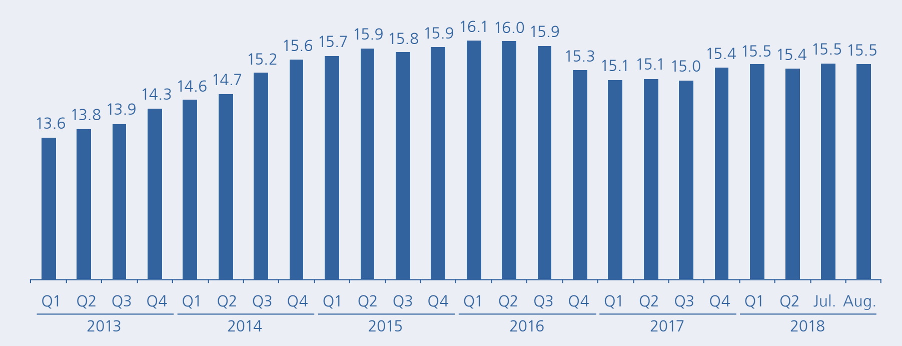
29. In August 2018, the fiscal deficit accumulated in twelve months declined to 2.1 percent of GDP after having reached 3.1 percent of GDP at the end of 2017. This reduction of the deficit results from the higher current revenues of the general government due to higher tax revenue from the income tax and value added tax as well as to lower tax refunds. In GDP terms non-financial expenditure remained at a similar level since the rise in wages was offset by a reduction in capital expenditure not associated with public investment (transfers).

Graph 40
ECONOMIC BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR
(Accumulated last 12 months - % GDP)



Graph 41
CURRENT REVENUES OF THE GENERAL GOVERNMENT
(Accumulated last 12 months - % GDP)

Graph 42
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT
(Accumulated last 12 months - % GDP)



30. The fiscal deficit projected for 2018 has been revised down from 3.1 of GDP in the previous report to 2.8 percent of GDP in this report due to higher current revenues, in line with the trend observed so far this year. Driven by tax revenue, current revenue would reach a growth rate of 19.1 percent of GDP in 2018, while non-financial expenditure would be equivalent to 20.5 percent of GDP, in line with the pace implementation of infrastructure projects. In 2019, revenue is expected to increase as a result of the tax measures announced by the government in a context in which commodity prices are anticipated to fall, whereas expenditure would moderate in 2019 as a result of the change of government in the subnational governments. Because of this, the fiscal deficit is estimated at 2.6 percent of GDP.

Table 24
NON-FINANCIAL PUBLIC SECTOR
(% GDP)

	2017		2018*			2019*	
	S1	**Year**	**S1**	**IR Jun.18**	**IR Sep.18**	**IR Jun.18**	**IR Sep.18**
1. General government current revenues [1/]	**19.0**	**18.1**	**20.7**	**18.7**	**19.1**	**18.8**	**19.3**
Real % change	*-2.5%*	*0.4%*	*16.5%*	*9.6%*	*10.4%*	*5.0%*	*4.5%*
2. General government non-financial expenditure [2/]	**17.8**	**20.1**	**17.8**	**20.4**	**20.5**	**20.3**	**20.4**
Real % change	*-0.2%*	*4.2%*	*6.3%*	*7.3%*	*6.7%*	*4.0%*	*3.2%*
Of which:							
Current expenditure	14.2	15.4	14.2	15.4	15.6	15.3	15.7
Real % change	*-0.3%*	*3.9%*	*6.9%*	*6.0%*	*6.3%*	*4.0%*	*4.1%*
Gross capital formation	2.8	4.0	3.1	4.3	4.3	4.2	4.1
Real % change	*-10.1%*	*1.6%*	*16.9%*	*14.5%*	*11.8%*	*2.6%*	*0.0%*
3. Others	**-0.2**	**0.1**	**-0.2**	**-0.1**	**-0.1**	**-0.1**	**-0.1**
4. Primary balance (1-2+3)	**0.9**	**-1.9**	**2.8**	**-1.8**	**-1.5**	**-1.6**	**-1.3**
5. Interests	**1.2**	**1.2**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**
6. Overall Balance	**-0.3**	**-3.1**	**1.4**	**-3.1**	**-2.8**	**-2.9**	**-2.6**
Memo:							
Weighted fiscal impulse	0.1	0.0	-0.5	0.4	0.3	0.0	-0.1
Output gap	-1.1	-1.1	-1.0	-0.6	-0.6	0.0	-0.3

1/ The central government includes the ministries, national universities, public agencies and regional governments. The general government has a wider coverage that includes the central government, social security, regulators and supervisors, government charity organizations and local governments.
2/ Includes net accrued expenses to FEPC.
* Forecast.
IR: Inflation Report.

Tax Revenues

31. In the period of January-August 2018, the current revenues of the general government was equivalent to 20.0 percentage points of GDP, which represented an increase of 1.7 percent compared to the same period of 2017. This result reverses the downward trend observed since 2014, following the recovery of domestic demand and the higher prices of metals in the first half of the year.

    Revenue from the income tax grew by 0.7 percentage points of GDP, mainly as a result of the campaign promoting the regularization of the income tax of FY 2017, given the higher profits observed in the mining sector. Moreover, revenue from the value added tax (VAT) grew 0.4 percentage points of GDP, in line with the recovery of economic activity. In addition to this, the increase in tax revenues is also explained by lower tax refunds for exports.

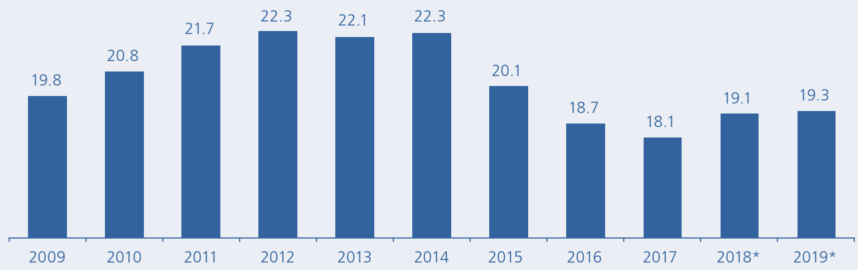
    It is estimated that current revenues will increase to 19.1 percent and 19.3 percent of GDP in 2018 and 2019, respectively. This upward correction of revenue in 2018 is supported by the better-than-expected evolution of tax revenue observed so far this year. On the other hand, the slight upward correction expected in revenue in 2019 compared to 2018 takes into account the following factors: i) the measures announced to improve tax collection, such as the massive use of electronic invoices and vouchers, and the international exchange of tax information; ii) the return of tax refunds to their historical levels, as observed in recent months, and iii) the impact of the increase in the excise tax on fuels, automobiles, cigarettes, and alcoholic and sugary beverages, effective since May 2018. These factors would offset the adverse effect of the downward adjustment in the terms of trade.

Table 25
CURRENT REVENUES OF THE GENERAL GOVERNMENT
(% GDP)

	2017		2018*			2019*	
	S1	Year	S1	IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
TAX REVENUES	**13.6**	**13.4**	**15.5**	**14.2**	**14.4**	**14.4**	**14.5**
Income tax 1/	5.9	5.3	6.7	5.6	5.6	5.7	5.5
Value added tax	7.9	7.8	8.3	8.0	8.2	8.0	8.3
Excise tax	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Import duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other tax revenues	1.6	1.6	1.7	1.7	1.7	1.6	1.7
Tax returns	-2.8	-2.5	-2.3	-2.3	-2.4	-2.2	-2.3
NON-TAX REVENUES	**5.3**	**4.7**	**5.2**	**4.5**	**4.7**	**4.4**	**4.7**
TOTAL	**19.0**	**18.1**	**20.7**	**18.7**	**19.1**	**18.8**	**19.3**

1/ Includes revenues by repatriation of capital.
* Forecast.
IR: Inflation Report.

Graph 43
CURRENT REVENUES OF THE GENERAL GOVERNMENT: 2009 - 2019
(% GDP)



* Forecast.

Public Expenditure

32. The non-financial expenditure of the general government increased 0.1 percentage points of GDP in the period of January-August compared to the same period of 2017 and reached 18.5 percent of GDP. The increase in current expenditure is explained by higher salaries and wages, offset in part by lower capital transfers to public enterprises this year after the transfer of S/ 1.06 billion made to Petroperú in January 2017. It is worth mentioning that gross capital formation rose by 13.8 percent in real terms, driven mainly by the progress of the construction projects being implemented for the Pan American Games and by investment in transport infrastructure, telecommunications, and water and sewerage infrastructure being carried out in the country.

    In 2018, expenditure would represent 20.5 percent of GDP, 0.4 percentage points of GDP more than in 2017. Compared to 2017, this represents an increase of 0.2 percentage points of GDP in current expenditure and an increase of 0.3 percentage points of GDP in gross capital formation, which would reach 4.3 percent of GDP including the works of Line 2 of Lima's Metro, the projects for the Pan American Games, and to a lesser extent, the projects and public works carried out within the framework of the Plan of Reconstruction with Changes.

    It is estimated that in 2019 non-financial expenditure would reach 20.4 percent of GDP, considering that current expenditure would increase from 15.3 to 15.7 percent of GDP, whereas capital expenditure at the level of the subnational governments would decrease from 2.6 to 2.5 percent, reflecting the change in government administration after the new authorities take office.

Main Investment Projects

33. The 2019 Budget Project considers investments for a total of S/ 31.93 billion, of which S/ 16.78 billion corresponds to the National Government,

S/ 6.92 billion to the regional governments, and S/ 8.23 billion to local governments.

At the level of the National Government, the 15 projects with the largest budgets concentrate S/ 3.17 billion (19 percent) of the investment assigned to this level of government. Among the most important projects, it is worth mentioning the rehabilitation of *Eje Vial Piura-Guayaquil sector Perú* (S / 655 million), the construction of Line 2 of the Lima Metro and the Ave. Faucett-Gambetta section (S/ 521 million), and the improvement of the Huánuco-Conococha highway (S/ 262 million).

Table 26
MAIN INVESTMENT PROJECTS OF THE NATIONAL GOVERNMENT IN THE PROPOSED PUBLIC BUDGET PROJECT: 2019
(Million S/)

Project	Sectors	Amount
Rehabilitation of the road n° 01 Piura - Guayaquil, Perú - Ecuador, 21 interventions sector Perú	MTC	655
Construction of Line 2 and Ave. Faucett-Gambetta section in the Lima Metro	MTC	521
Improvement of the Huánuco-Conococha highway, sector: Huánuco-La Unión-Huallanca, route PE-3N	MTC	262
Program management and others: subnational transport support program - PATS	MTC	231
Construction of the Bellavista - Mazán - Salvador - El Estrecho highway (Loreto)	MTC	206
Improvement of the sports services of the Villa Deportiva Nacional -Videna, San Luis, Lima	MTC	141
Comprehensive rural water and sanitation program - PIASAR	MVCS	140
Improvement of the Oyón highway - Ambo (Huánuco)	MTC	135
Construction of Irrigation Systems (multidepartamental)	Agriculture and Irrigation	134
Creation of the Pan American Village services in the district of Villa El Salvador, Lima	MTC	133
Sectorization of the potable water and sewerage system in Chorrillos	MVCS	130
Rehabilitation and improvement of the Cajamarca-Celendín-Balzas highway (Cajamarca)	MTC	124
Rehabilitation and improvement of the Pallasca - Mollepata - Mollebamba - Santiago de Chuco highway (La Libertad)	MTC	121
Improvement of the departmental road network Moquegua-Arequipa	MTC	120
Improvement and expansion of the operational and logistics capacity of the Naval Air Base of Callao	Defense	120
Rest of projects		13 611
TOTAL		**16,783**

Source: Proposed Public Budget Project for 2019.

At the level of the regional governments, the 15 largest projects represent S/ 1.23 billion that account for 18 percent of these entities' total investment. Projects standing out include Stage III of the Chavimochic project (S/ 201 million); the construction, operation, and maintenance of Túnel Trasandino, and Stage I of the dam Presa Limón of the Olmos Project (S/ 141 million); the improvement, construction and equipment of health centers in the regions of Arequipa, Loreto and Cusco, and the execution of Stage II of the Majes Siguas project (S/ 95 million) in the Arequipa region.

Table 27
MAIN INVESTMENT PROJECTS OF THE REGIONAL GOVERNMENTS IN THE PROPOSED PUBLIC BUDGET PROJECT: 2019
(Million S/)

PROJECTS	REGIONS	Amount
Chavimochic Project Third Stage	La Libertad	201
Construction, operation and maintenance of the Trasandino Tunnel and the first stage of the Dam Presa Limón	Lambayeque	141
Improvement and expansion of health services. Health Center Maritza Campos Diaz in the Dist. Cerro Colorado, Prov. Arequipa	Arequipa	103
Construction and equipment of the new Hospital of Iquitos César Garayar García / Maynas Province	Loreto	102
Improvement of the resolutive capacity of the health services of the Hospital Antonio Lorena level III-1-Cusco	Cusco	99
Majes Siguas - II Stage	Arequipa	95
Improvement of the resolutive capacity of the health services of the Hermilio Valdizán Regional Hospital in Huánuco-level III-1.	Huánuco	67
Improvement of the health services in the Hipólito Unanue Hospital in Tacna, Tacna District, Tacna Province	Tacna	65
Improvement of the Departmental Road Ju-103 Section: Emp.PE-22 to Palca-Tapo-Antacucho-Ricran-Abra Cayan-Yauli Pacán-Emp. PE-3S to Jauja	Junín	60
Health services improvement in the Health Center Jesús Guerrero Cruz of the Huancabamba Health Network, Disttrict and Province of Huancabamba.	Piura	59
Improvement of the health services of the Ayabaca Health Center in the District and Province of Ayabaca	Piura	51
Hydraulic consolidation of the Rio Grande basin - Santa Cruz - Palpa.	Ica	51
Improvement of the health services of the Huarmaca Health Center in the district of Huarmaca, Province of Huancabamba	Piura	48
Improvement of irrigation and hydroelectric generation of the Alto Piura	Piura	45
Improvement of the resolution capacity of the San Francisco Hospital, second level of medical attendance, Ayna - La Mar.	Ayacucho	44
Rest of Projects		5 690
TOTAL		**6,920**

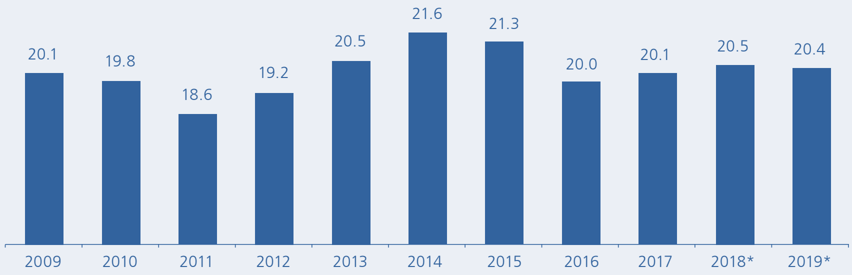
Source: Proposed Public Budget Project in 2019.

Table 28
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT
(% GDP)

	2017		2018*			2019*	
	S1	Year	S1	IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
CURRENT EXPENDITURE	**14.2**	**15.4**	**14.2**	**15.4**	**15.6**	**15.3**	**15.7**
National Government	9.7	10.5	9.5	10.5	10.7	10.5	10.7
Regional Governments	2.9	3.3	3.1	3.2	3.4	3.2	3.2
Local Governments	1.6	1.6	1.6	1.6	1.6	1.7	1.8
CAPITAL EXPENDITURE	**3.6**	**4.7**	**3.5**	**5.0**	**4.9**	**5.0**	**4.7**
Gross Capital Formation	**2.8**	**4.0**	**3.1**	**4.3**	**4.3**	**4.2**	**4.1**
National Government	0.9	1.4	1.0	1.5	1.5	1.7	1.7
Regional Governments	0.6	0.8	0.6	0.9	0.9	0.8	0.8
Local Governments	1.3	1.8	1.5	1.9	1.9	1.8	1.7
Others	**0.8**	**0.7**	**0.5**	**0.7**	**0.6**	**0.7**	**0.6**
TOTAL	**17.8**	**20.1**	**17.8**	**20.4**	**20.5**	**20.3**	**20.4**
National Government	11.4	12.6	10.9	12.6	12.7	12.8	13.0
Regional Governments	3.5	4.1	3.7	4.2	4.2	4.0	4.0
Local Governments	2.9	3.4	3.1	3.6	3.6	3.5	3.4

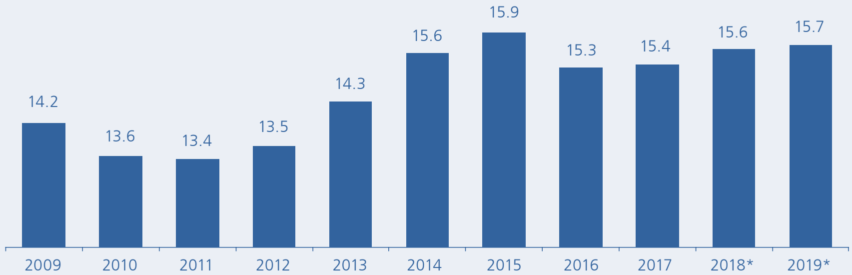
* Forecast.
IR: Inflation Report.

Graph 44
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT: 2009 - 2019
(% GDP)



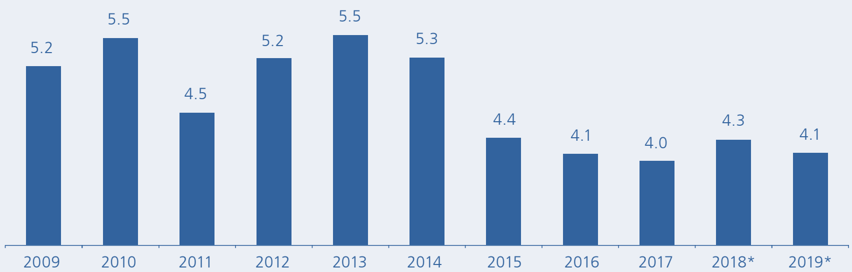
* Forecast.

Graph 45
CURRENT EXPENDITURE OF THE GENERAL GOVERNMENT: 2009 - 2019
(% GDP)



* Forecast.

Graph 46
GROSS CAPITAL FORMATION OF THE GENERAL GOVERNMENT: 2009 - 2019
(% GDP)



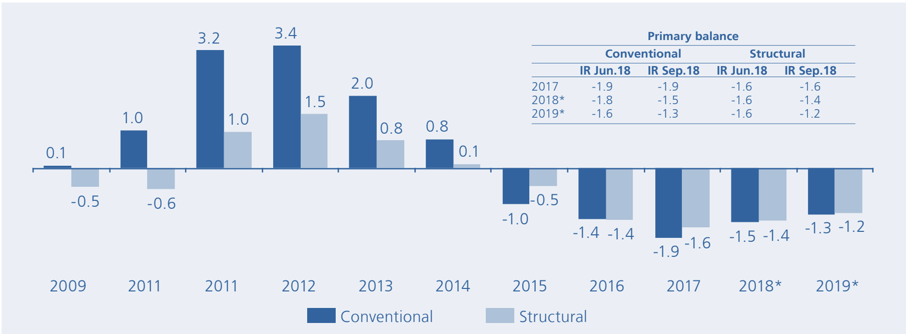
* Forecast.

Structural Primary Balance and Fiscal Impulse

34. The primary balance reflects the difference between income and non-financial expenditure. On the other hand, the **structural primary balance** isolates the

transitory effects of the business cycle and the effects of the prices of the commodities relevant to our economy. In 2017, the structural economic balance showed a deficit of 1.6 percent of the potential output, this level of deficit being estimated to decline to 1.4 and 1.2 percentage points of GDP in 2018 and 2019, respectively. The current forecast considers a lower deficit than that estimated in our previous Report given that revenue has been corrected up and the real variation in expenditure has been corrected down, in line with the trends observed recently.

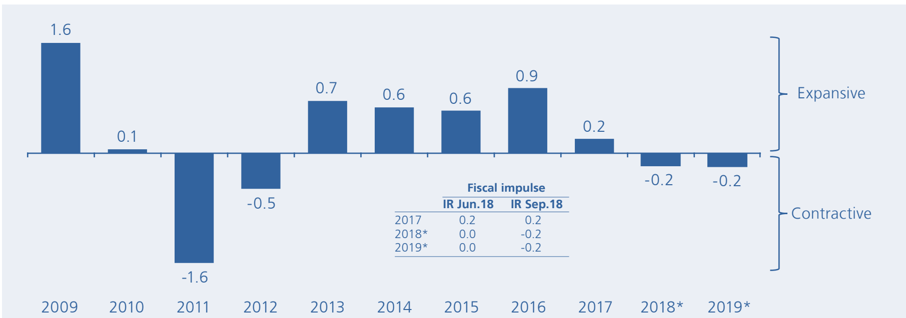
Graph 47
CONVENTIONAL AND STRUCTURAL PRIMARY RESULT OF THE NON-FINANCIAL PUBLIC SECTOR: 2009 - 2019
(% GDP[1/])



1 / The Primary structural balance is calculated in terms of potential GDP.
* Forecast.

35. The decrease in the Primary Structural Result in 2018 and 2019 would imply a slight negative (contractionary) fiscal impulse of -0.2 percent of GDP in both years. This projection is lower than that of the previous Report because it incorporates a lower real growth in spending, which is consistent with the evolution observed so far this year.

Graph 48
FISCAL IMPULSE
(% Potential GDP)



* Forecast.

Taking into account that the effect of changes in tax revenues, current expenditures, and capital expenditures do not have the same impact on activity, these components have been adjusted with their respective multipliers, which provides us with a weighted fiscal impulse indicator:

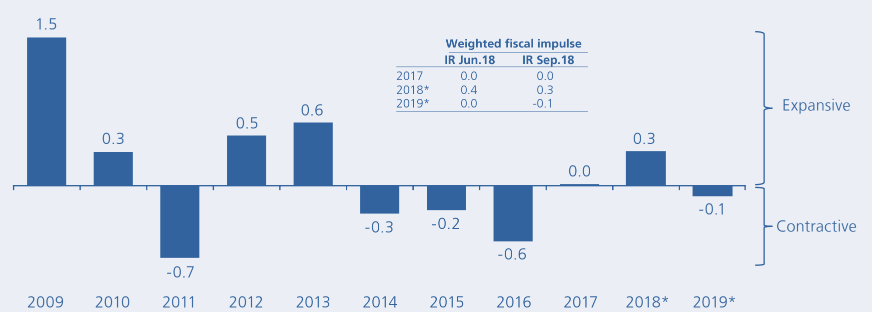
Table 29
WEIGHTED FISCAL IMPULSE
(% Potential GDP)

	2015	2016	2017	2018*	2019*
1. Fiscal impulse (a+b+c)	**0.6**	**0.9**	**0.2**	**-0.2**	**-0.2**
a. By structural revenues	0.9	1.6	0.3	-0.7	-0.2
b. By current expenditures[1/]	0.2	0.0	-0.2	0.4	0.1
c. By capital expenditures	-0.4	-0.7	0.1	0.1	-0.1
2. Weighted fiscal impulse (a+b+c)[2/]	**-0.2**	**-0.6**	**0.0**	**0.3**	**-0.1**
a. By structural revenues	0.2	0.4	0.1	-0.2	-0.1
b. By current expenditures[1/]	0.2	0.0	-0.1	0.3	0.1
c. By capital expenditures	-0.6	-0.9	0.1	0.2	-0.2

* Forecast.
1/ Includes public enterprises.
2/ Weighted per fiscal multiplier. In boom periods: Revenues 0; current expenditure 0.28; capital expenditure 0.73; and in slump periods: Revenues 0.25; current expenditure 0.93; capital expenditure 1.42.

The estimation of the weighted fiscal impulse shows that the fiscal policy in 2018 would be expansionary by 0.3 percent of GDP and that the policy in 2019 would be slightly contractionary (-0.1 percent).

Graph 49
WEIGHTED FISCAL IMPULSE [1/]
(% Potential GDP)



1/ The weighted fiscal impulse takes account the multiplier model of changes in the incomes, current expensives and public investment.
* Forecast.

Public Debt

36. The lower fiscal deficit considered in this report –in comparison to the one estimated in the Inflation Report of June– reduces the Gross Financing Requirement (GFR) of the public sector

in 2018 and 2019. According to the new projections, the GFR falls from S/ 39.4 billion in 2017 to S/ 24.8 billion in 2018 and rises slightly thereafter to S/ 25.6 billion in 2019.

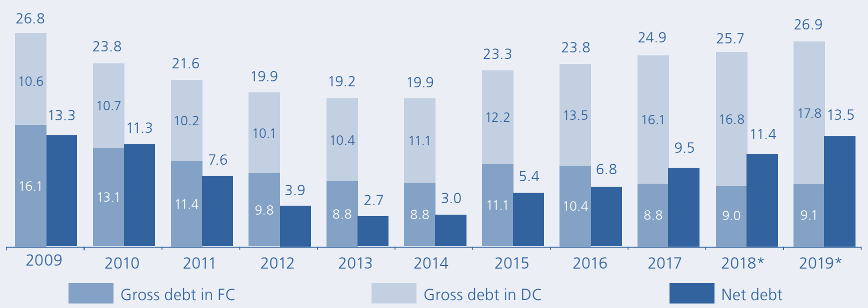
Table 30
FINANCIAL REQUIREMENTS OF THE NON-FINANCIAL PUBLIC SECTOR AND ITS FUNDING
(Million S/)

	2017		2018*			2019*	
	S1	Year	S1	IR Jun.18	IR Sep.18	IR Jun.18	IR Sep.18
II. USES	**4,546**	**39,428**	**-1,902**	**27,109**	**24,833**	**27,986**	**25,645**
1. Amortization	3,690	17,695	2,817	3,808	4,199	5,048	5,189
a. External	2,711	13,566	779	1,600	1,511	3,771	3,810
b. Domestic	979	4,130	2,038	2,209	2,689	1,276	1,378
Of which: Recognition bonds	*448*	*818*	*677*	*941*	*1,030*	*658*	*650*
2. Overall Balance	856	21,733	-4,719	23,300	20,634	22,938	20,457
(Negative sign indicates surplus)							
II. SOURCES	**4,546**	**39,428**	**-1,902**	**27,109**	**24,833**	**27,986**	**25,645**
1. Disbursements and other	16,721	33,080	4,098	17,703	18,006	22,841	24,339
2. Change on deposits and other 1/	-12,176	6,348	-6,000	9,405	6,827	5,146	1,306

1/ A positive sign indicates a reduction of deposits.
* Forecast.
IR: Inflation Report.

The balance of the public debt in gross terms would be equivalent to 25.7 percent of GDP in 2018 and to 26.9 percent of GDP in 2019. On the other hand, the net public debt –which isolates the amount of public sector deposits– would represent 11.4 and 13.5 percent of GDP in 2018 and 2019, respectively.

Graph 50
NON-FINANCIAL PUBLIC SECTOR DEBT: 2009 - 2019
(% GDP)

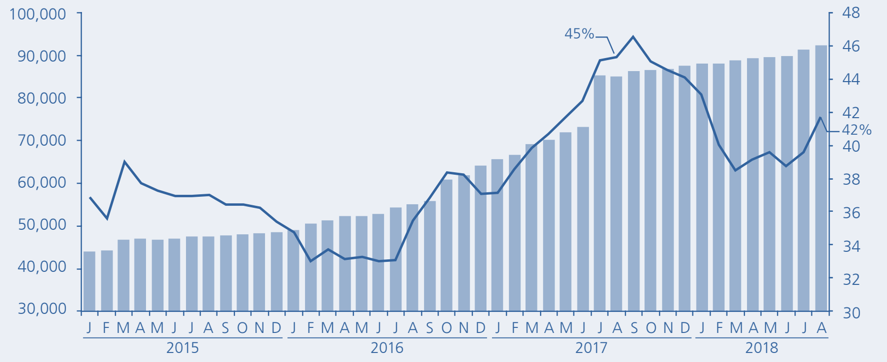


* Forecast.

37. The balance of **sovereign bonds** was S/ 92.30 billion in August 2018, S/ 2.43 billion higher than the balance in the second quarter of 2018. It should be pointed out that, according to the Indebtedness Law for FY 2018, the MEF can issue bonds for a maximum amount of S/ 12.17 billion in the year, of which bonds for a total of S/ 4.87 billion have already been issued. Moreover, on the demand side, the participation of non-resident investors stands out as the main investors in these securities since their

bond holdings increased from S/ 34.84 billion in June to S/ 38.46 billion in August. On the supply side, on the other hand, administrators of private pension funds (AFPs) stand out as the main sellers of sovereign bonds.

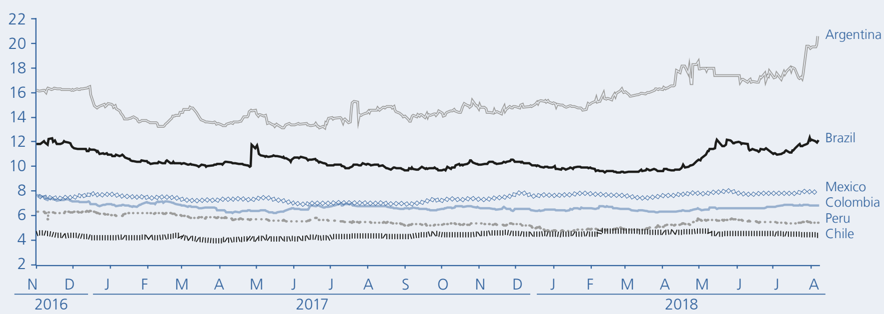
Graph 51
BALANCE OF SOVEREIGN BONDS AND SHARES OF NON-RESIDENT INVESTORS
(Amounts in million soles and shares in %)



Source: MEF.

The yield on 10-year bonds in soles was 5.45 percent at the end of August, 27 basis points higher than at the end of 2017.

Graph 52
10-YEAR TREASURY BOND YIELDS IN DOMESTIC CURRENCY
(%)



Source: MEF and Bloomberg.

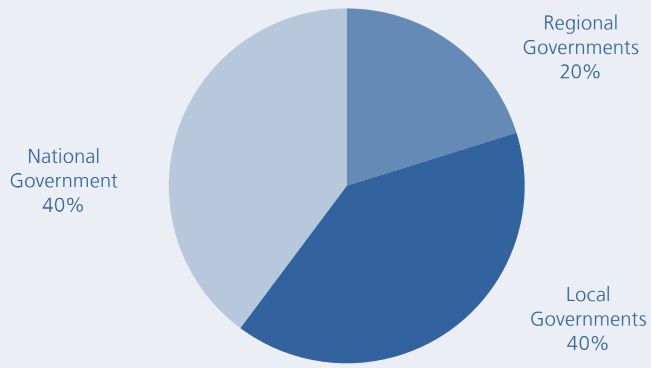
Box 5
PUBLIC INVESTMENT IN SUBNATIONAL GOVERNMENTS AND THE CHANGE OF GOVERNMENT AUTHORITIES CYCLE

The possible effects of the replacement of local and regional authorities on public investment are discussed in this box.

Evolution of subnational investment

In 2009-2017, regional governments accounted for around 20 percent of public investment and local governments, for 40 percent. Exceeding the investment of the national government, subnational governments altogether accounted for approximately 60 percent of total public investment.

PUBLIC INVESTMENT COMPOSITION BY LEVELS OF GOVERNMENTS
(2009-2017)



Source: SIAF-MEF.

During this period, subnational public investment showed high volatility. On the one hand, it showed high growth rates –for example, in 2010, 2012 and 2013–, but, on the other hand, investment at the subnational levels dropped by 12, 5, and 19 percent in 2011, 2014 and 2015, respectively.

Because of its significant magnitude (60 percent of total investment), the behavior of aggregate subnational investment introduces volatility in the dynamics of public investment. As we can see in the following table, subnational investment contributed with 7 and 11 percentage points to the contraction of aggregate investment in 2011 and 2015, respectively. Despite the expansion of investment at the level of the national government, total investment decreased by 5 and 4 percent in those years.

PUBLIC INVESTMENT EVOLUTION IN SUB-NATIONAL GOVERNMENTS

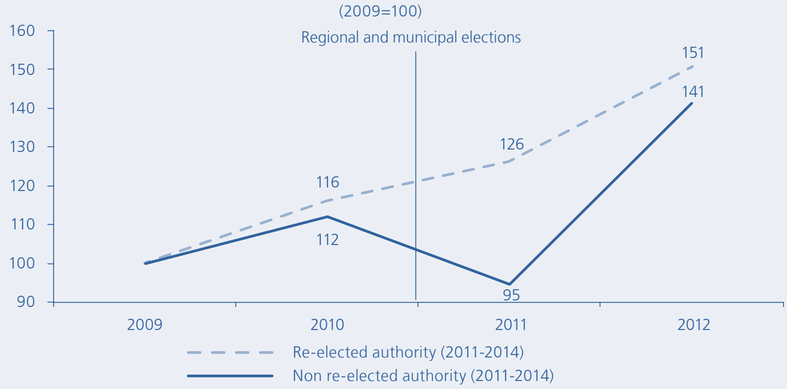
Year	Public investment (Million of nominal S/)			Contribution to Investment Growth		
	Sub-National Government	National Government	Total	Sub-National Government	National Government	Total
2009	13,141	6,659	19,800			
2010	14,928	9,591	24,519	9%	15%	24%
2011	13,121	10,057	23,179	-7%	2%	-5%
2012	18,842	9,599	28,441	25%	-2%	23%
2013	21,188	11,077	32,265	8%	5%	13%
2014	20,233	13,243	33,475	-3%	7%	4%
2015	16,455	15,604	32,059	-11%	7%	-4%
2016	17,295	11,973	29,268	3%	-11%	-9%
2017	18,391	11,932	30,323	4%	0%	4%

The contraction of investment was greater in the regional and local governments in which there was a change of government authorities after the municipal elections. Based on information of the National Jury of Elections (JNE), we established two different sets of circumscriptions: one that includes the provinces and districts in which the subnational authorities were re-elected and the other, which includes those areas in which no authorities were re-elected.

Public investment in both groups grew at a similar rate in 2010, but there was a difference between the amount invested in each group in 2011. While investment increased by 8.7 percent in nominal terms in the subnational governments that re-elected their authorities, investment in the governments where new authorities took office fell by 15.5 percent.

In 2012, the pace of investment recovered in the group of subnational governments with new authorities, but without reaching the levels recorded by the group of the regional and local governments that did reelect authorities.

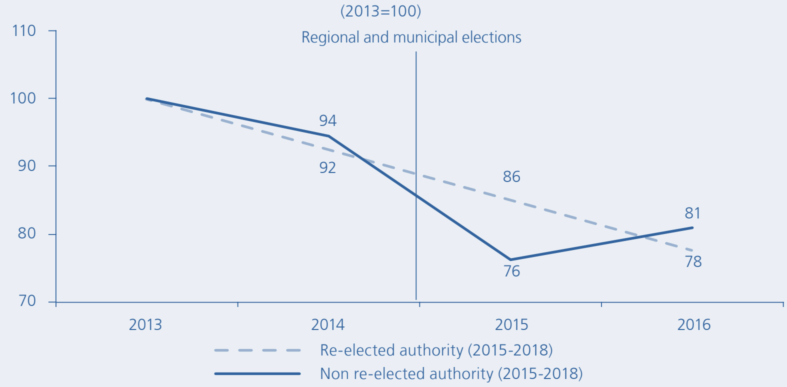
INVESTMENT IN SUB-NATIONAL GOVERNMENTS
(2009=100)



Source: SIAF-MEF, Jurado Nacional de Elecciones.

If we examine the period after the 2014 elections, we also find a difference in investment the year following the elections. Thus, investment in the group of subnational governments with re-elected authorities showed a reduction of about 7 percent, while the drop in investment was much more significant in the group of subnational governments with no re-elected authorities: 19.4 percent.

INVESTMENT IN SUB-NATIONAL GOVERNMENTS
(2013=100)



Source: SIAF-MEF, Jurado Nacional de Elecciones

Possible explanations of this pattern

Two factors may have contributed to this. First, the non-reelection of authorities generates delays in the implementation of the expenditure chain processes because the new authorities require a learning period. Moreover, another factor that contributes to this is the likely removal of officials that worked with the previous administration.

In addition to this, the new authorities may decide not to continue with the projects that the previous administration left pending execution and give priority to other investment projects compatible with what they offered to voters. These factors would have a negative impact on the execution of investment projects, especially in the first year of the new administration.

In 2015 the magnitude of the contraction of subnational investment was greater than that observed in 2011, the following reasons accounting for these disparities:

- The budget resources of the subnational governments were reduced by 14 percent in 2015, which would have reinforced the effect of the change of government authorities. In 2011, in contrast, the available budget for investment was increased by 1 percent.

- The rate of immediate re-election of mayors and regional governors decreased. In the 2010 elections, 393 of a total of 1,836 mayors were re-elected, which represented a rate of 21.4 percent, whereas in the 2014 elections, the rate of re-election of mayors was 18.2 percent (335 mayors out of a total of 1,838 mayors). A similar phenomenon was observed in the case of regional governors: 6 of the 25 governors were re-elected in the 2010 elections, while only 4 governors were re-elected in 2014.

PIM PUBLIC INVESTMENT IN SUB-NATIONAL GOVERNMENTS						
	Modified Institutional Budget - PIM 1/ (Million of nominal S/)			PIM (annual % change)		
	Regional Governments	Local Governments	Total	Regional Governments	Local Governments	Total
2009	7,255	15,747	23,002			
2010	8,135	13,796	21,931	12%	-12%	-5%
2011	7,561	14,631	22,192	-7%	6%	1%
2012	8,790	19,417	28,207	16%	33%	27%
2013	9,083	21,396	30,479	3%	10%	8%
2014	8,181	19,330	27,510	-10%	-10%	-10%
2015	7,346	16,298	23,644	-10%	-16%	-14%
2016	6,961	15,609	22,570	-5%	-4%	-5%
2017	7,881	17,329	25,209	13%	11%	12%
2018	7,746	15,190	22,935	-2%	-12%	-9%

1/ Acquisition of non-financial assets.
Source: SIAF-MEF.

Outlook for 2019

Law No. 30305, which prohibits the immediate reelection of mayors and regional governors, will come into force as from the 2018 Regional and Municipal Elections. The application of this regulation will probably have a negative effect on subnational investment in 2019 since all the mayors and governors in the subnational governments will change after the 2018 elections.

However, these negative effects could be offset by the fact that the law does not forbid the non-immediate re-election of authorities, which makes it possible for former mayors and governors to participate in this year's elections. Furthermore, the authorities in office are allowed to run as candidates for a position different from the one they currently hold. For example, a district mayor may run for mayor in a province municipality or for regional governor since the law does not forbid this.

As a result of this, of a total of 368 participants registered in the JNE who are running as candidates in the 2018 Regional Elections to be held in October, 61 of them (17 percent) have previously been in office, either as mayors or as governors. If they are elected, the impact of new authorities on the execution of spending could be less pronounced. Another factor that should contribute to a more "normal" spending at the level of the subnational governments is that no contraction similar to that observed in 2015 is foreseen in the budgetary resources (PIM) of subnational governments in 2019.

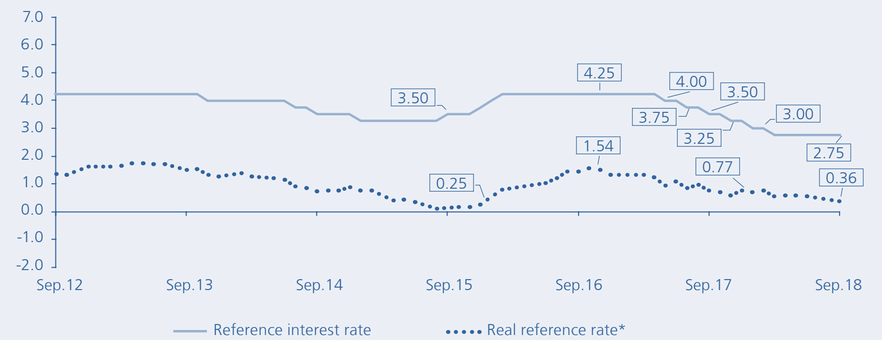
V. Monetary Policy and Financial Markets

Monetary Policy Actions

38. In the third quarter of 2018, the monetary policy actions of BCRP continued to be aimed at maintaining an expansionary monetary stance to ensure that inflation and inflation expectations remain within the target range in the forecast horizon, in a context marked by a level of economic activity still below its potential level.

    In this context, the Board of BCRP maintained the **benchmark interest rate** at 2.75 percent between June and September. These decisions were in line with the information provided in the monetary policy communiqués in which the Board reiterated that it considered "*that it is appropriate to maintain an expansionary policy stance until it is certain that this convergence will take place when inflation expectations are anchored in a context in which the level of economic activity is close to its potential level of growth*". As a result of these monetary policy actions, the real interest rate stood around 0.4 percent in this period, below its neutral level which is estimated at 1.75 percent. This expansionary monetary policy stance is consistent with a level of inflation of around 2 percent.

Graph 53
NOMINAL AND REAL* REFERENCE INTEREST RATE
(%)



* Considers expectation of inflation.

39. The decision of maintaining an expansionary monetary policy stance was made taking also into account the following factors:

i. **Year-on-year inflation** returned to the target range in June (1.43 percent) and then increased to 1.62 percent in July, falling thereafter to 1.07 percent in August. This result is mainly explained by the reversal of supply shocks and the base effect associated with the high rate of inflation registered in August 2017. Moreover, inflation without food and energy showed a rate around 2.0 percent.

ii. **Expectations of inflation in 12 months** showed levels within the target range.

iii. Indicators of **economic activity** continued showing signals of dynamism in the last three months, although the growth of GDP is still below its potential level. The negative output gap estimated for the first half of the year indicates that there are no inflationary pressures on the demand side.

iv. Higher risk in terms of **global economic activity** and increased financial stability are observed due to recent trade tensions.

Interest rates

40. Between June and August 2018, **interest rates** in the money and credit markets continued to show levels below their historical average values, in line with the expansionary monetary policy stance adopted. Thus, the 90-day corporate prime rate stood at 3.85 percent in August 2018, below its average in the 2010-2018 period (4.67 percent), while the rates for loans to large and medium-sized companies registered 6.24 and 10.15 percent in August, levels lower than their historical averages of 7.07 and 10.48 percent, respectively. As for deposit interest rates, the interest rates on deposits up to 30 days were 78 bps. below their historical average levels, while the interest rates on deposits for terms up to 180 days and 360 days were 59 and 66 bps below their respective historical average levels.

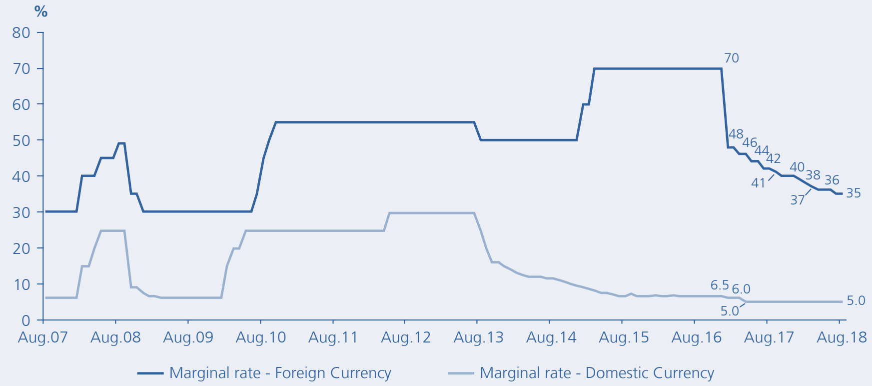
Table 31
INTEREST RATE IN DOMESTIC CURRENCY
(%)

		Dec.17	Mar.18	Jun.18	Jul.18	Aug.18	Average Hist.
Pasive	Deposits up to 30-day	2.97	2.65	2.85	2.85	2.77	3.55
	On 31 to 180-day term deposits	3.30	2.97	2.76	2.99	3.15	3.74
	On 181 to 360-day term deposits	3.61	3.19	3.32	3.31	3.51	4.17
Active	90-day corporate prime	3.63	3.11	3.56	3.67	3.85	4.67
	Corporates	4.03	3.75	4.25	3.99	4.15	5.52
	Large companies	6.23	6.41	6.28	6.26	6.24	7.07
	Medium-sized enterprises	9.68	9.76	9.34	9.32	10.15	10.48
	Small businesses	19.76	19.78	19.05	18.76	19.51	21.59
	Consumer	48.56	43.94	41.73	41.52	41.31	41.86
	Mortgage	7.65	7.42	7.30	7.35	7.46	8.88

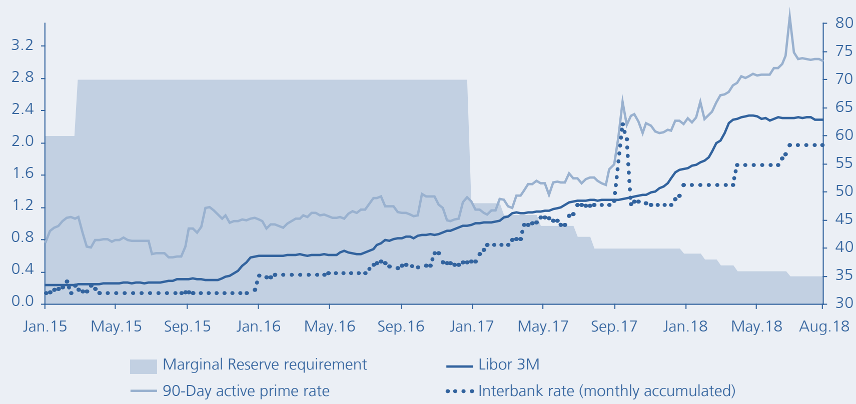
Source: SBS. Average comprise since September 2010 until August 2018.

41. On the other hand, interest rates in dollars showed mixed conducts. In the local money market, the 90-day corporate prime rate fell from 3.14 percent in June to 3.08 percent in August, while the interbank overnight rate increased from 1.89 percent to 2.00 percent, in line with the interest rate increases observed in the international financial markets. Similarly, the interest rates of the bank loan market increased in most of the segments. The interest rates in the local market continue to increase at a lower pace than interest rates in the international market due to the reserve requirements measures taken.

Graph 54
RESERVE REQUIEREMENTS RATE IN DOMESTIC AND FOREIGN CURRENCY
(as % of total deposits)



Graph 55
90-DAY CORPORATE PRIME, INTERBANK OVERNIGHT, AND LIBOR 3 MONTHS IN FOREIGN CURRENCY
(%)



Source: BCRP and Bloomberg.

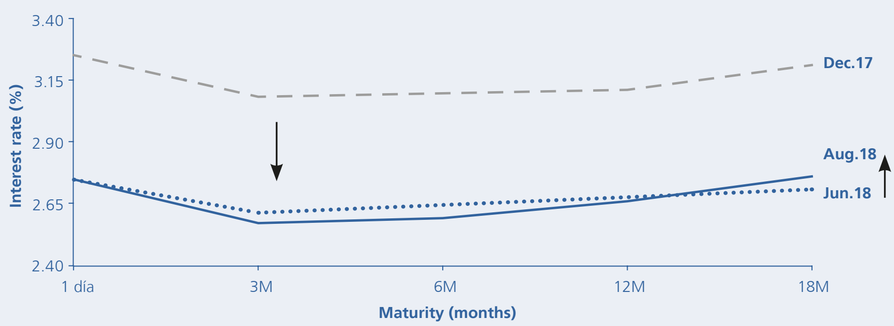
Table 32
INTEREST RATE IN FOREIGN CURRENCY
(%)

		Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
	Deposits up to 30-day	1.10	1.15	1.33	1.44	1.37
Pasive	On 31 to 180-day term deposits	1.32	1.43	1.65	1.73	1.80
	On 181 to 360-day term deposits	1.05	1.12	1.45	1.66	1.39
	90-day corporate prime	2.32	2.77	3.14	3.11	3.08
	Corporates	3.22	2.98	3.36	3.69	3.87
	Large companies	5.25	5.14	5.06	5.42	5.43
Active	Medium-sized enterprises	6.35	6.65	7.06	7.11	7.27
	Small businesses	7.29	10.09	10.17	9.41	9.81
	Consumer	32.91	34.12	33.87	34.32	34.56
	Mortgage	5.90	5.92	5.75	5.88	5.96

Source: SBS.

42. The **yield curve** of the primary and secondary markets of **CDBCRP** decreased by an average of 4 and 5 basis points between June and August for terms between 3 and 6 months. The interest rates in August are 48 points below the rates of December 2017 as a result of the reduction of 50 basis points in the BCRP benchmark rate for this period.

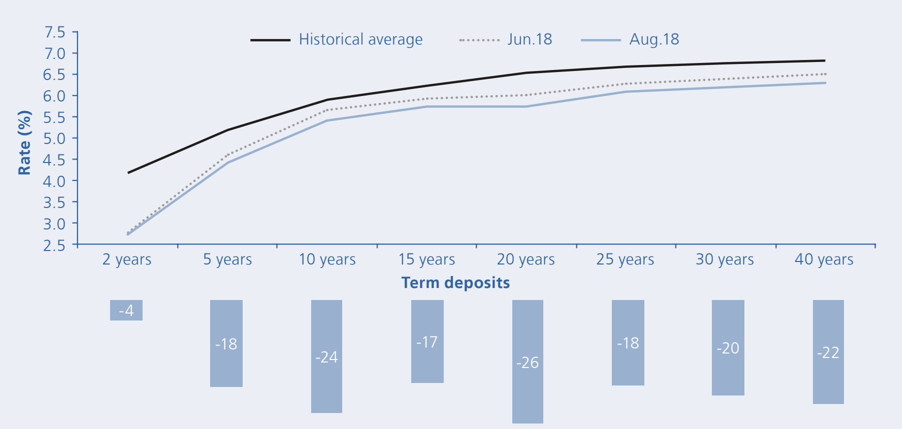
Graph 56
YIELD CURVE OF CENTRAL BANK SECURITIES 1/



1/ Yield rate of the primary and secundary market of CDBCRP.

43. The **yield curve of Peruvian sovereign bonds** at a fixed rate show higher values in all of their terms, the middle section of the curve being the most favored section due to the better outlook and forecasts of economic growth in the following years as well as to the high demand of both non-resident and local investors for government assets. It should be pointed out that the interest rates on sovereign bonds are lower than their historical average levels.

Graph 57
YIELD CURVE OF PERUVIAN SOVEREIGN BONDS
(%)

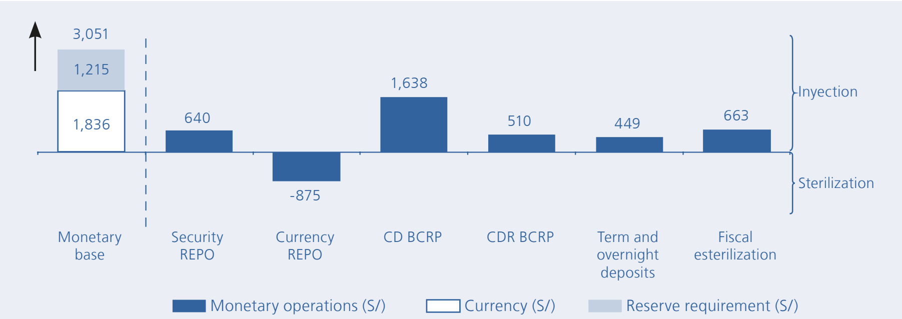


Source: MEF and Bloomberg. The historical average corresponds to the monthly average rate since 2005.

Monetary Operations

44. Between June and August, **the monetary operations of the Central Bank** were oriented to meet higher reserve requirements (S/ 1.84 billion) and the higher demand for currency associated with Peru's *fiestas patrias*. By sources, BCRP met the demand for liquidity through net maturities of CDBCRP (S/ 1.64 billion), CDRBCRP (S/ 510 million), term deposits (S/ 449 million), and as well as through the net placement of security repos (S/ 640 million), which offset in part the maturity of currency repos (S/ 875 million).

Graph 58
SOURCE OF MONETARY BASE FROM JUNE 1 TO AUGUST 31
(Million S/)



As a result of the net maturity of repos operations, the balance of these operations went from representing 6.8 percent of the net assets of BCRP in June 2018 to representing 6.1 percent at the end of August 2018. As for the composition of the liabilities of BCRP, public sector deposits at the BCRP decreased –to finance the higher expenditure resulting from the payment of the July bonus and the payment of BTP coupons in August–, their ratio declining from 34.2 to 33.1 percent. Despite this, public sector deposits are still the most important liability of BCRP. Moreover, the ratio of the net maturity of BCRP sterilization instruments went from representing 13.9 percent to representing 12.9 percent of BCRP total liabilities, reflecting in this way the expansionary monetary policy stance.

Table 33
SIMPLIFIED BALANCE SHEET OF THE BCRP*
(As % of Net Assets)

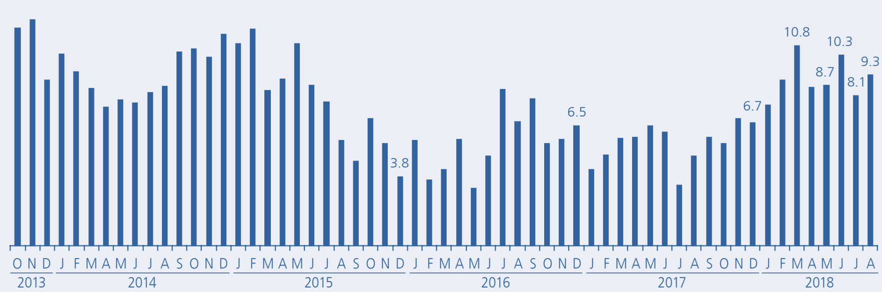
	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
I. Net assets	**100**	**100**	**100**	**100**	**100**
Net International Reserves	**90.3**	**93.2**	**93.2**	**93.8**	**93.9**
In millions US$	*63,621*	*59,079*	*59,079*	*60,797*	*60,275*
Repos	**9.7**	**6.8**	**6.8**	**6.2**	**6.1**
II. Net liabilities	**100**	**100**	**100**	**100**	**100**
1. Total public sector deposits	**32.0**	**34.2**	**34.2**	**34.3**	**33.1**
In domestic currency	18.7	20.7	20.7	21.1	19.8
In foreign currency	13.4	13.5	13.5	13.2	13.3
2. Total financial system deposits	**29.9**	**25.8**	**25.9**	**27.5**	**27.8**
In domestic currency	5.0	5.2	5.2	4.8	5.7
In foreign currency	24.9	20.6	20.6	22.7	22.1
3. BCRP instruments	**14.8**	**13.9**	**13.9**	**11.9**	**12.9**
CD BCRP	13.6	12.9	12.9	11.1	12.0
CDLD BCRP	0.2	0.0	0.0	0.0	0.0
CDR BCRP	0.4	0.2	0.2	0.0	0.0
Term deposits	0.0	0.0	0.0	0.0	0.0
Overnight deposits	0.7	0.8	0.8	0.8	0.8
4. Currency	**19.5**	**21.4**	**21.3**	**21.7**	**21.2**
5. Others*	**3.7**	**4.7**	**4.7**	**4.6**	**5.1**

* Includes interests, discounts and net profits.

Liquidity

45. In August, **currency in circulation** grew at a year-on-year rate of 9.3 percent, reflecting the recovery in the growth rate of aggregate expenditure.

Graph 59
CURRENCY IN CIRCULATION
(Annual % change)



Source: BCRP.

Showing two-digit growth rates for 10 consecutive months, private sector deposits registered a YoY growth rate of 10.6 percent in August. This dynamism was supported by an increase in savings deposits and demand deposits in domestic currency. By currencies, deposits in soles grew at a YoY rate of 15.9 percent in August, while deposits in dollars grew 2.6 percent.

Graph 60
DEPOSITS OF THE PRIVATE SECTOR BY CURRENCY
(Annual % change)

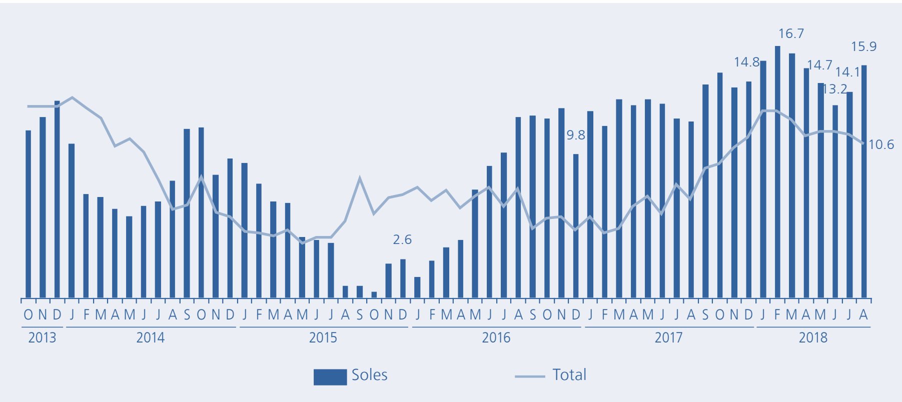


Table 34
MONETARY AND CREDIT ACCOUNTS OF THE DEPOSITORY CORPORATIONS (END-OF-PERIOD)
(12-month % change)

	Dec.16	Mar.17	Jun.17	Sep.17	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Currency in circulation	6.5	5.8	6.2	5.9	6.7	10.8	10.3	8.1	9.3
Deposits in domestic currency	9.8	13.6	13.3	14.6	14.8	16.7	13.2	14.1	15.9
Total deposits 1/	4.7	4.8	5.7	8.9	11.0	12.3	11.4	11.2	10.6
Broad money in domestic currency	9.0	11.5	10.7	11.8	12.5	14.9	12.4	12.5	14.1
Total broad money 1/	5.1	4.9	5.2	8.0	10.1	12.3	11.4	10.9	10.6
Credit to the private sector in domestic currency	7.2	4.4	3.9	5.2	5.3	7.4	9.2	9.4	9.6
Credit to the private sector 1/	5.6	4.5	4.5	5.3	6.6	7.8	9.0	8.6	8.7

1/ Balances in foreign currency are valuated at constant exchange rate on December 2017.
Source: BCRP.

The faster pace of growth of deposits in soles has continued to favor the reduction of the dollarization ratio of this aggregate, which registered 37.2 percent in August. The decrease of more than one basis point observed in the ratio of dollarization of corporate deposits to 45.6 percent (47.9 percent in July) stands out in the month of August.

Table 35
DOLLARIZATION RATIO OF DEPOSITS
(%)

	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Individuals	**34.6**	**34.0**	**33.4**	**33.3**	**33.2**
At current exchange rate	*34.6*	*33.9*	*33.6*	*33.6*	*33.6*
Demand deposits	47.1	45.6	47.3	46.8	44.5
Savings deposits	38.7	37.5	37.4	36.1	36.2
Term deposits	30.3	29.6	28.7	30.1	30.0
CTS	26.7	26.9	25.3	25.3	25.3
Business	**49.5**	**48.6**	**49.3**	**47.9**	**45.6**
At current exchange rate	*49.5*	*48.5*	*49.5*	*48.1*	*46.0*
Demand deposits	47.1	45.6	47.3	46.8	44.5
Savings deposits	52.6	60.0	54.8	61.4	55.6
Term deposits	58.9	56.9	56.3	49.6	48.2
TOTAL	**39.5**	**38.9**	**38.6**	**38.1**	**37.2**
At current exchange rate	*39.5*	*38.8*	*38.9*	*38.3*	*37.6*

Credit to the Private Sector

46. **Credit to the private sector** grew at a YoY rate of 8.7 percent in August. By loan segments, credit to businesses grew 7.1 percent, while loans to households grew 11.3 percent. In the case of personal loans, consumer loans and mortgage loans continue to show the higher growth rates (12.5 and 9.6 percent, respectively), while in the case of loans to businesses, the segments with the higher rates were loans to corporations and to large companies, as well as loans to small and micro businesses (9.3 and 7.6 percent, respectively).

Table 36
CREDIT TO THE PRIVATE SECTOR
(12-month % change)

	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Businesses	**5.4**	**6.6**	**7.9**	**7.2**	**7.1**
Corporate and large companies	6.0	7.9	10.5	9.4	9.3
Medium-sized enterprises	0.7	1.9	2.5	1.8	2.0
Small business and Microbusinesses	9.5	8.8	8.1	8.0	7.6
Individuals	**8.7**	**9.7**	**10.7**	**11.0**	**11.3**
Consumer	8.8	10.4	11.6	12.1	12.5
Car loans	-4.2	-0.6	-2.7	-2.4	-1.7
Credit cards	3.0	3.8	5.9	7.8	8.2
Rest	13.0	14.8	15.6	15.4	15.7
Mortgage	8.6	8.7	9.5	9.5	9.6
TOTAL	**6.6**	**7.8**	**9.0**	**8.6**	**8.7**

47. Moreover, credit in soles has increased its pace of growth, while credit in dollars has slowed down, which is consistent with the increase of interest rates in dollars following the rises in the Fed interest rate.

Graph 61
TOTAL CREDIT TO THE PRIVATE SECTOR AND IN DOMESTIC CURRENCY
(12-month % change)

Table 37
CREDIT TO THE PRIVATE SECTOR
(Annual % change)

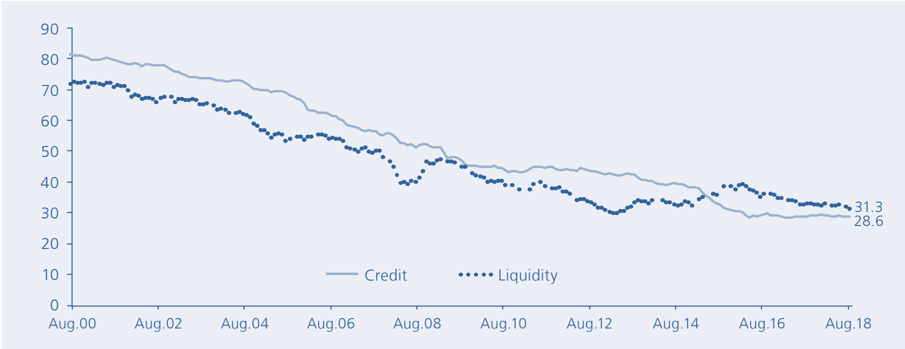
	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Domestic currency	5.3	7.4	9.2	9.4	9.6
Foreign currency	9.9	8.6	8.5	6.7	6.5
Total	**6.6**	**7.8**	**9.0**	**8.6**	**8.7**

48. The ratio of dollarization of credit, measured at a constant exchange rate, registered 28.2 percent. Furthermore, the ratio of dollarization of personal loans continued to decline, especially in the segments of mortgage loans and car loans whose ratios recorded 17.2 and 16.8 percent, respectively.

Table 38
RATIO OF DOLLARIZATION OF CREDIT TO THE PRIVATE SECTOR
(%)

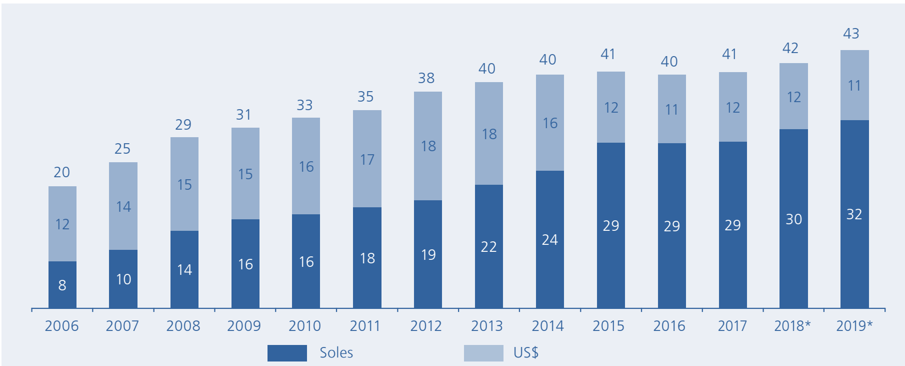
	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Businesses	**39.7**	**39.6**	**39.5**	**39.3**	**39.1**
Corporate and large companies	53.9	53.5	53.4	52.8	52.7
Medium-sized enterprises	40.5	40.2	40.4	40.4	39.9
Small business and Microbusinesses	6.7	6.4	6.2	6.2	6.2
Individuals	**11.9**	**11.4**	**11.0**	**10.9**	**10.7**
Consumer	6.8	6.6	6.4	6.4	6.4
Car loans	20.2	17.5	15.9	16.8	16.8
Credit cards	6.9	7.1	7.2	7.3	7.3
Rest	6.0	5.8	5.6	5.5	5.4
Mortgage	19.3	18.5	17.7	17.5	17.2
TOTAL	**29.3**	**28.9**	**28.6**	**28.5**	**28.2**
At current exchange rate	*29.3*	*28.8*	*28.8*	*28.7*	*28.6*

Graph 62
RATIO OF DOLLARIZATION OF CREDIT AND LIQUIDITY: 2000 - 2018
(%)



49. In the 2018-2019 forecast horizon, **credit to the private sector** is expected to grow at higher rates than the nominal GDP and therefore the ratio of credit-to-GDP would increase from 41 percent to 43 percent in this period. These forecasts take into account loose monetary conditions and the recovery in the pace of growth of domestic demand foreseen for these years.

Graph 63
RATIO CREDIT/GDP
(%)



* Forecast.

50. The ratio of **non-performing loans** in August was 3.59 percent, higher than in June 2018 (3.45 percent). The ratio of non-performing loans in credit to businesses increased from 3.54 percent in June to 3.71 percent in August while this indicator increased from 3.28 percent to 3.35 percent in the case of personal loans.

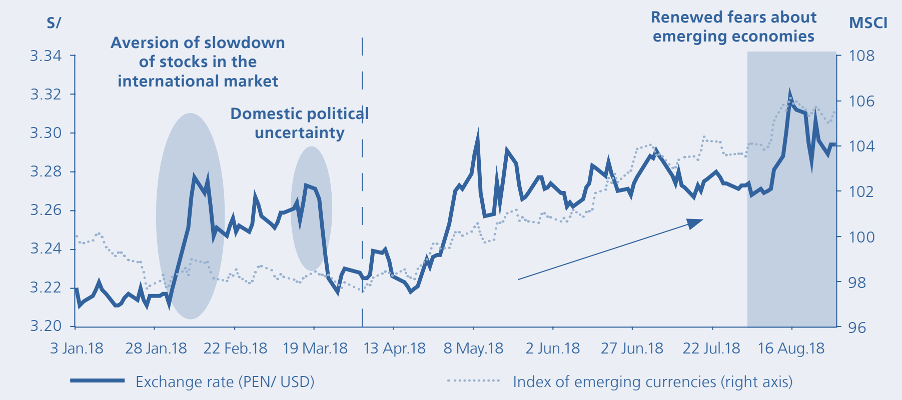
Table 39
NON-PERFORMING LOANS INDEX
(%)

	Dec.17	Mar.18	Jun.18	Jul.18	Aug.18
Businesses	**3.33**	**3.48**	**3.54**	**3.64**	**3.71**
Corporate and large companies	0.47	0.54	0.57	0.60	0.62
Medium-sized enterprises	7.02	7.38	7.46	8.00	8.19
Small business and Microbusinesses	7.12	7.53	7.74	7.71	7.83
Individuals	**3.29**	**3.27**	**3.28**	**3.32**	**3.35**
Consumer	3.70	3.60	3.59	3.60	3.65
Car loans	5.13	4.89	4.84	4.73	4.77
Credit cards	6.10	6.14	5.59	5.45	5.33
Mortgage	2.78	2.86	2.89	2.95	2.97
TOTAL	**3.31**	**3.40**	**3.45**	**3.52**	**3.59**

Exchange Rate and Intervention in the Forex Market

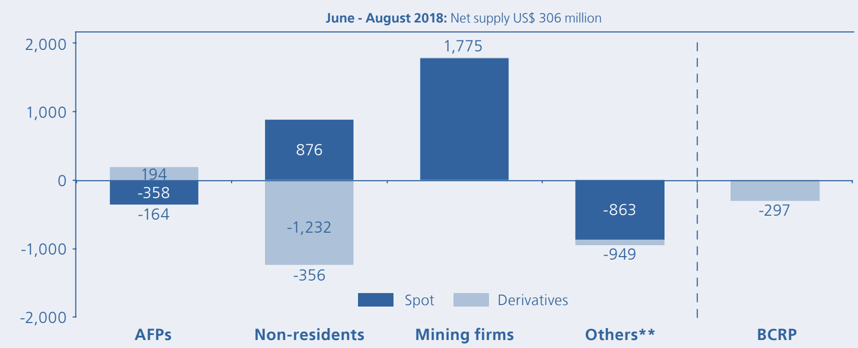
51. Between June and August 2018, the US dollar-PEN exchange rate rose 0.7 percent, from S/ 3.272 to S/ 3.294 per dollar, as a result of which the PEN shows an accumulated depreciation of 1.7 percent year-to-date. It is worth pointing out, however, that the PEN-dollar exchange rate was not uniform during this period. Between June and the first weeks of August, the **exchange rate** remained stable due to the less negative external context observed when pressures on the assets of the emerging economies as well as uncertainty associated with trade tensions decreased after the United States and Mexico reached an agreement. Then, in the last three weeks of August, the sol depreciated 0.7 percent given the risk of possible contagion as the emerging economies are again affected by the economic situation in Turkey and Argentina, as well as by fears of trade tensions between China and the United States. It should be pointed out that, since April, the value of currencies in the emerging economies has been influenced by the aforementioned negative international context.

Graph 64
EXCHANGE RATE PEN/USD AND MSCI INDEX OF EMERGING CURRENCIES: 2018



As regards **currency flows in the local foreign exchange market**, a slight supply of dollars (US$ 306 million) was observed between June and August 2018 in spite of the depreciation mentioned above. The supply of dollars came mostly from mining companies (US$ 1.78 billion). On the other hand, the demand for dollars came mainly from non-resident agents (US$ 356 million), especially in the market of derivatives. Non resident agents not only offered dollars in the spot market (US$ 876 million), in line with the increase in their position of local assets in sovereign bonds, but they also bought dollars in the market of derivatives (US$ 1.23 billion) with the aim of hedging their assets in soles against foreign exchange risk.

Graph 65
QUARTERLY TOTAL FLOW TO THE FOREIGN EXCHANGE MARKET*
(Million US$)



* Negative flows means net demand of US$ in the period.
** Includes Banco de la Nación, financial institutions, retail clients, and privates.

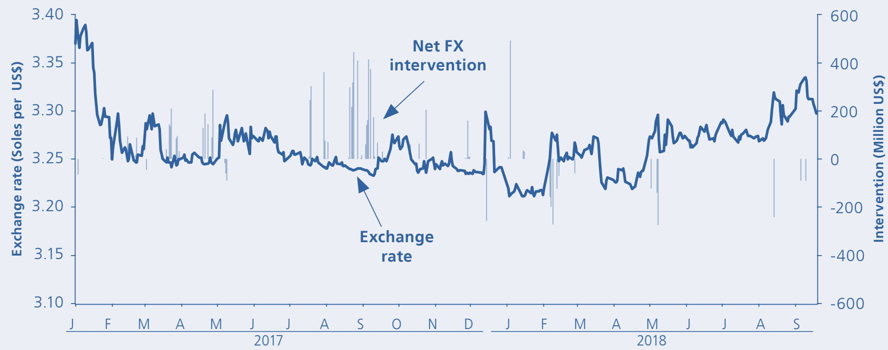
As for BCRP actions in the foreign exchange market, the Central Bank allowed FX Swaps-Sell (SCV) for a total of US$ 383 million to expire at the beginning of July and then intervened in the foreign exchange market on one single day during this period, auctioning FX Swaps-Sell for a total of US$ 241 million on August 15, in response to the higher exchange rate volatility and the demand for coverage observed. It is worth pointing out that BCRP did not intervene in the spot market in this period.

Table 40
FX INTERVENTION

	Days of trade	Number of days of Intervention				
		Spot Market	Placement of derivatives and indexed instruments	Total (spot and/or placement)	Percentage of days with intervention	Standard deviation of the exchange rate (annualized of % chg.)
2017	249	55	23	63	25%	4.5%
Jan.17-Aug.17	166	38	15	43	26%	4.6%
Jan.18-Aug.18	165	4	12	15	9%	3.6%

As a result of lower foreign exchange volatility, the number of BCR interventions in the foreign exchange market relative to the number of trading days fell from 26 percent between January and August 2017 to 9 percent in the same period of this year. In this way, BCRP maintains an exchange intervention policy aimed at reducing excessive volatility in the foreign exchange rate without taking action against the evolution of the exchange rate fundamentals.

Graph 66
EXCHANGE RATE AND NET FX INTERVENTION [1/]



1/ Includes Net purchases of US$, net maturities of CDR BCRP, net maturity of FX swaps , net placement of CDLD, and net purchases by substitution REPOS.

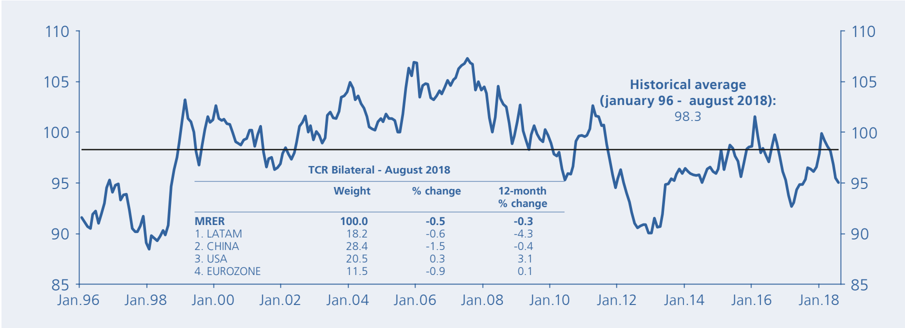
Table 41
INTERVENTION BY TYPE OF INSTRUMENT*
(Million US$)

	Net purchases of US$	Net purchases using derivatives and indexed instruments						TOTAL
		Placement of CDR	Maturity of CDR	Placement of CDLD	Maturity of CDLD	FX Swaps Placement Sales	FX Swaps Maturity Sale	
2017	**5,246**	**-368**	**347**	**1,453**	**-1,329**	**-172**	**322**	**5,499**
Jan.-May 2018	184	-733	835	382	-502	-720	337	-217
June 2018	0	0	0	0	0	0	0	0
July 2018	0	0	156	0	0	0	383	539
Aug. to 2018	0	0	0	0	0	-241	0	-241
2018**	**184**	**-733**	**991**	**382**	**-502**	**-961**	**720**	**81**

* Negative indicates net sale of US$.
** As of August 31.

52. The **multilateral real exchange rate index** (RER) showed a level of 95.0 in August, a level 0.3 percent lower than that recorded in the same period of 2017. This slight decrease in the RER index in the last 12 months has been mainly associated with the increase of the real exchange rate relative to Latin American currencies (4.3 percent), offset by the real bilateral depreciation against the U.S. currency (3.1 percent). It is worth highlighting that, in recent months, the current level of the RER has fluctuated around its historical average level, estimated at 98.

Graph 67
MULTILATERAL RER
(Index 2009=100)



	Weight	% change	12-month % change
MRER	**100.0**	**-0.5**	**-0.3**
1. LATAM	18.2	-0.6	-4.3
2. CHINA	28.4	-1.5	-0.4
3. USA	20.5	0.3	3.1
4. EUROZONE	11.5	-0.9	0.1

VI. Inflation Forecast and Balance of Risks

Inflation at August 2018

53. The annual rate of inflation declined from 1.4 percent in December 2017 to 1.1 percent in August 2018, while the indicator of trend inflation rose from 2.0 to 2.1 percent in the same months. This difference between the growth rates of the consumer price index and trend inflation is explained by the reduction in the prices of food and beverages, which reflected the normalization of agricultural activity after the occurrence of El Niño in 2017.

Graph 68
INFLATION
(Last 12-month % change)

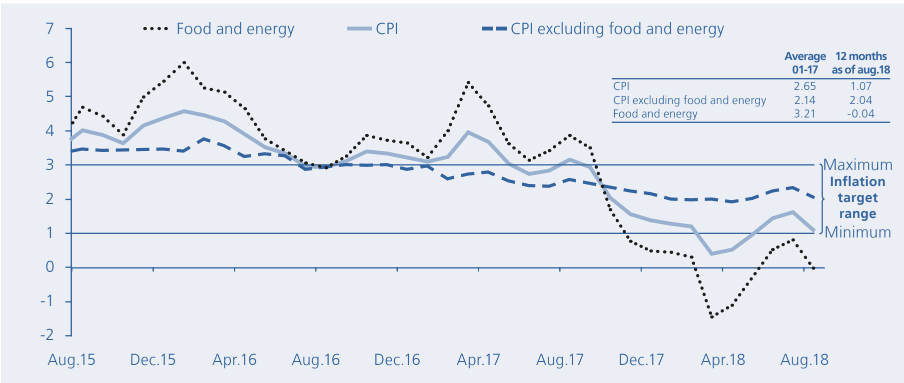
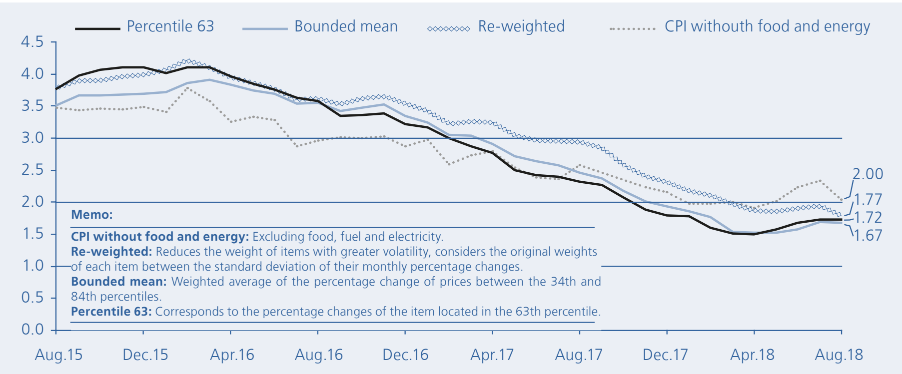


Table 42
INFLATION
(% change)

	Weight	2017	2018 Jan.-Aug.	2018 12 months
CPI	100.0	1.4	1.6	1.1
1. CPI excluding food and energy	**56.4**	**2.1**	**1.7**	**2.0**
a. Goods	21.7	1.2	1.7	1.9
b. Services	34.8	2.7	1.7	2.1
2. Food and energy	**43.6**	**0.5**	**1.5**	**0.0**
a. Food and beverages	37.8	0.3	1.2	-1.1
b. Fuel and electricity	5.7	1.6	3.3	7.2
- Fuel	2.8	3.9	4.7	8.3
- Electricity	2.9	-0.2	2.2	6.5

54. Measurements of trend inflation using different methods show inflation rates ranging between 1.7 percent and 2.0 percent; that is, that inflation is within the inflation target range.

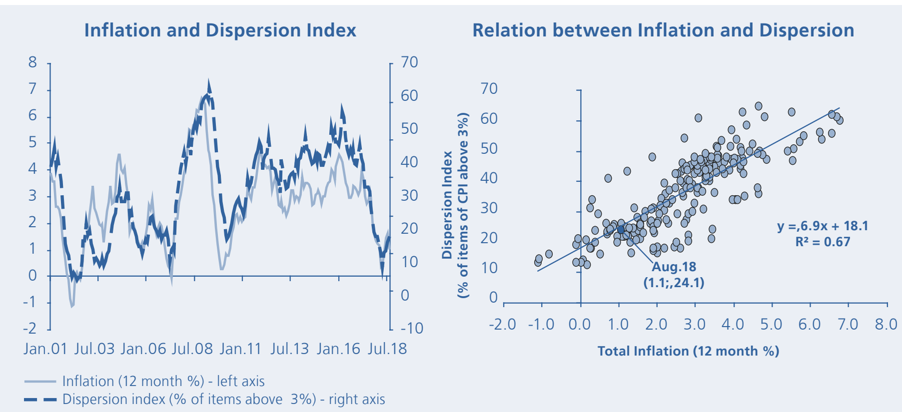
Graph 69
MEASUREMENTS OF THE INFLATIONARY TREND
(Last 12 months % change)



55. The low level of dispersion in consumer prices suggests a widespread absence of inflationary pressures. This index is a tool that allows analyzing how *dispersed* the upward pressures of prices are because it measures the percentage of items in the CPI basket whose YoY variations are higher than 3 percent.

In the period of January 2001-July 2018, the dispersion index has captured episodes of increase and decrease in annual inflation. The relationship between these two variables suggests that high inflation rates are generally associated with a high percentage of items that also show equally high year-on-year variations and, likewise, that the months in which high inflation rates are explained by price increases in a small number of items are atypical. Today, the low level of inflation is associated with an equally low dispersion index level.

Graph 70



2018 - 2019 Forecast

56. BCRP monetary policy actions are taken on the basis of inflation forecasts and projections of inflation determinants elaborated using the macroeconomic information available at the time of decision making. Key indicators used to determine monetary policy actions include inflation expectations, imported inflation (including the impact of the exchange rate), and demand inflationary pressures, all of which are quantified through the concept of the output gap (the difference between the GDP observed and its potential level).

    Based on these determinants of inflation, YoY inflation is expected to be transitorily below 2.0 percent until the third quarter of 2018 as a result of the reversal of the supply shocks associated with the adverse climate-related events registered in early 2017 (El Niño Costero) as well as of a negative output gap.

Graph 71
INFLATION FORECAST: 2015 - 2019
(Last 12-month % change)

* Forecast.

The rapid normalization of the supply shocks observed has been correcting the path of inflation expectations and leading them towards the midpoint of the target range. This trend in inflation expectations, together with the absence of inflationary pressures on the demand side and with moderate levels of imported inflation, imply that inflation without food and energy will remain very close to 2.0 percent in the forecast horizon. As a result of this, inflation is expected to show a rate of 2.2 percent at the end of 2018 and to be very close to 2.0 percent in 2019.

57. The determinants of the inflation forecast are discussed below:

    a) **Expectations of inflation in 12 months** are foreseen to continue decreasing during the forecast horizon and to converge to 2.2 percent during 2018.

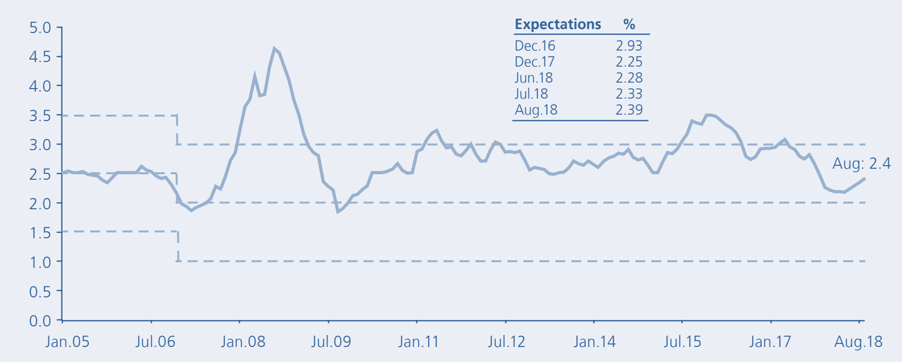
    The surveys on expectations continue showing a reduction in inflation expectations in 2018 and 2019, as shown in the following table.

Table 43
SURVEY ON MACROECONOMIC EXPECTATIONS: INFLATION
(% change)

	IR Sep.17	RI Dec.17	RI Mar.18	IR Jun.18	IR Sep.18*
Financial entities					
2018	2.6	2.5	2.0	2.0	2.1
2019	2.8	2.7	2.5	2.4	2.5
Economic analysts					
2018	2.8	2.5	2.3	2.1	2.3
2019	2.7	2.6	2.5	2.5	2.5
Non-financial firms					
2018	3.0	3.0	2.5	2.4	2.4
2019	3.0	3.0	2.5	2.5	2.5

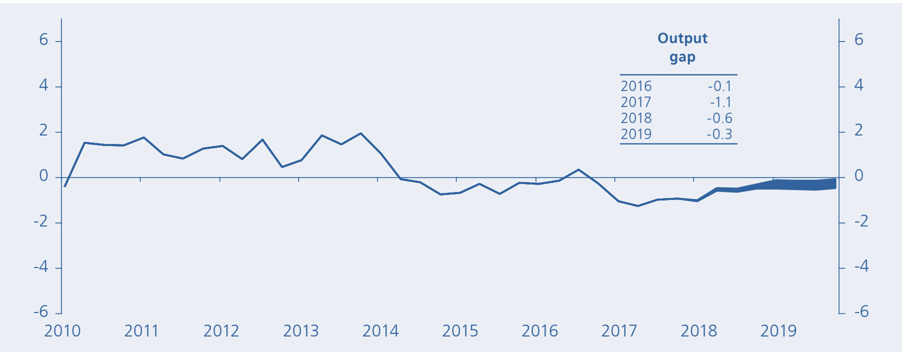
* Survey conducted during August 31.
IR: Inflation Report.

Graph 72
EXPECTATIONS OF INFLATION FOR THE NEXT YEAR
(% points)



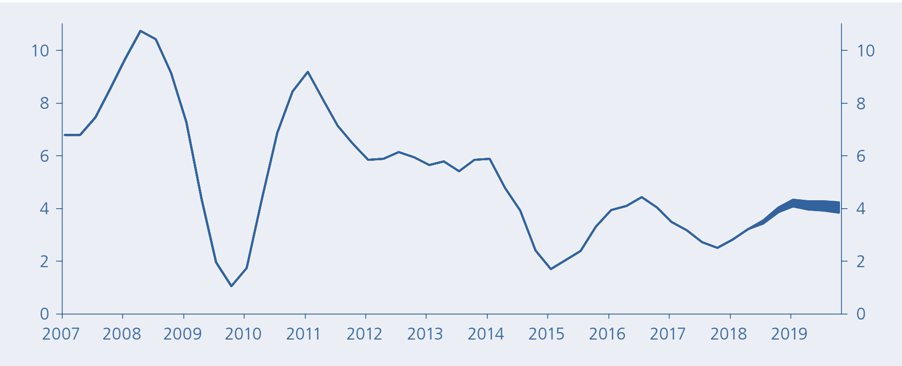
b) Increased fiscal expenditure in infrastructure projects, together with favorable external conditions during the year, greater business confidence and the effect of the monetary stimulus are foreseen to contribute to bringing the **output gap** closer to its neutral position at the end of 2019.

Graph 73
OUTPUT GAP: 2010 - 2019
(% Potential GDP)



The GDP growth forecast of an annual growth rate of 4.0 percent in the 2018-2019 horizon is consistent with this gradual recovery of the output gap.

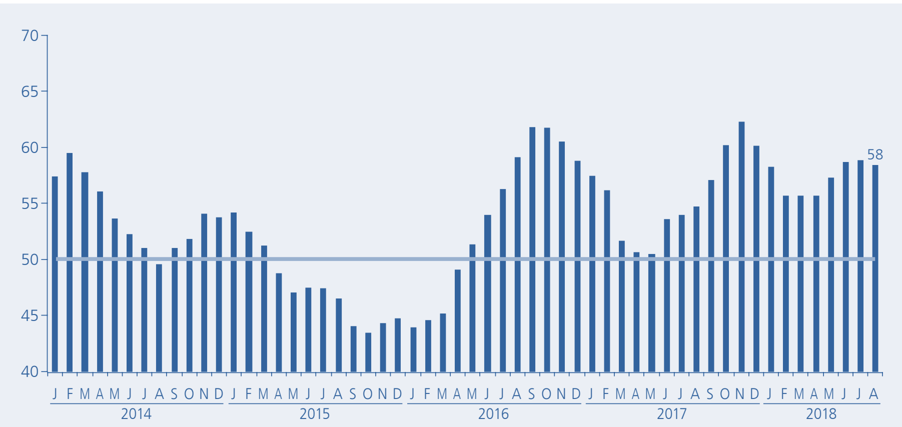
Graph 74
GDP GROWTH FORECAST: 2007 - 2019
(Last 12-month % change)



The main determinants of the forecast of the **output gap** include the following:

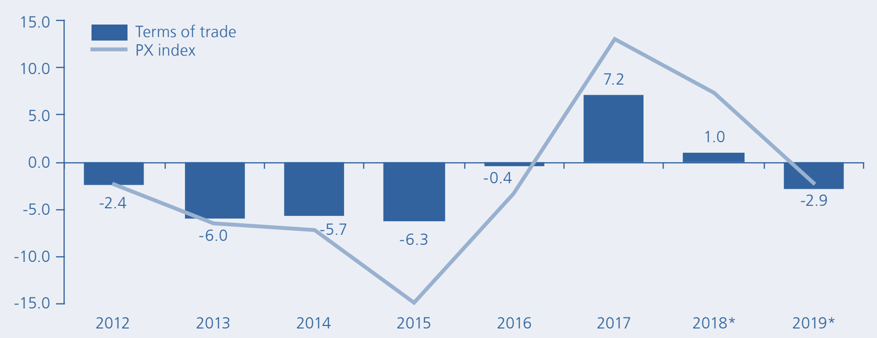
- **Business confidence**: Confidence is expected to continue recovering and to remain within the optimistic side in the forecast horizon, in line with the 5.5 percent growth of private investment foreseen for 2018 and the 6.5 percent growth of private investment foreseen for 2019 .

Graph 75
EXPECTATION ABOUT THE ECONOMY SITUATION 3-MONTHS AHEAD, JAN.2014 - AUG.2018
(Moving average 3 months)



- **External conditions**: Favorable external conditions, driven by the increase in the terms of trade as well as by a faster pace of growth in our trading partners than in 2017, are foreseen for 2018. On the other hand, these favorable external conditions are anticipated to be more moderate in 2019.

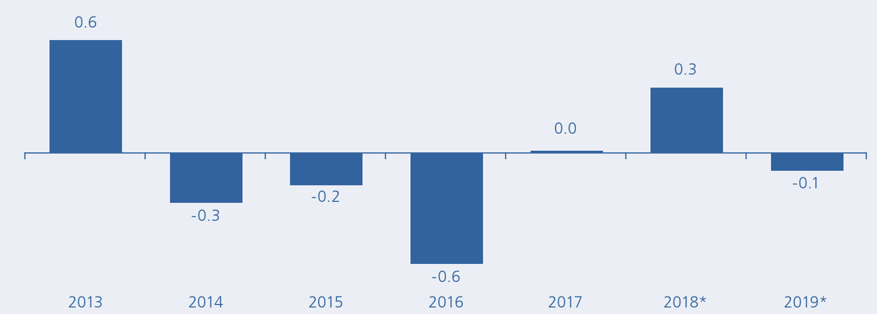
Graph 76
TERMS OF TRADE: 2012 - 2019
(Annual % change)



* Forecast.

- **Fiscal impulse:** The weighed fiscal impulse estimated for 2018 would be significant, with increased expenditure associated with the reconstruction of the infrastructure affected by El Niño Costero and with the construction of infrastructure for the Pan American Games accounting for this. In 2019, the fiscal impulse is expected to be around its neutral position due to the lower spending of the subnational governments.

Graph 77
WEIGHTED FISCAL IMPULSE: 2013 - 2019
(% Potential GDP)

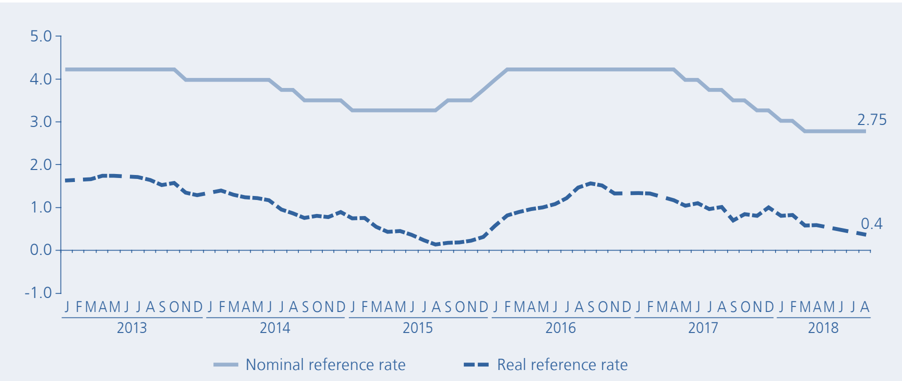


* Forecast.

- **Monetary conditions**: Taking into account the four rate cuts in the benchmark interest rate in 2017 (in May, July, September, and November) and the rate cuts made in January and March 2018, monetary conditions in soles remain expansionary (with a real interest lower than 0.5 percent).

Moreover, although higher rates are anticipated in the Fed interest rates, the reduction of reserve requirements in dollars carried out by BCRP will offset in part the impact of these higher rates on local credit conditions.

Graph 78
REFERENCE INTEREST RATE: JAN.2013 - AUG.2018



c) **Imported inflation** reflects the evolution of import prices and the evolution of the foreign exchange rate. In 2018, the level of imported inflation is expected to be higher than the level projected in the Inflation Report of June due mainly to market expectations of higher oil prices, as well as due to the greater strengthening of the dollar expected.

Table 44
SURVEY ON MACROECONOMIC EXPECTATIONS: EXCHANGE RATE
(S/ per US$)

	IR Sep.17	RI Dec.17	RI Mar.18	IR Jun.18	IR Sep.18*
Financial entities					
2018	3.30	3.29	3.25	3.30	3.30
2019	3.44	3.28	3.25	3.33	3.30
Economic analysts					
2018	3.35	3.30	3.28	3.28	3.30
2019	3.40	3.35	3.35	3.35	3.35
Non-financial firms					
2018	3.40	3.34	3.30	3.29	3.30
2019	3.43	3.40	3.35	3.32	3.33

* Survey conducted during August 31.
IR: Inflation Report.

d) As previously mentioned, the annual variation in **food and energy prices** is expected to remain below 2.0 percent until the third quarter of 2018 due to the reversal of the supply shocks caused by El Niño Costero. The annual changes in these prices are foreseen to converge towards 2 percent as the effects of these shocks disappear.

Table 45
INFLATION FORECAST
(Annual rates)

		2017	2018	2019
CPI		**1.4**	**2.2**	**2.0**
1.	**CPI excluding food and energy**	**2.1**	**2.3**	**2.0**
	i. Goods	1.2	2.2	1.7
	ii. Services	2.7	2.3	2.2
2.	**Food and energy**	**0.5**	**2.2**	**2.1**
	i. Food	0.3	2.1	2.1
	ii. Energy	1.6	2.4	2.1

Balance of Risks in the 2018 - 2019 Horizon

58. Every forecast is subject to the occurrence of unanticipated events that may deviate the forecast from the central scenario. The materialization of some risks may imply a rate of inflation different from the one originally forecast. The main factors that could more likely deviate the inflation forecast from the baseline scenario include the following:

a. External demand shocks

The escalation of the trade war initiated by the United States and China's reprisal actions could generate greater uncertainty about world economic activity, which would cause possible inflationary impacts –due to currency depreciation– as well as a slowdown in world economic activity. The impact of this risk and its probability of occurrence are now greater than foreseen in the June Inflation Report.

b. Volatility in international financial markets

Unexpected adjustments in the Fed interest rates and financial volatility in some emerging economies could push up the exchange rate and could also increase inflation in the short term through the effect this would have on imported inflation. The probability of occurrence of this scenario has increased in comparison with the probability of occurrence considered in the previous Inflation Report.

c. Negative shocks in domestic demand

Economic recovery could be more moderate if public and private investment grew at lower rates than expected, which would imply a more negative output gap for a longer period of time, with inflation tending to fall below the baseline scenario. The probability of occurrence of this risk has been revised up in comparison with the probability estimated in the previous Inflation Report.

d. Supply shocks

The risk of a sudden increase in the price of some food items has a nil expected impact, similar to the one considered in the Inflation Report of June.

The balance of risks of the inflation forecast shows a positive bias, which means that the impact of factors that could affect inflation on the upside is higher than the impact of factors that could affect inflation on the downside.

Graph 79
BALANCE OF RISKS AGAINST THE BASE SCENARIO