



# INFLATION REPORT

*June 2018*

**Recent trends  
and macroeconomic  
forecasts  
2018-2019**

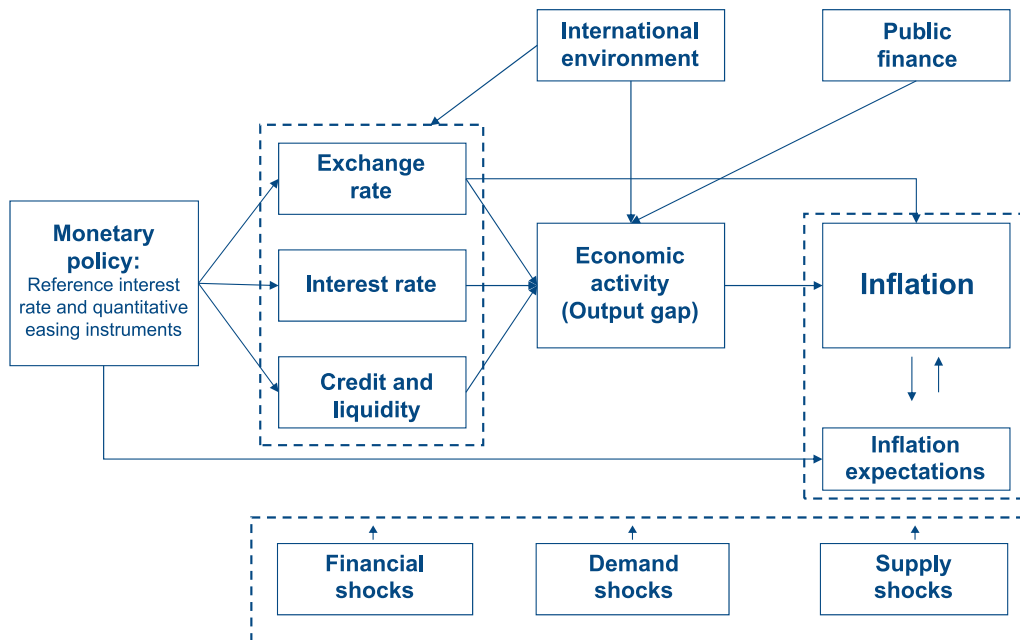


CENTRAL RESERVE BANK OF PERU

# INFLATION REPORT

## Recent Trends and Macroeconomic Forecasts 2018 - 2019

*June 2018*



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## **INFLATION REPORT**

Recent trends and macroeconomic forecasts

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## Recent Trends and Macroeconomic Forecasts 2018 - 2019

June 2018

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This **Inflation Report** was prepared using data on the balance of payments and the gross domestic product as of the first quarter of 2018, data on monetary accounts as of April 2018, and data on the operations of the non-financial public sector, inflation, financial markets, and the exchange rate as of May 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 June 7, 2018.





## Summary

- i. Between January and May 2018, the indicators of **global economic activity** show that the foreseen pace of global economic growth would continue, but that a lower degree of synchronized growth would be seen among the major economies. The Eurozone shows indicators of a slowdown that contrast with the increased dynamism registered in the United States as well as with China's high and stable pace of growth. Therefore, the projections of global growth for 2018 and 2019 remain at 3.8 percent and 3.7 percent, respectively, in line with a lower monetary stimulus in the developed economies and with the convergence of their growth rates to their potential growth levels.
- ii. In the first quarter of 2018, **the terms of trade** grew 7.1 percent, reflecting mostly the higher prices of commodity exports (12.8 percent). Since April, however, the prices of our imports –particularly the price of crude– have increased at a magnitude not foreseen in our previous Inflation Report, driven by supply constraints and by a sound growth in the world economy. In this context, the projected growth of the **terms of trade** in 2018 has been revised on the downside, from 7.4 to 4.9 percent, mainly due to the upward adjustment of oil prices and to the revision of the estimated growth of the prices of some metals (lead and zinc), which have been affected by commercial tensions and by the appreciation of the dollar. In 2019, the terms of trade would increase by 1.3 percent.
- iii. In the first quarter of 2018, the deficit in the **current account of the balance of payments** was 2.4 percent of GDP. 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 for the seventh consecutive quarter (this surplus was 0.9 percentage points of GDP higher than that recorded in the same period in 2017).

In the forecast horizon, the current account deficit would be 1.2 percent of GDP in 2018 and 2019, in line with the increased non-traditional exports foreseen for 2018 and with higher terms of trade in 2019. The **long-term flow of external private capital** (equivalent to 4.8 percent of GDP in 2018 and 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 3.2 percent in the first quarter of 2018 –the highest rate observed since the third quarter of 2016 (4.7 percent)–, supported by a recovery in the **domestic demand**, which grew 3.9 percent and thus offset the impacts of the negative shocks that affected the economy in 2017. The higher pace of public expenditure (associated mostly with reconstruction and maintenance projects) stands out together with an improvement in private investment which reflected better terms







of trade. In turn, this had a positive impact on non-primary sectors (which grew 3.6 percent), especially on the sectors of construction and services.

In the forecast horizon, the GDP growth rate projected for 2018 remains at 4.0 percent, while the growth rate projected for 2019 has been revised up from 4.0 to 4.2 percent, in line with the dynamism of domestic demand, especially private consumption and private investment, due to the recovery of business confidence and to the fiscal stimulus associated with the Reconstruction Plan and with investment for the Pan American Games.

- v. After reaching a peak of 3.1 percent of GDP in 2017, the **fiscal deficit** initiated a downward trend and recorded an annual rate of 2.4 percent of GDP in May 2018. This rate of deficit reflected mainly a recovery in the current revenues of the general government as a result of increased revenue from the regularization of the income tax, which registered a maximum record this year.

Revenue is expected to continue showing a positive trend in the forecast horizon, driven by the better performance of domestic demand, increased revenue from mining, lower tax refunds, and by the increase in the excise tax. On the other hand, current expenditure would moderate the pace of growth observed early in the year while public investment would increase due to the reconstruction works after the damages caused by El Niño Costero and due to the projects being carried out for the Pan American Games. As a result, the fiscal deficit in 2018 would reach 3.1 percent of GDP and would decline in 2019 to 2.9 percent of GDP, in line with fiscal consolidation. This projection implies a positive weighted fiscal impulse in 2018 and a nil impulse in 2019, which would coincide with the closure of the output gap.

- vi. In this context of recovery of economic activity and with forecasts indicating a level of inflation in the midpoint of the target range, the Board of BCRP maintained the **benchmark rate** at 2.75 percent in the second quarter of the year. This rate is equivalent to a real interest rate of 0.5 percent, which reflects an expansionary monetary policy stance in a context in which no demand pressures are foreseen.
- vii. **Credit to the private sector** recorded a YoY growth rate of 8.6 percent in April 2018, in a context of recovery of the demand of the private sector. 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 8.5 percent and 8.8 percent being expected for 2018 and 2019, respectively. This is consistent with the monetary easing measures implemented, that is, with the reduction of both the benchmark interest rate and the rates of reserves requirements in both domestic currency and foreign currency.
- viii. **Inflation** decreased from 1.18 percent in February to 0.93 percent in May due mainly to the evolution of inflation in the group of Food and Energy prices, which still shows

a decline due to the reversal of the supply shocks that affected agricultural products in 2017. The CPI without Food and Energy recorded a variation of 2.0 percent, in line with the midpoint of the inflation target. Moreover, remaining within the inflation target range since March 2017, expectations of inflation in twelve months continued to decline and reached an annual rate of 2.2 percent.

- ix. **Inflation** is forecast to show levels below 2.0 percent during the first half of 2018 due to the correction of the supply shocks that increased prices between the last months of 2016 and the first half of 2017, and to converge gradually thereafter towards 2 percent. Moreover, inflation without Food and Energy and inflation expectations are also expected to show levels around 2 percent in the forecast horizon, in a context in which no inflationary pressures are foreseen on the side of demand and moderate levels of imported inflation are expected.
- x. The balance of the **risk factors** considered in this Report –domestic demand shocks (a more gradual recovery of private and public investment), volatility in international financial markets, external demand shocks (lower global growth due to the additional protectionist measures of the United States and trade reprisals of some of their trading partners), and supply shocks (increase in the prices of fuels and some imported food products) translates into a neutral balance of risks, which means that the impact of factors that could affect inflation on the upside is counterbalanced by the impact of factors that could affect inflation on the downside.





**SUMMARY OF INFLATION REPORT FORECAST**

	2016	2017	2018 <sup>1/</sup>		2019 <sup>1/</sup>	
			IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>Real % change</b>						
1. Gross Domestic Product	4.0	2.5	4.0	4.0	4.0	4.2
2. Domestic demand	1.1	1.6	4.2	4.2	4.2	4.4
a. Private consumption	3.3	2.5	3.2	3.4	3.6	3.7
b. Public consumption	-0.6	1.0	4.0	3.8	2.5	2.5
c. Private fixed investment	-5.7	0.3	5.5	5.5	7.5	7.5
d. Public investment	-0.2	-2.3	14.2	12.6	5.0	5.0
3. Exports (good and services)	9.5	7.2	3.2	4.4	3.6	3.9
4. Imports (good and services)	-2.2	4.0	4.0	5.1	4.3	4.5
5. Economic growth in main trading partners	2.8	3.6	3.7	3.8	3.5	3.6
<b>Memo:</b>						
Output gap <sup>2/</sup> (%)	-0.3 ; 0.2	-1.4 ; -0.8	-1.0 ; -0.3	-0.9 ; -0.2	-0.7 ; 0.0	-0.4 ; 0.4
<b>% change</b>						
6. Inflation	3.2	1.4	2.0	2.2	2.0	2.0
7. Expected inflation <sup>3/</sup>	-	-	2.2	2.2	2.5	2.5
8. Expected depreciation <sup>3/</sup>	-	-	0.8	1.6	1.1	1.5
9. Terms of trade <sup>4/</sup>	-0.7	7.3	7.4	4.9	0.2	1.3
a. Export prices	-3.6	13.1	12.0	11.6	0.1	1.9
b. Import prices	-3.0	5.4	4.3	6.4	-0.1	0.6
<b>Nominal % change</b>						
10. Currency in circulation	6.5	6.7	7.6	7.6	8.0	8.5
11. Credit to the private sector <sup>5/</sup>	5.6	6.6	7.5	8.5	7.8	8.8
<b>% GDP</b>						
12. Gross fixed investment	22.8	21.7	22.2	22.1	22.8	22.7
13. Current account of the balance of payments	-2.7	-1.3	-1.2	-1.2	-1.3	-1.2
14. Trade balance	1.0	2.9	4.3	3.9	4.2	4.1
15. Long-term external financing of the private sector <sup>6/</sup>	4.6	5.6	4.4	4.8	4.4	4.8
16. Current revenue of the general government	18.5	18.0	18.3	18.7	18.5	18.8
17. Non-financial expenditure of the general government	19.9	20.0	20.3	20.4	20.0	20.3
18. Overall balance of the non-financial public sector	-2.6	-3.1	-3.5	-3.1	-2.9	-2.9
19. Balance of total public debt	23.8	24.8	25.3	25.2	26.3	26.1
20. Balance of net public debt	6.8	9.5	12.3	11.8	14.8	14.1

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.

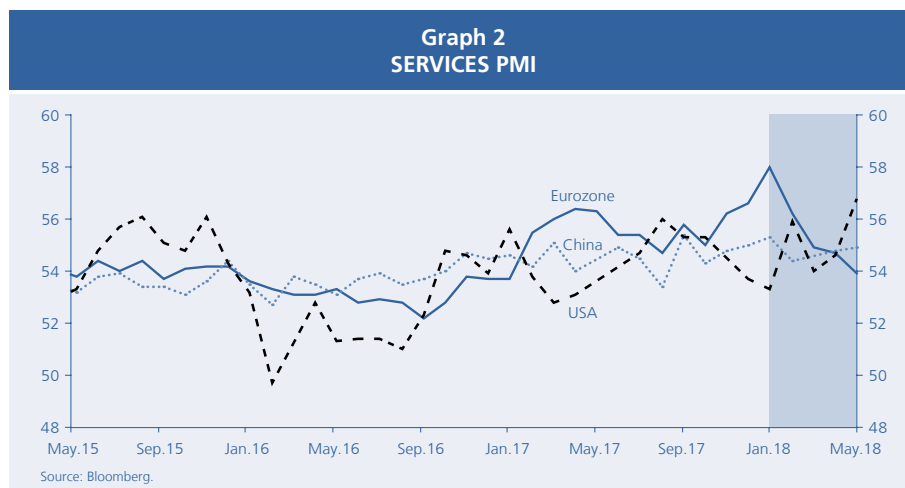
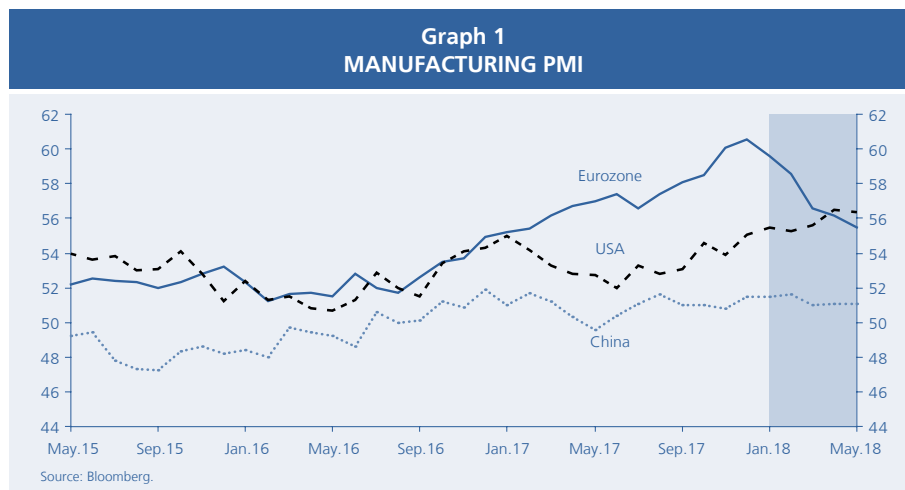
6/ Includes net direct investment, portfolio investment and private sector's long term disbursement.

IR: Inflation Report

# I. International Environment

## World Economy

1. A lower degree of synchronization has been observed in the economic growth of the major economies between January and March of this year. The Eurozone shows indicators of a slowdown, which contrasts with the greater dynamism observed in the US economy and with China's high and stable growth.





2. The **projection of global growth** remains at 3.8 percent for 2018 and 3.7 percent for 2019. The average growth of the output in the developed economies would decline from 2.3 percent to 2.0 percent, reflecting lower growth in the United States (2.8 and 2.2 percent), the Eurozone (2.2 and 2.0 percent), and Japan (1.3 and 1.0 percent). The developing economies, on the other hand, would continue to show greater dynamism (with rates of 4.9 percent in 2018 and 5.0 percent in 2019), including China (6.6 percent and 6.4 percent), India (7.4 percent and 7.8 percent), and Latin America and the Caribbean (2.2 and 2.7 percent).

**Table 1**  
**GLOBAL GDP GROWTH**  
(Annual % change)

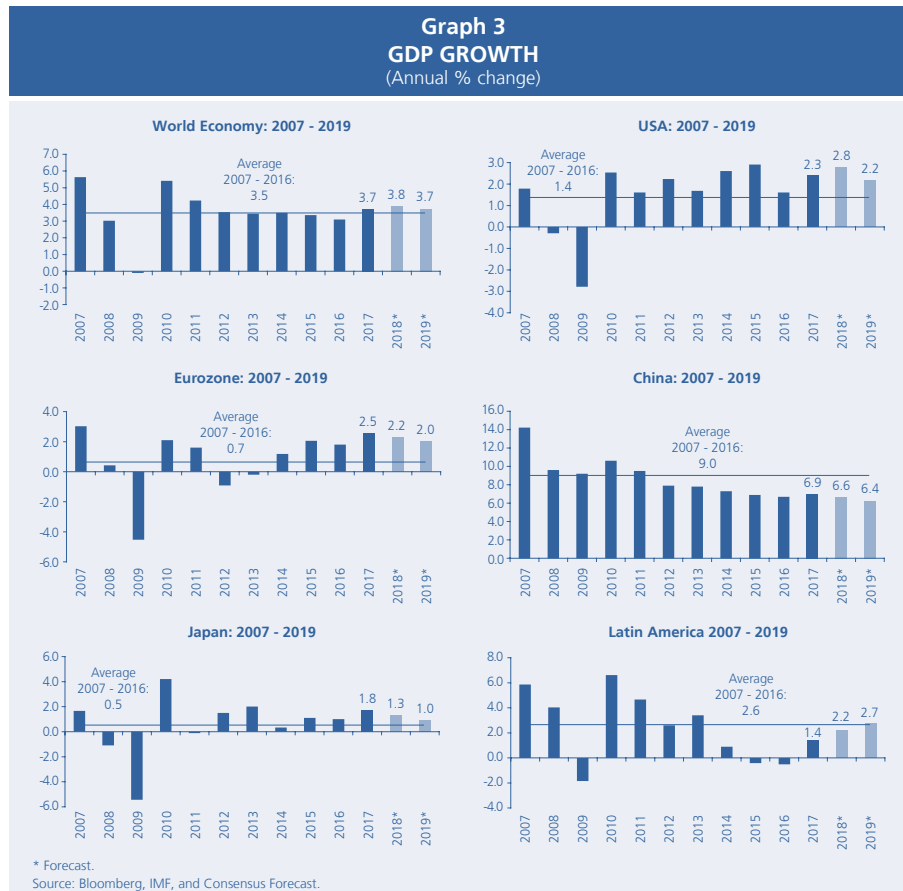
	PPP% <sup>1/</sup>	Trading Peru % <sup>1/</sup>	2016	2017	2018*		2019*	
					IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>Developed economies</b>	<b>41.3</b>	<b>42.9</b>	<b>1.7</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.0</b>	<b>2.0</b>
<i>Of which</i>								
1. USA	15.3	20.2	1.5	2.3	2.7	2.8	2.2	2.2
2. Eurozone	11.6	12.8	1.8	2.5	2.3	2.2	2.0	2.0
Germany	3.3	2.7	1.8	2.5	2.4	2.2	2.0	2.0
France	2.2	0.8	1.2	1.9	2.0	1.9	1.8	1.8
Italy	1.8	1.8	0.9	1.5	1.4	1.3	1.2	1.2
Spain	1.4	4.0	3.2	3.1	2.5	2.5	2.2	2.2
3. Japan	4.3	4.0	1.0	1.8	1.3	1.3	1.0	1.0
4. United Kingdom	2.3	1.3	1.8	1.8	1.4	1.4	1.4	1.4
5. Canada	1.4	2.6	1.4	2.8	2.1	2.0	1.9	1.9
<b>Developing economies</b>	<b>58.7</b>	<b>57.1</b>	<b>4.2</b>	<b>4.7</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>	<b>5.0</b>
<i>Of which:</i>								
1. Emerging and developing Asia	32.4	34.9	6.4	6.6	6.5	6.6	6.5	6.6
China	18.2	27.9	6.7	6.9	6.5	6.6	6.3	6.4
India	7.4	3.8	7.1	6.7	7.4	7.4	7.8	7.8
2. Commonwealth of Independent States	4.5	0.5	0.4	2.2	2.2	2.2	2.2	2.2
Russia	3.2	0.5	-0.2	1.8	1.7	1.7	1.7	1.7
3. Latin America and the Caribbean	7.7	21.6	-0.5	1.4	2.2	2.2	2.7	2.7
Brazil	2.6	5.4	-3.4	1.0	2.5	2.5	2.4	2.9
Chile	0.4	3.3	1.7	1.5	3.0	3.6	3.0	3.5
Colombia	0.6	2.9	1.6	1.8	2.9	2.6	3.0	3.0
Mexico	1.9	3.0	2.4	2.0	2.2	2.2	2.5	2.3
Peru	0.3	-	4.0	2.5	4.0	4.0	4.0	4.2
<b>World Economy</b>	<b>100.0</b>	<b>100.0</b>	<b>3.1</b>	<b>3.7</b>	<b>3.8</b>	<b>3.8</b>	<b>3.7</b>	<b>3.7</b>
Memo:								
Peru's trading partners <sup>1/2/</sup>	65.9		2.8	3.6	3.7	3.8	3.5	3.6

1/ PPP weight corresponds to 2017.

2/ Basket of Peru's 20 main trading partners.

\* Forecasts.

Source: Bloomberg, IMF, and Consensus Forecast.



3. The main **risk factors** that could affect global growth are associated with potential commercial conflicts between the U.S. and its main partners (China and the Eurozone) and with geopolitical events (the Middle East and North Korea). There is also a risk of seeing an abrupt adjustment in financial market conditions associated with unanticipated adjustments in the monetary policy of the Fed and other central banks. This scenario may have a particular impact on the emerging economies and bring about changes in their exchange, stock, and bond markets, particularly in the government bond market.
  
4. In the first quarter of 2018, the growth of the output in the **United States** (2.2 percent) was lower than in the previous quarter (2.9 percent), but higher than in the first quarter of the previous year (1.2 percent), in line with the improvement of economic activity.

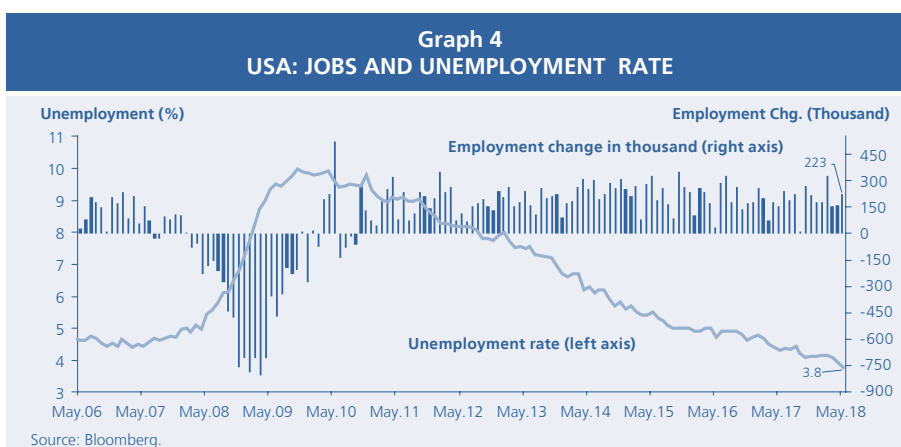




Table 2 EUA: GDP (Annual % change)								
	2015	2016	2017				Year	2018
			Q1	Q2	Q3	Q4		Q1
Personal consumption	2.5	2.7	1.9	3.3	2.2	4.0	2.8	1.0
Gross private investment	0.9	-1.6	-1.2	3.9	7.3	4.7	3.3	7.2
Non-residential investment	2.3	-0.6	7.2	6.7	4.7	6.8	4.7	9.2
Change on inventories *	0.2	-0.4	-1.5	0.1	0.8	-0.5	-0.1	0.1
Exports	0.1	-0.3	7.3	3.5	2.1	7.0	3.4	4.2
Imports	-0.8	1.3	4.3	1.5	-0.7	14.1	4.0	2.8
Government expenditure	0.3	0.8	-0.6	-0.2	0.7	3.0	0.1	1.1
<b>GDP</b>	<b>2.9</b>	<b>1.5</b>	<b>1.2</b>	<b>3.1</b>	<b>3.2</b>	<b>2.9</b>	<b>2.3</b>	<b>2.2</b>

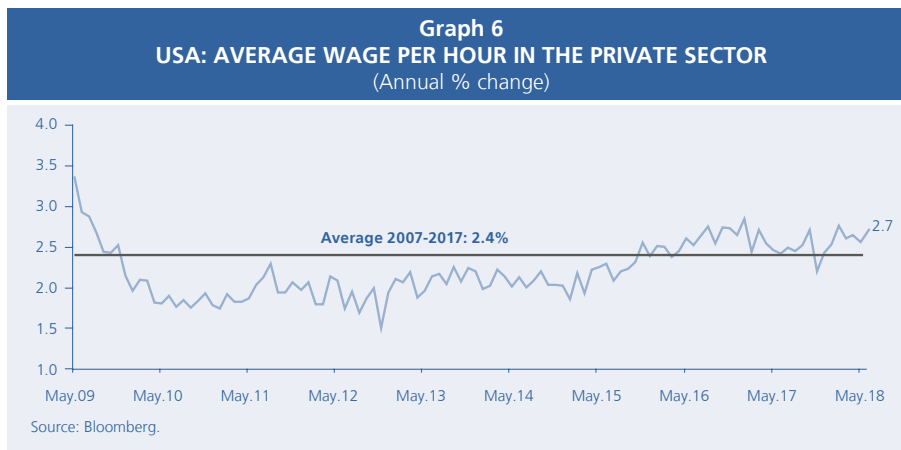
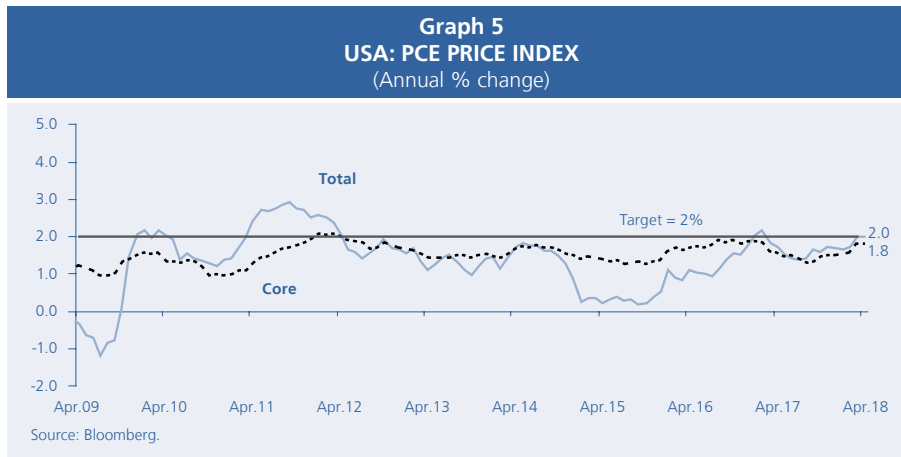
\* Contribution to growth.  
Source: BEA.

This lower GDP growth rate is explained by the evolution of personal consumption. It is estimated that this deceleration is temporary taking into account the continuous improvement observed in the labor market: in May, 223 thousand jobs were created, unemployment dropped to 3.8 percent –its lowest level since 2000– and the participation rate was 62.7 percent. On the other hand, private investment continued to be the most dynamic component of domestic demand, in part due to changes in the tax policy and due to the favorable performance of corporate profits in the previous quarters.



In April, the personal consumption expenditure price index (PCE) showed an annual rate of 2.0 percent and the core PCE price index recorded 1.8 percent, showing an upward trend compared to previous periods. On the other hand, in May the

average wage per hour increased 2.7 percent with respect to May 2017, in line with the favorable trend observed in employment indicators.



The evolution of inflation –together with the impact of fiscal stimulus on economic activity and improvements in the labor market– suggests that the output of the United States would be close to its potential level, after the reversal of the negative output gap observed since 2009 as a result of the international financial crisis. In this context, the Fed has been gradually adjusting the monetary policy interest rate and reducing the purchase of fixed income bonds.

In its meeting of June, the Fed decided to raise its range of rates to 1.75-2.00 percent after maintaining it unchanged in May. The projections of the Committee members showed a correction on the upside on the outlook for growth and inflation, whereas unemployment was revised down. Moreover, the Fed also raised its profile of rates for 2018 and 2019.







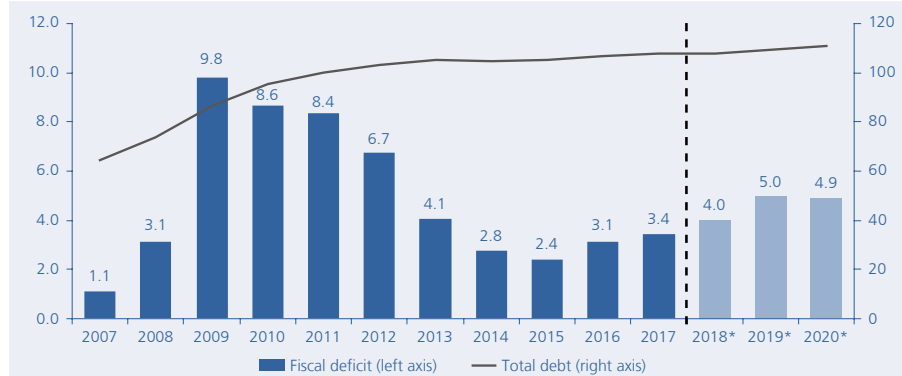
**Table 3  
PROJECTIONS OF THE FED\***

	2018		2019		2020		Long-term	
	Mar.18	Jun.18	Mar.18	Jun.18	Mar.18	Jun.18	Mar.18	Jun.18
<b>GDP growth</b>	2.7	2.8	2.4	2.4	2.0	2.0	1.8	1.8
<b>Unemployment rate</b>	3.8	3.6	3.6	3.5	3.6	3.5	4.5	4.5
<b>PCE price index (PCE)</b>	1.9	2.1	2.0	2.1	2.1	2.1	2.0	2.0
<b>Core Inflation (Core PCE)</b>	1.9	2.0	2.1	2.1	2.1	2.1	-	-
Memo: Core PCE excluding food and energy.								
<b>Interest rate (%)</b>	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.

However, given the strengthening of the labor market, the possible pass-through of salary pressures on inflation acquires greater importance and could become a factor that could influence the speed and magnitude of the interest rate adjustments. Another important factor that could affect the Fed decisions is the expansionary fiscal policy, which has implied upward revisions on the outlook for growth in the following years. In line with the tax reduction measures, it is expected that the fiscal deficit will increase from 3.4 to 4.0 percent in 2018 and to 5.0 percent in 2019.

**Graph 7  
USA: FISCAL DEFICIT AND DEBT  
(% GDP)**



\* Mean of projections of Bloomberg for deficit and projections of IMF for debt.  
Source: Bloomberg and IMF.

In this context, markets now expect two more rate hikes in 2018 (September and December) and three more in 2019, with which rates would converge towards a rate of around 3.0 percent.

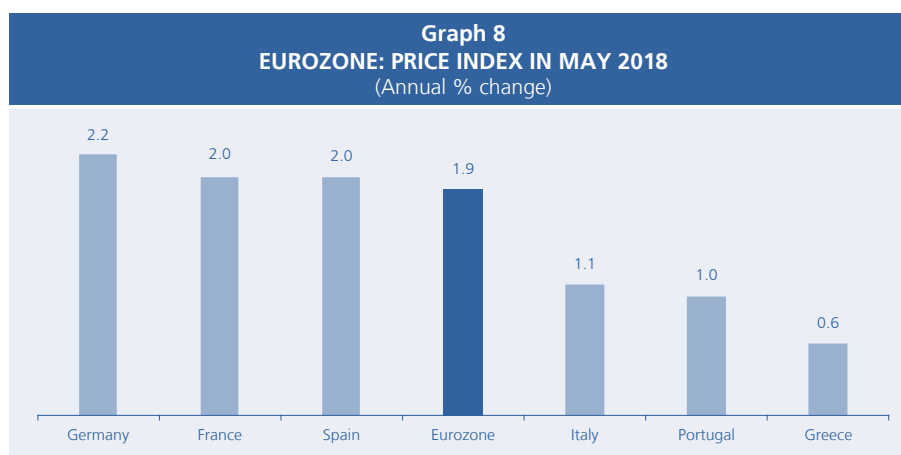
5. The **Eurozone GDP** grew 0.4 percent in the first quarter of 2018, less than in the previous quarter (0.7 percent). This lower growth is in part explained by temporary factors associated with weather conditions and labor conflicts. The indicators of

activity in the sectors of manufacturing and services in April and May are lower than expected but have remained in the expansion zone.

In line with these recent indicators, it is estimated that the economy will grow 2.2 percent in 2018, slightly less than projected in the March Inflation Report (2.3 percent). Domestic demand continues to be supported by the improvement in the labor market, credit conditions, the increase in the price of assets, and higher corporate profits, while external demand would grow supported by global growth and by the recent depreciation of the euro. At the country level, the improvements observed in Germany stand out, whereas, on the other hand, Italy shows lower growth rates due to political uncertainty. In 2019, the Eurozone would grow around 2.0 percent given the moderation of monetary stimulus and the lower improvements in the labor market.

This economic growth is accompanied by low inflation rates. In May, annual inflation registered a rate of 1.9 percent, although some disparity is observed at the country level. Moreover, core inflation showed a rate of 1.1 percent, in line with the drop recorded in the prices of services. Inflation is expected to converge towards 2 percent next year.

Taking into account these macroeconomic indicators, the ECB decided in its June meeting that it will continue with its asset purchase program until December 2018 and that it will maintain the interest rate at its current levels until 2019.



- Like in the last two quarters of 2017, the economy of **China** grew 6.8 percent in the first quarter of 2018, a sound conduct being observed in the evolution of consumption, investment, and exports. Investment and retail sales showed some moderation in April, but industrial production continued to show a significant rate of expansion. Moreover, in that month, the Government issued a statement mentioning the need to boost domestic demand, which has been interpreted as





a sign that the government may soften adjustment measures, particularly fiscal measures, if necessary.

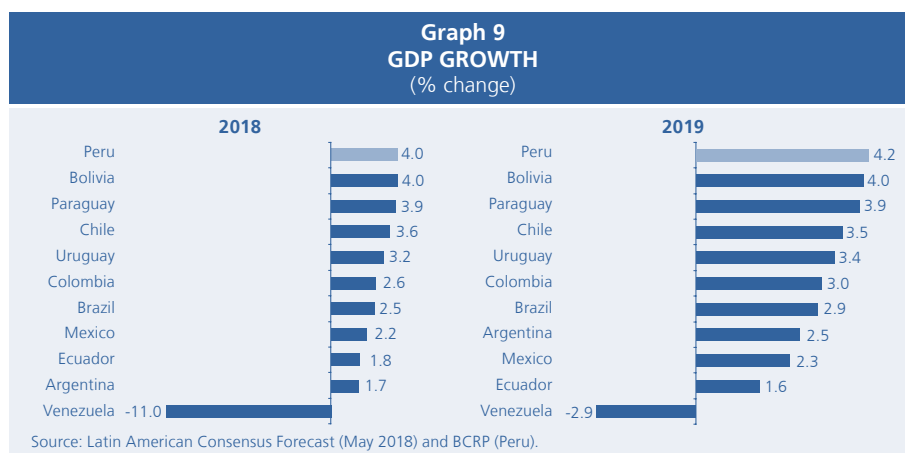
**Table 4  
CHINA'S ECONOMIC INDICATORS**

Indicators	December				2018	
	2014	2015	2016	2017	Mar.	Apr.
Annual GDP (%) <sup>1/</sup>	7.3	6.9	6.7	6.9	6.8	--
Industrial Production (Annual % change)	7.9	5.9	6.0	6.2	6.0	7.0
Investment in fixed assets (Accum. annual % change)	15.7	10.0	8.1	7.2	7.5	7.0
Investment in infrastructure (Accum. annual % change)	21.5	17.2	17.4	19.0	13.0	12.4
Retail sales (Annual % change)	11.9	11.1	10.9	9.4	10.1	9.4
Exports (Annual % change)	9.7	-1.6	-6.2	10.9	-2.7	12.9
Imports (Annual % change)	-2.4	-7.4	3.1	4.5	14.4	21.5
Copper imports (volume, Annual % change)	17.3	12.6	13.5	-0.8	-1.6	--
Total new financing (Annual %)	15.2	12.4	12.7	12.3	10.5	10.5
Consumer Price Index (Annual % change)	1.5	1.6	2.1	1.8	2.1	1.8

1/ For GDP is the percentage change of each year respect to the previous year until 2017.  
Source: Bloomberg and IMF.

In line with these recent indicators, the growth forecast of China's GDP has been revised slightly up to 6.6 percent in 2018 and to 6.4 percent in 2019. However, there are still risk factors on the downside (the high level of indebtedness of the private sector). Furthermore, the probability of occurrence of a commercial war with the United States, which would affect industrial production and Chinese exports, has increased since our last Report.

- 7. Latin America** has shown a favorable trend of economic activity in a context of lower inflationary pressures, with growth rates of 2.2 and 2.7 percent being estimated for 2018 and 2019, respectively. Most economies would show higher growth rates than in 2017, except for Venezuela and Argentina, the latter of which has been affected by a lower soybean production and by the adjustment of financial conditions.

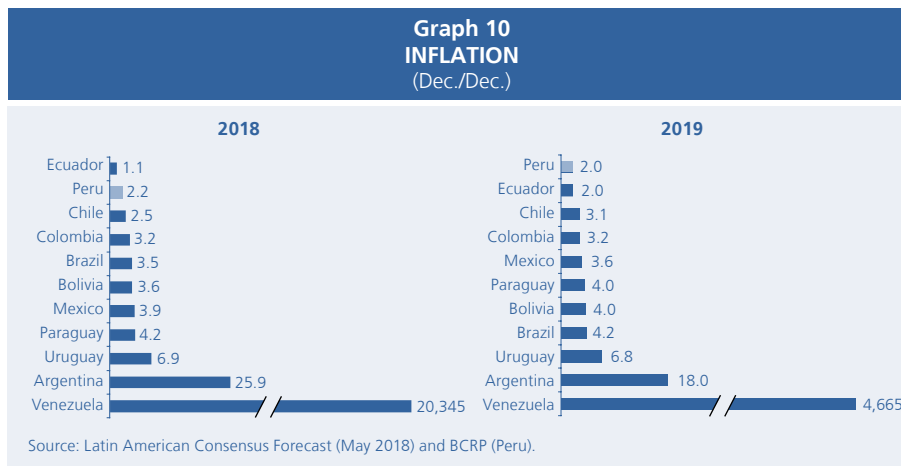


Brazil would grow at a higher rate than in 2017. The reduction of inflation has implied an improvement in real income and allowed the central bank to implement monetary stimulus measures. In addition, exports would also contribute to growth given the increase in the prices of the main products. However, there are still risks associated with the elections in October and with difficulties for implementing reforms in the public sector pension system.

Mexico is estimated to grow 2.2 percent in 2018 and 2.3 percent in 2019. This projection is based on the growth of the United States (Mexico's main trading partner), the improvement in the terms of trade, and the recent reduction of inflation (which in 2017 affected the purchasing power of families). However, the renegotiation of NAFTA and the electoral process are still considered risk factors for growth.

In Colombia, favorable external conditions and a slightly expansionary fiscal policy are expected to contribute to a higher growth rate in 2018 than that registered in 2017. Since the inflation rate has decreased in recent months (once the impact of the rise in the VAT dissipated), it is likely that the monetary authorities will resume the accommodative position adopted last year.

In Chile, after a prolonged slowdown, the rate of growth of economic activity has been recovering as a result of the favorable external environment and the accommodative monetary policy, the latter of which would start to be reversed as from the fourth quarter of this year.



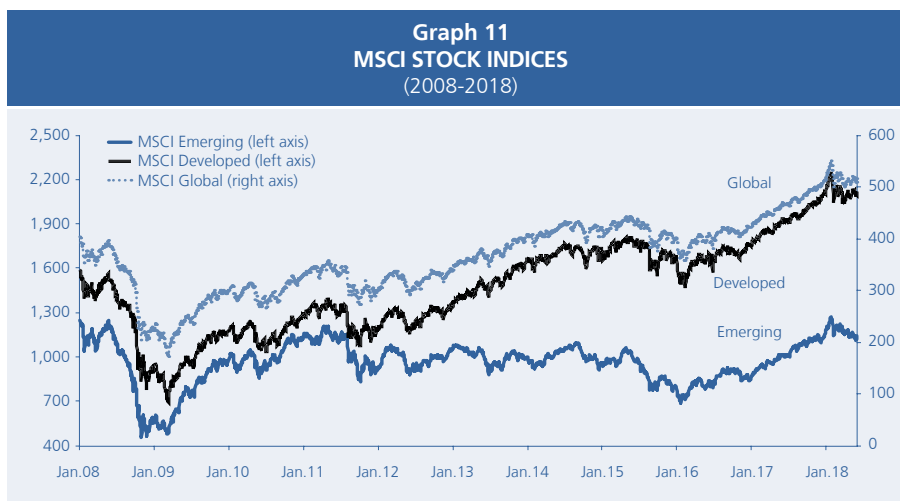
## Financial Markets

- Reversing the adverse effect of the sell-off recorded during the first quarter of the year, **variable-income markets** performed well in developed countries due to the positive economic indicators observed (especially in the U.S.) and the corporate





profits recorded in the energy, technology, and industrial sectors. Other factors that contributed to the rise of the markets included the tax cuts in the U.S. and the relaxation of geopolitical conflicts in the last weeks of May.

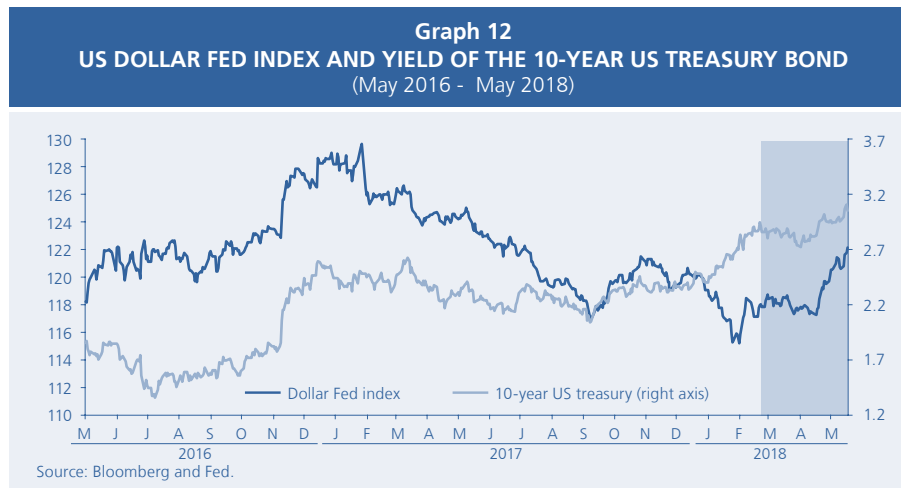


**Table 5**  
**STOCK MARKETS**

		Dec.17	Mar.18	May.18	% change	
					May./Mar.	May./Dec.
VIX*	S&P 500	11.04	19.97	15.43	-4.5	4.4
EUA	DOW JONES	24,719	24,103	24,416	1.3	-1.2
Germany	DAX	12,918	12,097	12,605	4.2	-2.4
France	CAC 40	5,313	5,167	5,398	4.5	1.6
Spain	IBEX 35	10,044	9,600	9,466	-1.4	-5.8
Italy	FTSE MIB	21,853	22,411	21,784	-2.8	-0.3
Greece	ASE	802	781	756	-3.2	-5.8
Switzerland	SMI	9,382	8,741	8,457	-3.2	-9.9
Japan	NIKKEI 225	22,765	21,159	22,202	4.9	-2.5
United Kingdom	FTSE 100	7,688	7,057	7,678	8.8	-0.1
Brazil	BOVESPA	76,402	85,366	76,754	-10.1	0.5
Mexico	IPC	49,354	46,125	44,663	-3.2	-9.5
Chile	IGP	27,981	27,736	27,626	-0.4	-1.3
Colombia	IGBC	11,478	11,320	12,297	8.6	7.1
Argentina	MERVAL	30,066	31,115	28,559	-8.2	-5.0
Peru	General index	19,974	20,559	20,814	1.2	4.2
Russia	INTERFAX	1,154	1,247	1,163	-6.7	0.7
South Africa	JSE	59,505	55,475	56,158	1.2	-5.6
Turkey	XU100	115,333	114,845	100,652	-12.4	-12.7
China	Shangai C.	3,307	3,161	3,095	-2.1	-6.4
South Korea	Seul Composite	2,467	2,436	2,423	-0.5	-1.8
India	CNX NIFTY	10,531	10,114	10,736	6.2	2.0
Indonesia	JCI	6,356	6,189	5,984	-3.3	-5.9
Malaysia	KLSE	1,797	1,856	1,741	-6.2	-3.1
Thailand	SET	1,754	1,767	1,727	-2.3	-1.5

1/ Change in basis points.  
Source: Bloomberg.

9. In **fixed-income markets**, the increase of 45 bps in the yield of the 10-year US Treasury bond (from 2.4 to 2.9 percent) stands out this year, reflecting the Fed's decision of gradually reducing its expansionary stance.



Political risks and the high weight of the public debt would affect the yields of the bonds of Italy and Greece, which show an increase in yields of 77 and 47 bps, respectively, so far this year.

**Table 6**  
**YIELDS OF THE 10-YEAR TREASURY BONDS**

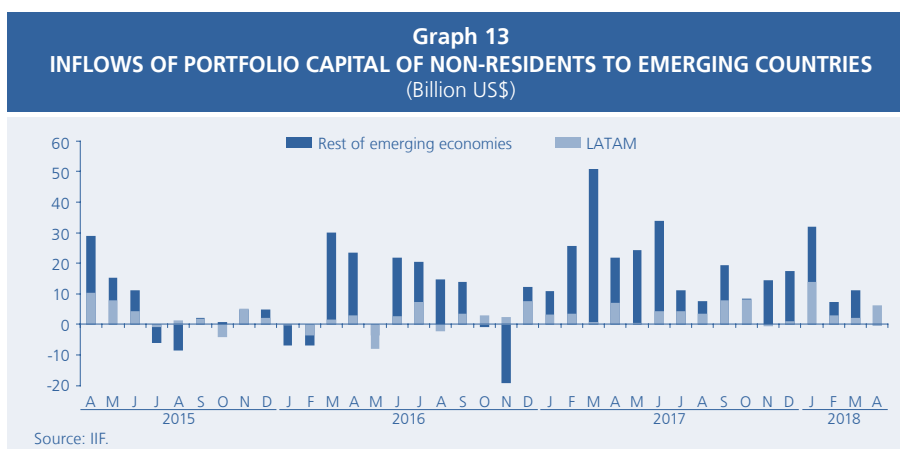
	Dec.17	Mar.18	May.18	Change (bps.)	
				May./Mar.	May./Dec.
USA	2.41	2.74	2.86	12	45
Germany	0.42	0.49	0.34	-16	-9
France	0.78	0.72	0.66	-5	-12
Italy	2.01	1.78	2.77	99	77
Spain	1.56	1.16	1.49	33	-7
Greece	4.07	4.29	4.55	26	47
Switzerland	-0.15	0.03	-0.07	-9	8
Japan	0.04	0.04	0.03	0	-1
United Kingdom	1.19	1.35	1.23	-12	4
Brazil	10.26	9.49	11.46	196	120
Colombia	6.48	6.51	6.62	11	14
Chile	4.55	4.47	4.56	9	1
Mexico	7.65	7.32	7.79	48	15
Peru	4.87	4.52	5.37	86	50
Russia	3.87	4.53	4.76	23	89
South Africa	8.86	8.18	8.79	61	-6
Turkey	11.35	12.20	13.83	163	249
China	3.90	3.77	3.64	-13	-26
South Korea	2.47	2.64	2.70	6	23
India	7.33	7.40	7.83	43	50
Indonesia	6.29	6.65	6.95	31	66
Malaysia	3.91	3.95	4.19	24	28
Thailand	2.32	2.40	2.60	20	28

Source: Bloomberg.





The bonds of the emerging economies registered an increase in their yields, in line with a more cautious position of international investors which translated into an outflow of capital from these economies. As a result, the yield on Turkish bonds showed an increase of 249 bps, while the yields of the bonds of Indonesia, Russia, and Brazil increased by 66 bps, 89 bps, and 120 bps, respectively.



10. Reversing the negative trend it showed in the first quarter of the year, the **dollar** has appreciated so far this year due to higher expectations of an adjustment in the Fed interest rate, in line with positive indicators of activity in comparison to those observed in Europe.

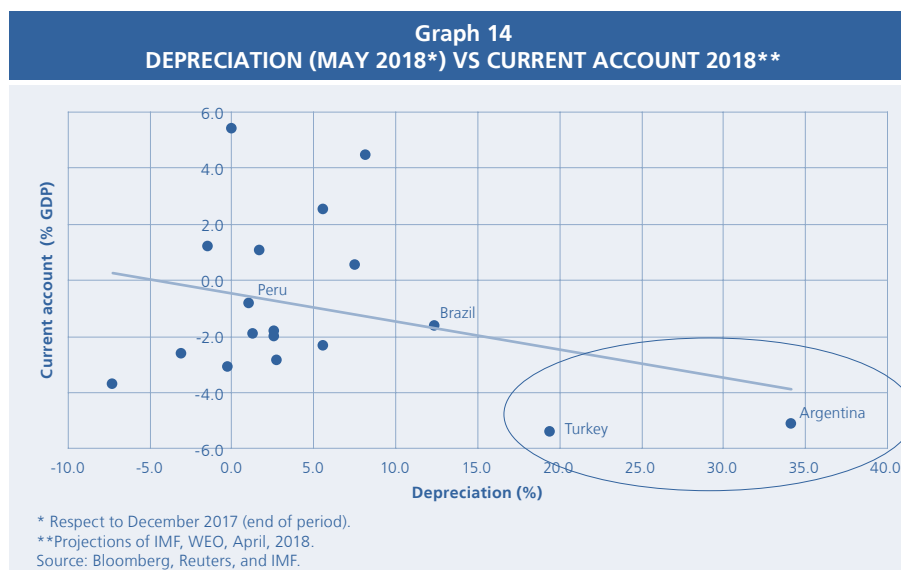
		<b>Table 7</b> <b>EXCHANGE RATE</b>				
		<b>Dec.17</b>	<b>Mar.18</b>	<b>May.18</b>	<b>Change (bps.)</b>	
					<b>May./Mar.</b>	<b>May./Dec.</b>
Dollar Index*	US Dollar Index	92.12	90.15	93.98	4.2	2.0
Euro	Euro	0.834	0.813	0.855	5.2	2.6
Switzerland	Swiss franc	0.974	0.956	0.986	3.1	1.2
Japan	Yen	112.67	106.42	108.81	2.2	-3.4
United Kingdom	Sterling pound	0.740	0.714	0.752	5.4	1.6
Brazil	Real	3.312	3.305	3.723	12.6	12.4
Chile	Peso	615	603	630	4.5	2.6
Colombia	Peso	2,982	2,788	2,890	3.6	-3.1
Mexico	Peso	19.65	18.18	19.91	9.5	1.3
Argentina	Peso	18.59	20.11	24.94	24.0	34.1
Peru	Sol	3.24	3.23	3.27	1.3	1.1
Russia	Ruble	57.66	57.25	62.35	8.9	8.1
South Africa	Rand	12.36	11.83	12.70	7.3	2.7
Turkey	Lira	3.79	3.94	4.52	14.8	19.4
China	Yuan (Onshore)	6.51	6.29	6.41	1.9	-1.5
South Korea	Won	1,066.4	1,062.1	1,079.6	1.6	1.2
India	Rupee	63.83	65.11	67.42	3.5	5.6
Indonesia	Rupee	13,555	13,780	14,202	3.1	4.8
Malaysia	Ringgit	4.04	3.87	3.98	2.9	-1.6
Thailand	Bath	32.55	31.24	32.05	2.6	-1.5

\* Increase in the index means an US dollar appreciation.  
Source: Reuters and FED.

The euro depreciated 5.2 percent compared to March and accumulates a depreciation of 2.6 percent in the year. Some indicators of the Eurozone would be indicating some slowdown in growth and a decrease in inflationary pressures, which has reduced expectations of an early withdrawal of the ECB stimulus. The euro was also affected by the political noise in Italy and Spain as well as by the slow progress of the Brexit process.

Most of the currencies of the emerging market economies have 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 was reinforced by other factors such as external imbalances (reflected in high current account deficits). Political pressures to avoid an increase in interest rates also contributed to this in the case of the Turkish lira.

In the case of Argentina, the Central Bank's easing of its inflation target, the high fiscal and current account deficits, and the lower exports of soybeans generated pressures on the peso. These pressures were intensified by the renewal of high amounts of short-term bills (Lebac) of the Central Bank, by the establishment of a tax on non-residents' holdings, and by uncertainty regarding the financial assistance of the IMF. The Central Bank's decision to raise interest rates (from 27.5 to 40.0 percent) offset these pressures on the exchange rate.



- Year-to-date, several central banks have raised their **monetary policy interest rate** following the Fed trend, the highest rate rises being observed in economies with high inflation rates or high external imbalances. The rate hikes in Argentina (1,125 bps) and Turkey (800 bps) stand out, these countries showing also the highest depreciation rates so far this year. In contrast, some economies (e.g. Colombia, Brazil, and Peru, among them) have lowered their interest rates given







the downward trend observed in inflation and the growth of the output below its potential level.

**Table 8**  
**MONETARY POLICY INTEREST RATE**  
(%)

	Dec.16	Dec.17	May.18	Change (bps.) respect to:
				Dec.17
Argentina	--	28.75	40.00	1,125
Turkey	8.00	8.00	16.00	800
Ukraine	14.00	14.50	17.00	250
Pakistan	5.75	5.75	6.50	75
Romania	1.75	1.75	2.50	75
Indonesia	4.75	4.25	4.75	50
Philippines	3.00	3.00	3.25	25
Canada	0.50	1.00	1.25	25
USA	0.75	1.50	1.75	25
Malaysia	3.00	3.00	3.25	25
Mexico	5.75	7.25	7.50	25
Czech Republic	0.05	0.50	0.75	25
Australia	1.50	1.50	1.50	0
South Korea	1.25	1.50	1.50	0
Chile	3.50	2.50	2.50	0
China	4.35	4.35	4.35	0
Hungary	0.90	0.90	0.90	0
Iceland	5.00	4.25	4.25	0
Israel	0.10	0.10	0.10	0
Norway	0.50	0.50	0.50	0
New Zealand	1.75	1.75	1.75	0
United Kingdom	0.25	0.50	0.50	0
Sweden	-0.50	-0.50	-0.50	0
Thailand	1.50	1.50	1.50	0
Eurozone	0.00	0.00	0.00	0
Japan	-0.10	-0.10	-0.10	0
India	6.25	6.00	6.00	0
Taiwan	1.38	1.38	1.38	0
South Africa	7.00	6.75	6.50	-25
Brazil	13.75	7.00	6.50	-50
Peru	4.25	3.25	2.75	-50
Colombia	7.50	4.75	4.25	-50
Russia	10.00	7.75	7.25	-50

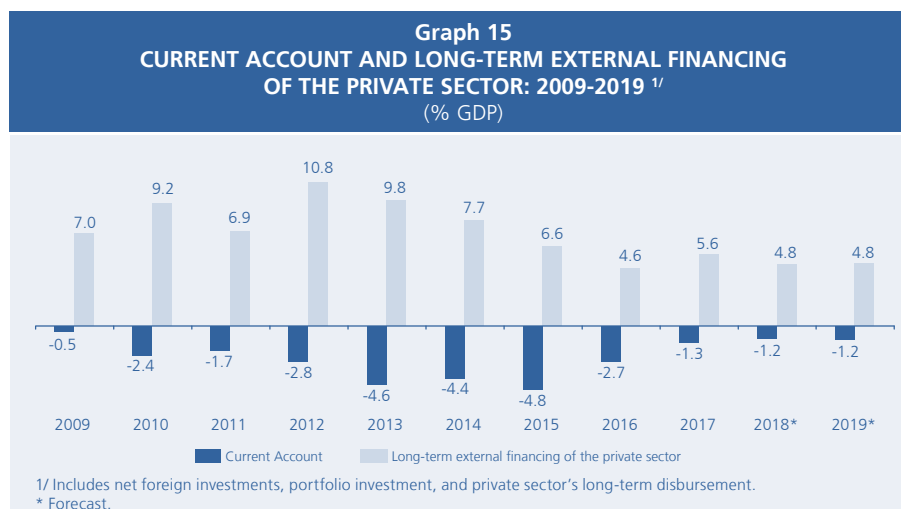
Source: Bloomberg.

## II. Balance of Payments

### Current Account

12. The forecast scenario in this report considers that the current international context of greater global growth and high metal prices will continue during the forecast horizon. It is worth pointing out that the downward correction of the terms of trade in 2018 with respect to the level estimated in our previous report as a result of the higher prices of crude and the lower prices of metals will imply a lower surplus in the trade balance, although the latter would improve in 2019 due to the higher prices projected for copper and gold.

**Current account deficit levels** of 1.2 percent of GDP are expected for 2018 and 2019, in line with a surplus in the trade balance that would exceed US\$ 10 billion in 2019. Long-term external capital flows for the private sector would continue to be the main source of financing the balance of payments (4.8 percent of GDP in 2018 and 2019).





**Table 9**  
**BALANCE OF PAYMENTS**  
(Million US\$)

	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>I. CURRENT ACCOUNT BALANCE</b>	<b>-1,114</b>	<b>-2,720</b>	<b>-1,290</b>	<b>-2 693</b>	<b>-2,742</b>	<b>-3,049</b>	<b>-2,785</b>
% GDP	-2.2	-1.3	-2.4	-1.2	-1.2	-1.3	-1.2
1. Trade Balance	1,172	6,266	1,752	9,983	9,025	10,102	10,011
a. Exports	10,164	44,918	11,782	51,942	52,058	53,822	55,181
Of which:							
i) Traditional	7,466	33,124	8 605	38,472	37,903	39 647	39,706
ii) Non traditional	2 664	11 663	3,139	13,316	14,005	14,006	15,316
b. Imports	-8,992	-38 652	-10,030	-41,959	-43,033	-43,720	-45,170
2. Services	-201	-1,434	-558	-2,235	-2,227	-2,375	-2,436
3. Investment income	-3,044	-11,263	-3,329	-14,235	-13,134	-14,713	-14,097
4. Current transfers	958	3,712	845	3,794	3,594	3,937	3,738
Of which: Remittances	710	3,051	745	3,194	3,204	3,332	3,364
<b>II. FINANCIAL ACCOUNT</b>	<b>1,915</b>	<b>4,655</b>	<b>-299</b>	<b>3,733</b>	<b>1 692</b>	<b>4,559</b>	<b>4,595</b>
1. Private Sector	1,021	1,406	1,403	2 681	1,031	3,378	3,394
a. Long-term	515	1 653	-31	3,161	1,892	3,798	4,314
b. Short-term 1/	505	-247	1,434	-480	-861	-420	-920
2. Public Sector 2/	895	3,249	-1,702	1,053	661	1,181	1,201
<b>III. CHANGE ON NIRs</b>	<b>802</b>	<b>1,936</b>	<b>-1,589</b>	<b>1,040</b>	<b>-1,050</b>	<b>1,510</b>	<b>1,810</b>
Memo:							
Long-term external financing of the private sector 3/ (% GDP)	5.9	5.6	7.3	4.4	4.8	4.4	4.8
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.							

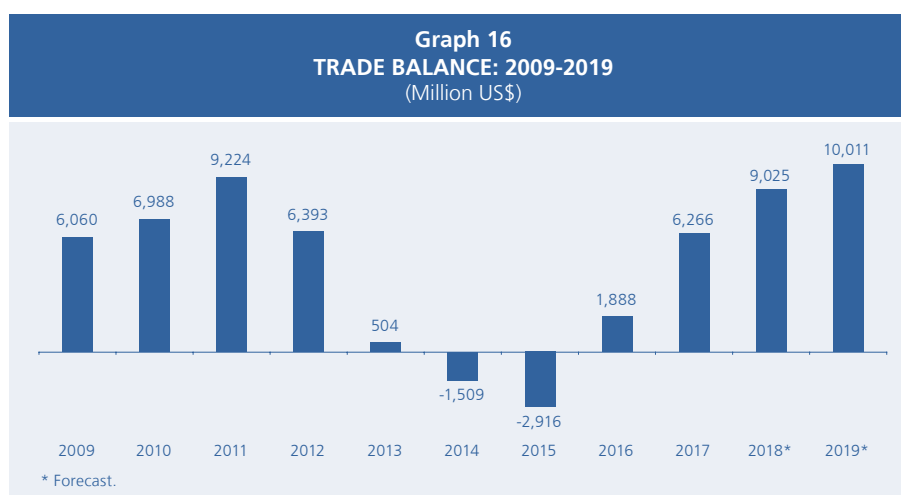
**13. Exports** would continue to be favored by the higher volumes of exports, especially exports of non-traditional products, thanks to the recovery of global activity and to the high prices of our major minerals. In the case of non-traditional exports, greater volumes of agricultural exports are expected in 2018 after the normalization of climate conditions, together with greater volumes of exports of textiles, in line with the recovery of external demand. In the case of traditional exports, on the other hand, a lower gold production is expected in 2018 which would affect the volume of traditional exports that year due in part to lower mineral grades that would affect the production of some mining units.

On the other hand, **imports** are expected to grow in line with the anticipated evolution of domestic demand, higher oil prices, and a relatively less depreciated dollar than estimated in the March Report. Moreover, this projection for 2018 considers the growing trend observed in the volumes of imports of durable consumer goods and capital goods in the first four months of the year, in line with the recovery of domestic demand. Thus, the volume of these imports is projected

to grow 7.9 and 6.5 percent, respectively, showing higher rates than the average volume of imports. Furthermore, higher oil prices (28 percent) would account for the increase in the price of imports in 2018.

Table 10 TRADE BALANCE (% change)				
	2016	2017	2018*	2019*
<b>1. Value:</b>				
Exports	7.6	21.3	15.9	6.0
Traditional products	11.5	26.7	14.4	4.8
Non-traditional products	-1.0	8.2	20.1	9.4
Imports	-5.9	10.0	11.3	5.0
<b>2. Volume:</b>				
Exports	11.6	7.3	3.9	4.0
Traditional products	16.7	7.4	1.0	2.9
Non-traditional products	0.9	7.0	12.6	6.8
Imports	-2.8	4.4	4.7	4.3
<b>3. Price:</b>				
Exports	-3.6	13.1	11.6	1.9
Traditional products	-4.3	17.9	12.4	1.4
Non-traditional products	-1.9	1.1	6.6	2.4
Imports	-3.0	5.4	6.4	0.6

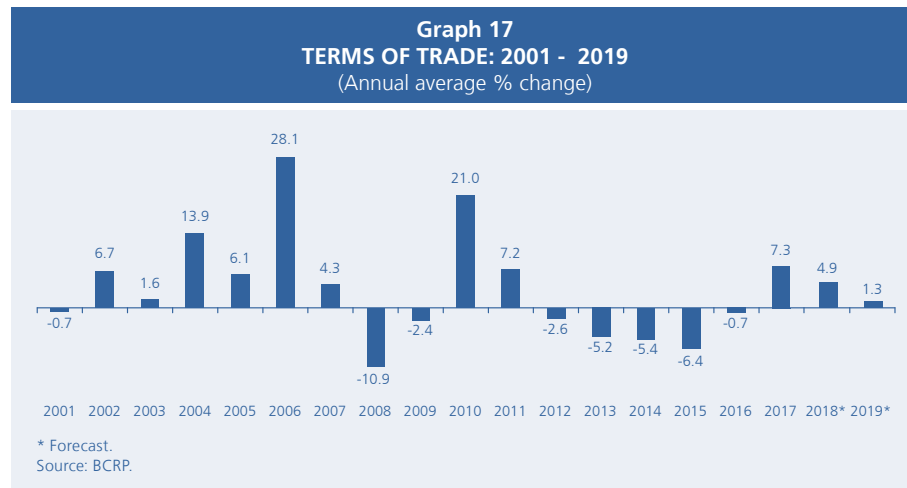
\* Forecast.



### Terms of Trade

14. In 2018, the **terms of trade** are estimated to increase 4.9 percent. The prices of exports would increase 11.6 percent compared to 2017, in line with the higher prices of basic metals and gold, while the prices of imports would increase 6.4 percent compared to 2017.





**Table 11**  
**TERMS OF TRADE: 2017 - 2019**

	2017	2018*		2019*	
		IR Mar.	IR Jun.	IR Mar.	IR Jun.
<b>Terms of Trade (Annual % chg.)</b>	<b>7.3</b>	<b>7.4</b>	<b>4.9</b>	<b>0.2</b>	<b>1.3</b>
<b>Price of exports (Annual % chg.)</b>	<b>13.1</b>	<b>12.0</b>	<b>11.6</b>	<b>0.1</b>	<b>1.9</b>
<i>Copper (US\$ cents per pound)</i>	280	317	319	316	329
<i>Zinc (US\$ cents per pound)</i>	131	154	146	143	142
<i>Lead (US\$ cents per pound)</i>	105	116	112	115	113
<i>Gold (US\$ per troy ounce)</i>	1,257	1,315	1,314	1,300	1,335
<b>Price of imports (Annual % chg.)</b>	<b>5.4</b>	<b>4.3</b>	<b>6.4</b>	<b>-0.1</b>	<b>0.6</b>
<i>Oil (US\$ per barrel)</i>	51	60	65	57	63
<i>Wheat (US\$ per ton)</i>	145	161	186	173	198
<i>Maize (US\$ per ton)</i>	131	144	145	156	162
<i>Soybean oil (US\$ per ton)</i>	707	716	674	735	713
<i>Whole milk (US\$ per ton)</i>	348	373	402	377	384

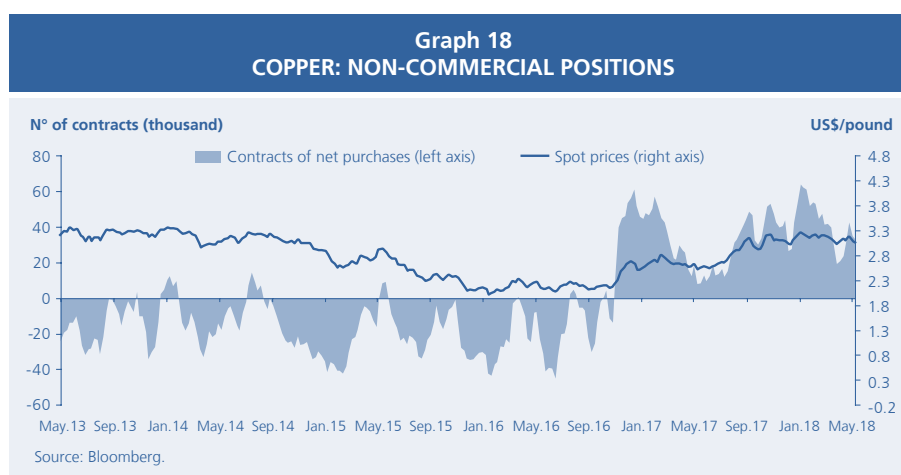
\* Forecast.  
IR: Inflation Report.  
Source: BCRP.

**a. Copper**

In May, the price of copper reached a monthly average of US\$ 3.09 a pound, the same price as the average price level in December 2017. This decline observed in the price of copper until May has been reversing since June

The recent drop in the price of copper is explained by the higher volatility generated by fears of a trade war between the United States and China as well as by increased geopolitical risks. In addition, the appreciation of the dollar has also affected the price of this metal since April. In this context of volatility and a strong

dollar, long non-commercial positions decreased after reaching maximum levels in January.



However, on the side of fundamentals, the estimates of the supply/demand balance for 2018 show marginal changes: the International Copper Study Group (ICSG) foresees a slight surplus as a result of an increase in supply –higher than that estimated in the previous report– due to fewer labor conflicts and few postponements in mining projects. On the demand side, the expected increase is in line with global growth (particularly with China’s growth).

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

	2014	2015	2016	2017 <sup>1/</sup>	2018 <sup>1/</sup>	2019 <sup>1/</sup>	Jan.17	Jan.18	% chg.
World Mine Production	18,428	19,155	20,354	20,029	20,670	20,758	1,656	1,716	3.6%
World Refined Production (Primary+Secondary)	22,491	22,871	23,337	23,503	24,511	24,664	1,949	2,051	5.2%
World Refined Usage	22,922	23,077	23,600	23,755	24,468	24,995	1,912	2,018	5.5%
Refined Balance	-431	-206	-263	-251	43	-331	37	33	

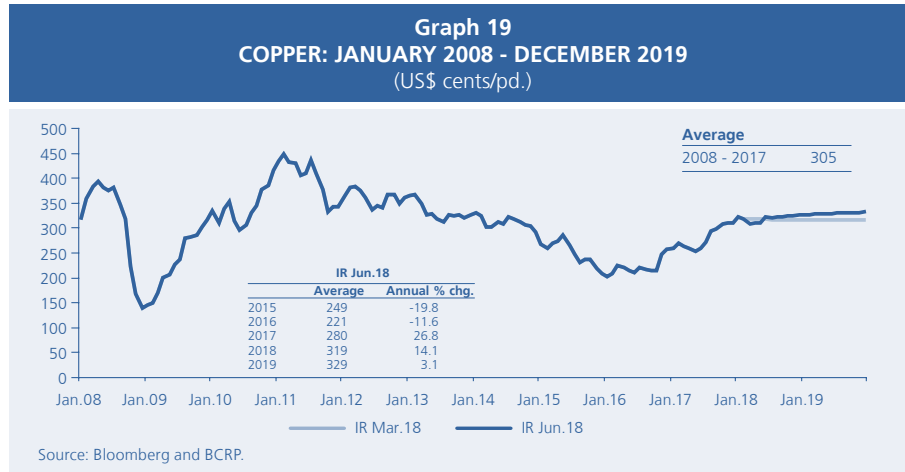
<sup>1/</sup> Estimation of April 2018.  
Source: International Copper Study Group (ICSG).

In line with the most recent recovery observed in the price of copper, the average prices of this metal estimated for 2018 and 2019 have been revised upwards. Prices have been showing an upward path and it is estimated that they will be above the levels foreseen in our March Inflation Report. The main risks in the projection are





associated with unforeseen changes in China’s growth, with supply constraints (if the labor negotiations programmed for this year do not reach agreements), and with a greater appreciation of the dollar.



**b. Zinc**

The international price of zinc decreased 14 percent between March and May 2018, reversing the 11 percent increase registered in in the first two months of the year. As a result, the zinc price accumulates a fall of 5 percent in the first 5 months of the year, reaching an average price of US\$ 1.38 per pound in May.

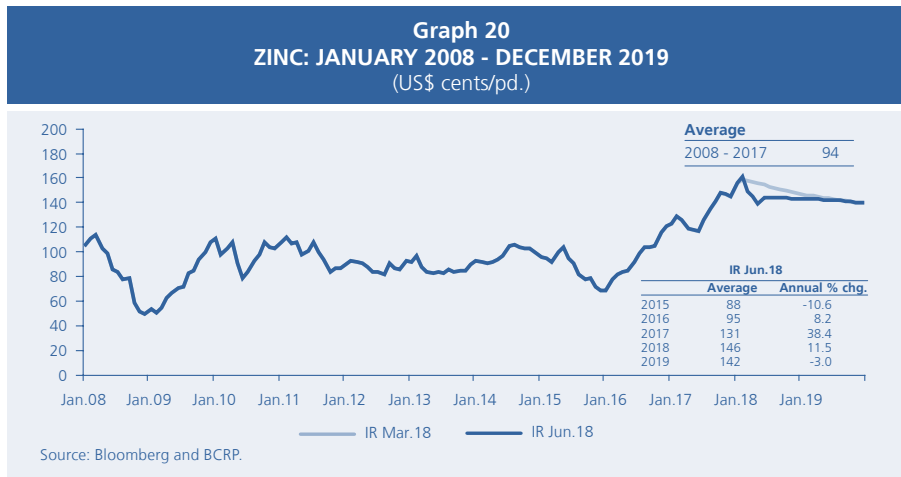
**Table 13**  
**WORLD REFINED ZINC USAGE AND SUPPLY**  
(Thousand metric tonnes, zinc)

	2014	2015	2016	2017	2018	Jan.-Mar. 2017	Jan.-Mar. 2018	Annual % chg.
World Mine Production	13.48	13.69	12.83	12.96	13.62	3.08	3.09	0.1%
World Refined Production	13.40	13.81	13.55	13.23	13.71	3.25	3.31	1.7%
World Refined Usage	13.67	13.64	13.67	13.69	13.97	3.27	3.28	0.4%
Refined Balance (in thousand)	-276	171	-127	-460	-263	-18	25	

Source: ILZSG.

Contrasting with what was observed in the price of copper, the price of zinc was not only affected by geopolitical and commercial uncertainty, but also by changes in its fundamentals: the supply had an unforeseen growth that led to a surplus in the first quarter and, in addition, the price was affected in recent months by news about China’s sales of its strategic reserves. There was also a strong increase in inventories at the London Metal Exchange.

In this scenario, the projected price of zinc has been revised down. Although demand is expected to grow at lower rates than supply, the market would continue showing a deficit in 2018 (although lower than in 2017). In 2019, the entry of a new supply will cause a downward correction in zinc prices.



**c. Gold**

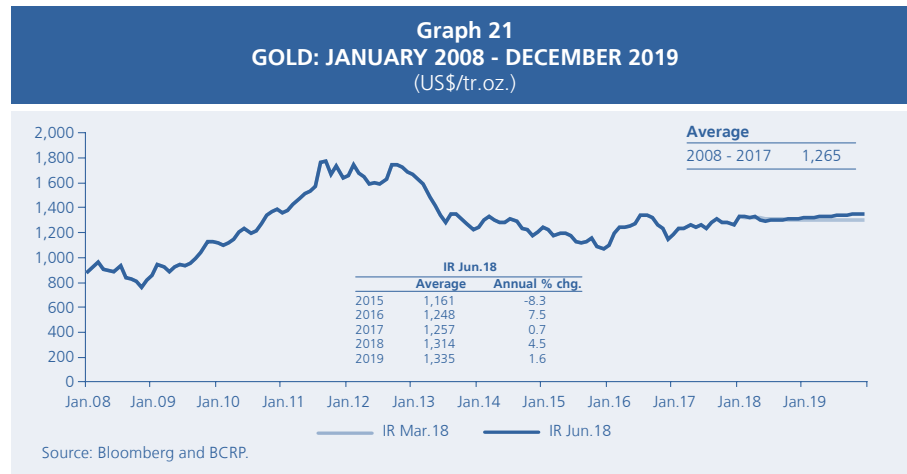
Between March and May, the price of gold fell 2 percent, reaching an average price of US\$ 1,304 a troy ounce in May. As a result, the price of gold has reversed in part the rise registered in the first months of the year.

The price of gold has declined in recent months due to expectations that the Fed will accelerate its cycle of interest rate increases as well as due to the strengthening of the dollar and the increase in the yield of the US Treasury bonds. Despite this, prospects of higher inflation are encouraging the demand for gold as a value asset and the anticipated decrease of monetary stimulus in the Eurozone and the United Kingdom are expected to limit the strength of the dollar. In line with this, the projections for the price of gold in 2018 remain at levels similar to those estimated in the March Report.

Two main risk factors could affect this projection. First of all, there is uncertainty about the speed and adjustment of monetary policies in the main developed economies and, therefore, about the future evolution of the dollar. Second, geopolitical events that increase risk aversion could bring about upward pressures on the price of the dollar in the forecast horizon.







#### d. Crude Oil

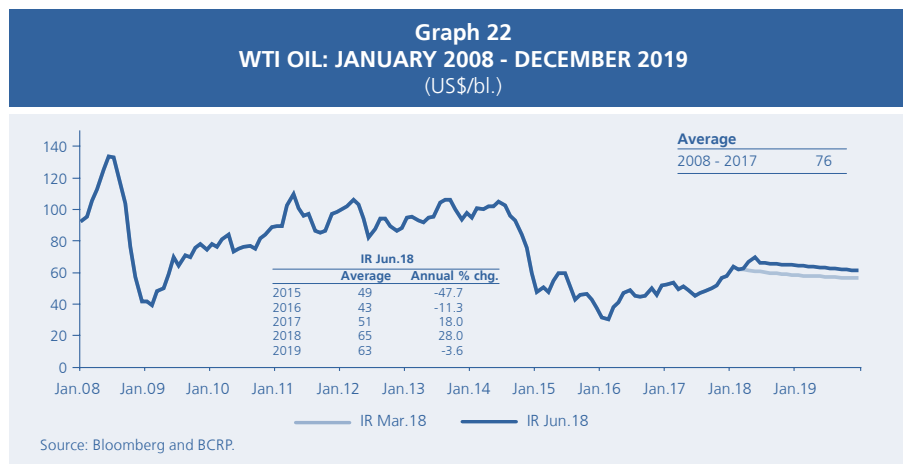
The average price of **WTI oil** increased 22 percent in the first five months of 2018, closing at an average price of US\$ 70 per barrel in May. Most of this increase occurred in April.

The rise in the price of oil showed a faster pace in recent months due to an increasing deficit in the global market as a result of a higher-than-expected global demand for oil (given the strong growth of global activity) and the OPEC’s strict compliance with its production cuts. Other factors that contributed to this rise were the collapse of Venezuela’s crude production and prospects for lower oil production in Iran following the United States decision to re-impose sanctions to Iran for its nuclear program.

However, the increase was offset by the acceleration of crude production in the United States due to the deflation of costs in the oil industry associated with productivity gains. Moreover, higher oil prices favor the development of new projects in 2018, particularly projects to produce shale oil.

In the forecast horizon, the estimated price of WTI oil price has been revised up, in line with recent developments. However, this projection shows some degree of uncertainty given the difficulty of predicting geopolitical events (particularly in oil producing areas), the behavior of the OPEC, and the evolution of shale oil

production, which accounts for approximately 50 percent of the United States' production of crude oil.



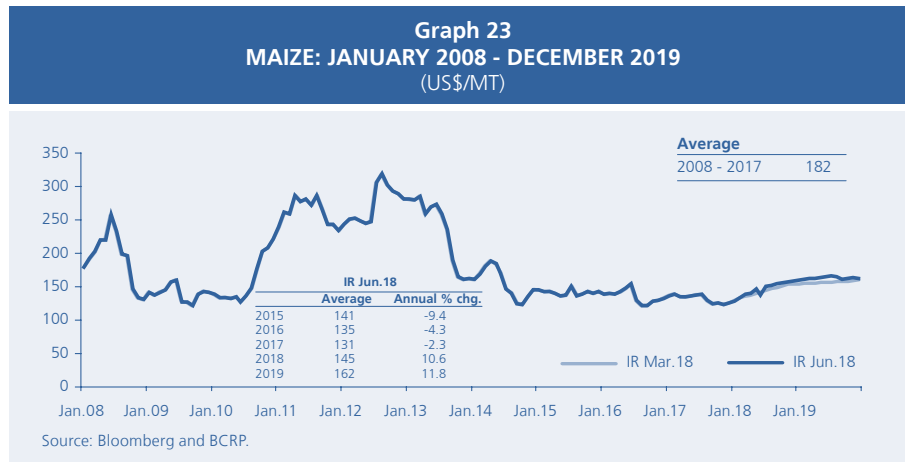
**e. Food: Maize, Wheat, and Soybean Oil**

The price of **maize** increased 10 percent compared to March 2018 and reached an average price of US\$ 146 per ton in May. With this increase, the price of maize has accumulated an increase of 17 percent in the first five months of the year.

The rise in the price of maize was associated with the increase in the price of oil, higher wheat prices, and the lower production of maize projected the United States in the 2018/19 crop season given that there have been two consecutive sowing seasons, according to the first estimates of the US Department of Agriculture. Concerns about the delay of the sowing season in the Mid-West of the United States –which maize cultivation gradually caught up with other areas– and fears of a lower production in Argentina, affected by adverse weather conditions, contributed also to this price increase.

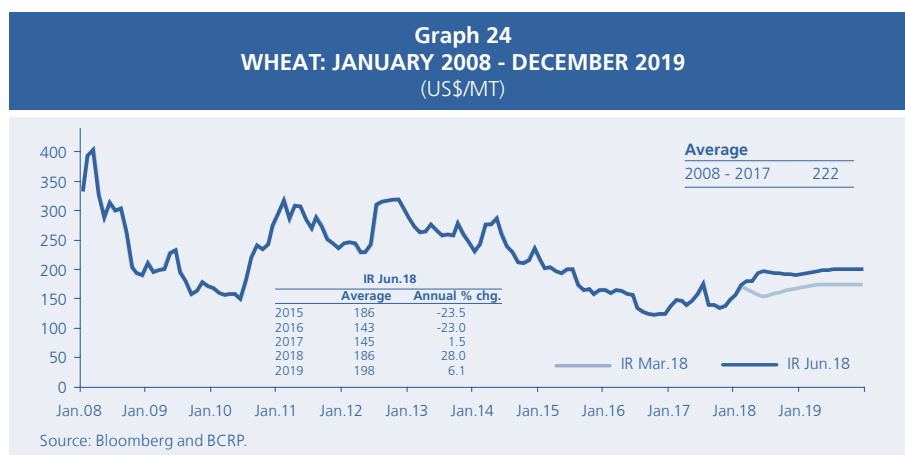
In line with these developments, the average price of maize in the forecast horizon is revised upwards. The main risk is uncertainty about the US trade policy, especially in relation to the Trade Agreement with Canada and Mexico (the main importer of corn from the United States) and fears of a trade war with China.





The price of **wheat** increased 6 percent since March, continuing with the upward trend observed in 2017 (when the price of wheat rose 20 percent). Thus, the price of wheat accumulates an increase of 30 percent in the year.

The increase in the price of wheat is explained by the outlook of a lower wheat production in the 2018/2019 crop season due to the lower harvest estimated especially in the European Union, Russia, Ukraine, and Kazakhstan. In addition to this, the United States Department of Agriculture projected a lower supply in the U.S. due to the poor state of winter crops due to lack of rain in the main producing regions (particularly Kansas). Wheat production in this country would have dropped by 25 percent in the 2017/2018 season, reaching its lowest level in 15 years due to the lower cultivation of winter wheat in 2018 (it is estimated to have been the lowest cultivation of wheat in almost 130 years).



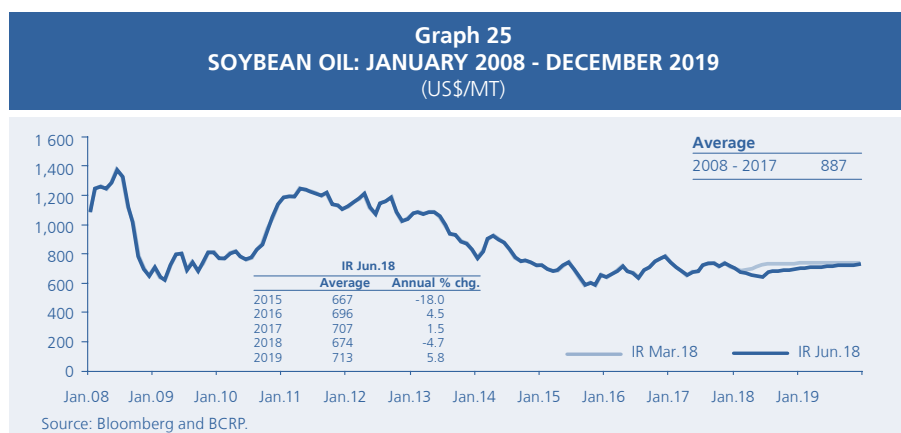
The price of wheat would show higher prices than those estimated in the previous Inflation Report due to the supply constraints foreseen in the forecast horizon.

In addition, the price of wheat would also be affected by the negative impact of weather conditions on production in Europe and Russia.

As of May, the average price of **soybean oil** was US\$ 647 per metric ton, 10 percent lower than the average price level in December 2017 and 2.8 percent lower than in March 2018. Thus, the average price of soybean oil maintains the downward trend it showed in 2017, when it recorded a 9 percent drop.

The reduction in the price of soybean oil is mainly explained by the evolution of palm oil markets. Global inventories of soybean oil are foreseen to recover in the 2018/19 season due to an increase in world production resulting mainly from higher production in the United States and China. A factor that offset this increase in supply was the lower availability of soy from Argentina (where the crop was affected by weather conditions). In addition, forecasts of a seasonal increase in palm oil production in Southeast Asia, particularly in Malaysia and Thailand, raise the projected oversupply even further.

Considering the factors mentioned above, it is expected that the price of soybean oil in the forecast horizon will be slightly below the level estimated in the previous Inflation Report. The increased supply of palm oil and the recovery of soybean oil production in Argentina and Brazil in the 2018/19 crop cycle will also contribute to the decline in this price.



## External Financing

- In the forecast horizon, **foreign direct investment** is expected to remain as the main source of financing given that profit reinvestment has been greater, in line with the recovery of activity and the continued high prices of our minerals. The expansion of Southern's Toquepala mine is expected to be completed by mid-2018. Moreover, Anglo American's Quellaveco investment project would be decided in 2018, while Minsur has announced investments of up to US\$ 480 million for its projects Relaves B2 San Rafael and Mina Justa.



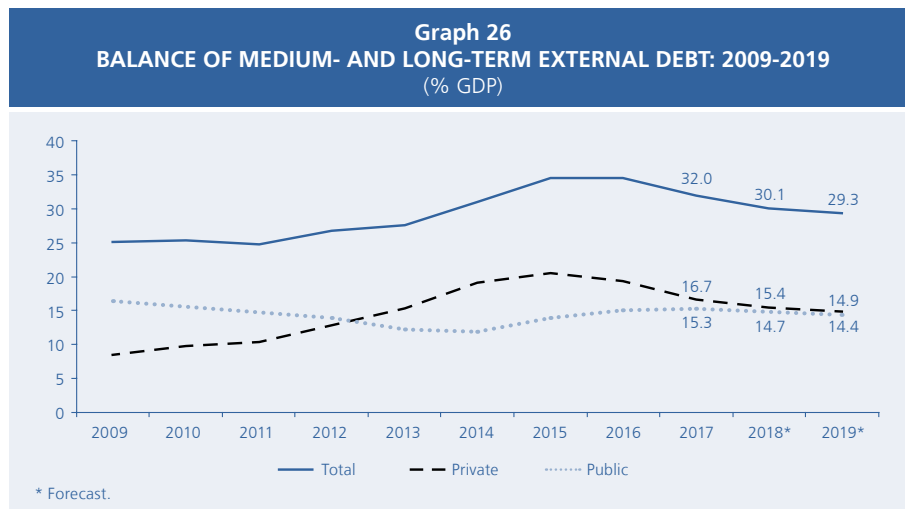


The long-term external capital of the private sector will continue to be the main source of financing the balance of payments and is expected to amount to 4.8 percent of GDP in 2018 and 2019, exceeding by far the requirements of the current account for that period. As in 2017, the net capital inflow would be lower due to higher debt repayments and investment in external portfolio assets and deposits in a context of Fed rate increases.

Table 14 FINANCIAL ACCOUNT OF THE PRIVATE SECTOR (Million US\$)			
	2017	2018*	2019*
<b>PRIVATE SECTOR (A+B)</b>	<b>1,406</b>	<b>1,031</b>	<b>3,394</b>
% GDP	0.7	0.4	1.4
<b>A. LONG-TERM</b>	<b>1 653</b>	<b>1,892</b>	<b>4,314</b>
<b>1. ASSETS</b>	<b>-2,929</b>	<b>-4,880</b>	<b>-4,355</b>
<b>2. LIABILITIES</b>	<b>4,582</b>	<b>6,772</b>	<b>8 669</b>
Foreign direct investment in the country	6,769	7,104	8,136
Long-term loans	-3,906	-1,817	-742
Portfolio investment	1,719	1,484	1,275
<b>B. SHORT-TERM <sup>1/</sup></b>	<b>-247</b>	<b>-861</b>	<b>-920</b>

1/ Includes net errors and omissions and the effect of exchange valuation.  
 IR: Inflation Report.  
 \* Forecast.

16. Private external indebtedness would show a decreasing trend during the forecast horizon and represent 14.9 percent of GDP in 2019. This projection is consistent with the anticipated greater use of local financing and rising international interest rates.



17. The soundness of the balance of payments to face negative events in the global economy 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 high prices of raw materials.

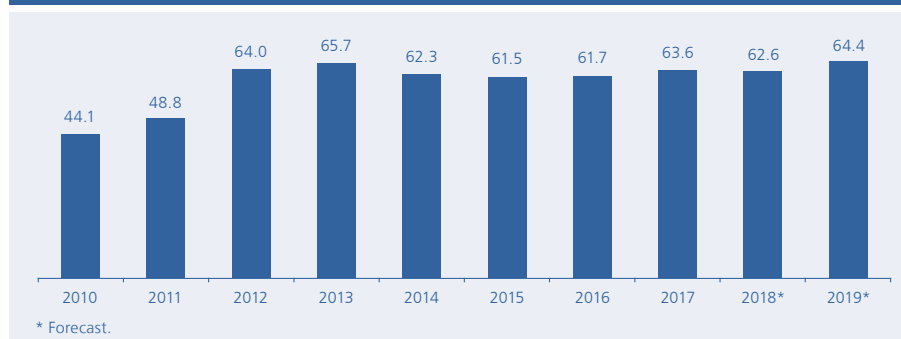
**Table 15**  
**NIR INDICATORS**

	2006	2011	2016	2017	2018*	2019*
<b>NIR as a % of:</b>						
a. GDP	19.6	28.5	31.5	29.5	27.1	26.6
b. Short-term external debt <sup>1/</sup>	166	470	316	463	457	519
c. Short-term external debt plus current account deficit	230	365	248	386	381	424
<b>Medium- and long-term external debt (as a % GDP):</b>						
a. Private	4.0	10.4	19.3	16.7	15.4	14.9
b. Public	24.5	14.3	15.1	15.3	14.7	14.4

<sup>1/</sup> Includes short-term debt balance plus redemption (1-year) of private and public sector.

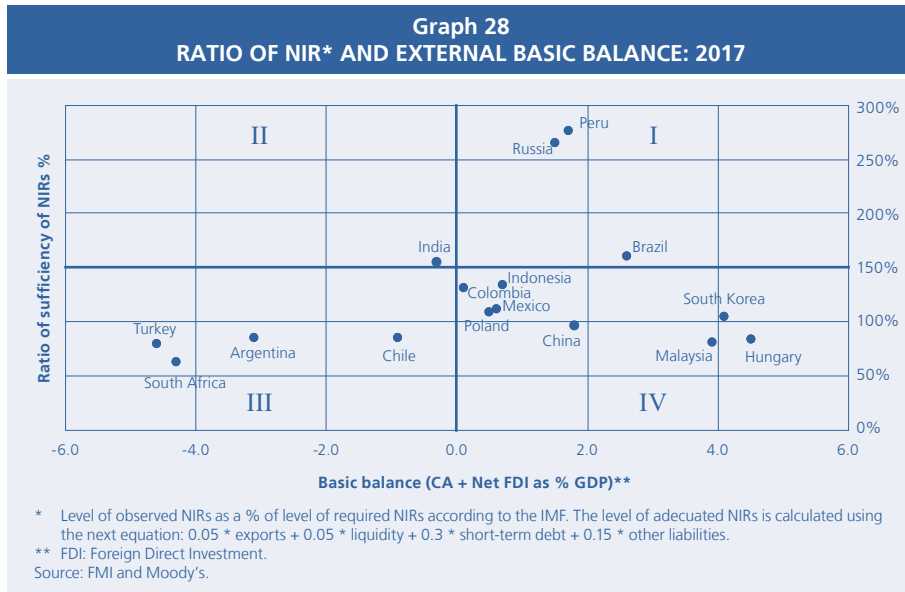
\* Forecast.

**Graph 27**  
**NET INTERNATIONAL RESERVES**  
(Billion US\$)



A high level of **net international reserves** (NIRs) is crucial to protect the economy from changes in investors' perceptions that may cause abrupt capital outflows. The following graph shows a representative group of emerging economies with their external account position indicators (the current account of the balance of payments plus the flow of foreign direct investment) and the ratio of sufficiency of NIRs (balance of NIRs to the country's short-term debt). The graph shows a favorable relative position in both indicators in the case of Peru.

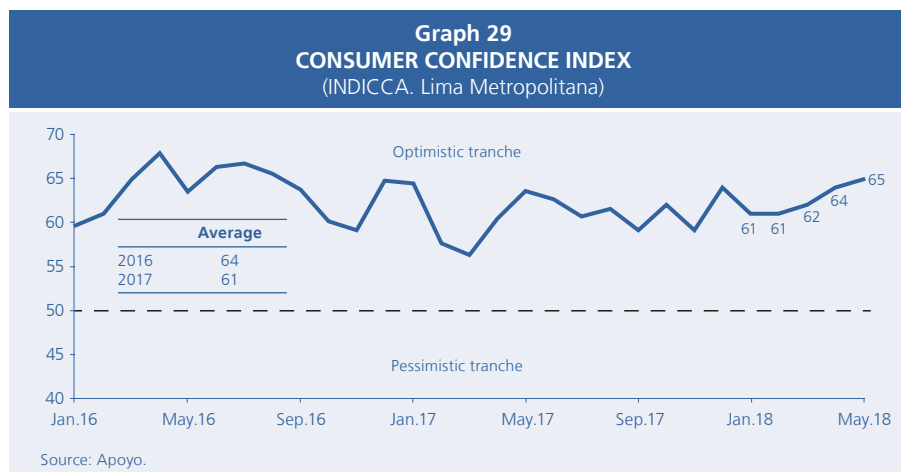




### III. Economic Activity

#### Expenditure-Side GDP

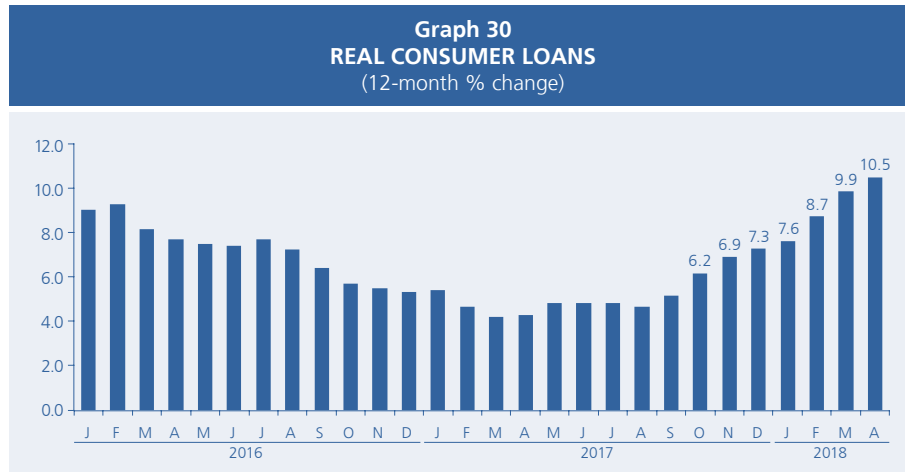
18. In the first quarter of 2018, **economic activity** grew 3.2 percent, reflecting the recovery in domestic demand, which grew 3.9 percent, after having been affected by the impact of El Niño Costero and the drop in public investment in the first quarter of 2017. In contrast with what happened in the first quarter of 2017, a faster pace of public spending was observed during the first quarter of this year (mainly due to rehabilitation and maintenance projects), together with an increase in private investment driven by the increase in export prices.
  
19. A recovery has been observed in demand indicators. Recent indicators of **private consumption** show a positive evolution. Consumer confidence shows an upward trend, credit to households has shown greater dynamism since the third quarter of 2017, and imports of consumer goods show an average two-digit growth in the first four months of 2018. Furthermore, indicators of employment at the national level (measured by the electronic payroll) show a greater recovery, particularly in the areas outside Metropolitan Lima.
  - a) The **consumer confidence** index, measured as the expected economic situation of the household in a year, has increased since March and remains in the optimistic area, recording a level of 65 points in May. This level is higher than the average level observed in the last two years.



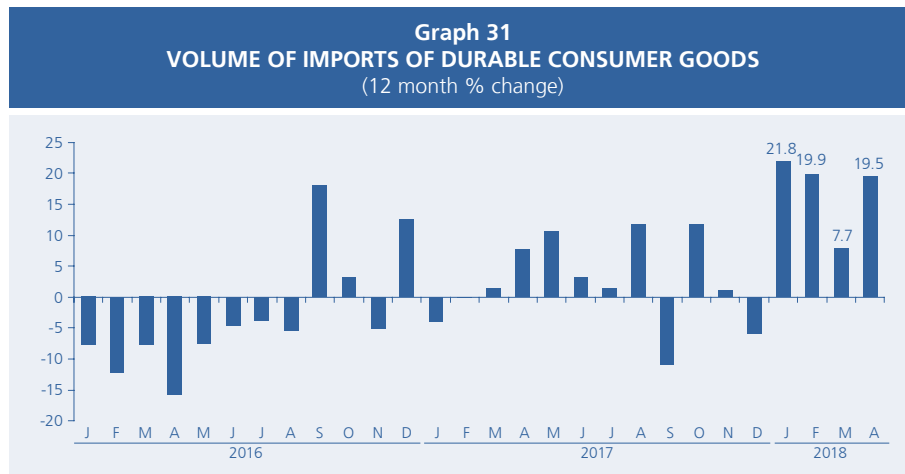




- b) **Consumer loans** have been showing greater dynamism associated with the recovery of private consumption and with the increased offer of loans since the fourth quarter of 2017.

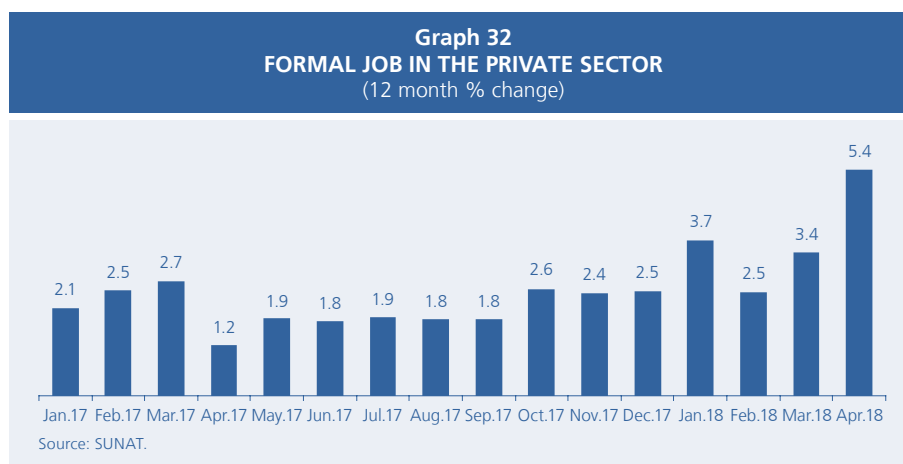


- c) In line with the evolution of credit, **imports of durable consumer goods** have been showing a strong growth year-to-date.

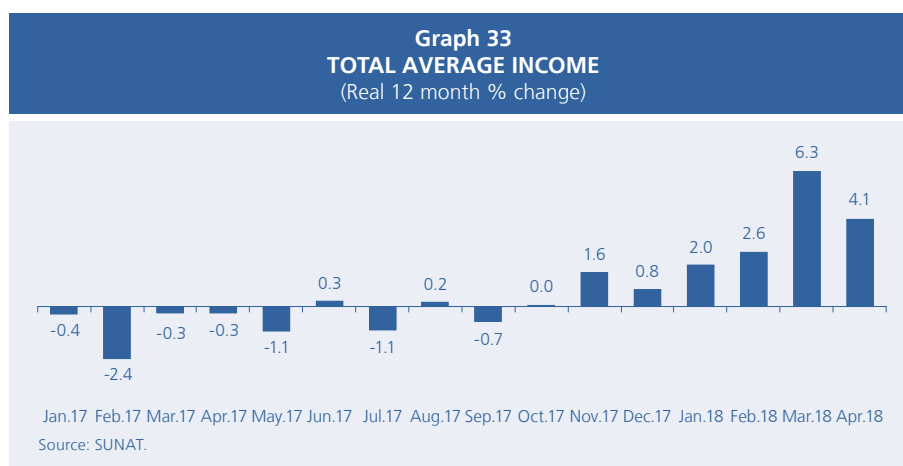


- d) The greater dynamism of economic activity in the first quarter is consistent with the increase registered in **formal jobs** nationwide (4.0 percent in April compared to April 2017). Moreover, the increase in private consumption in the first quarter was in line with the growth of formal jobs in the private sector, which grew 3.2 percent in the same period and 5.4 percent in April. This increase in jobs has been observed both in the agricultural sector and in the manufacturing branches associated with agro-exports, as well as

in the sector of services sector due to the greater dynamism of domestic demand.



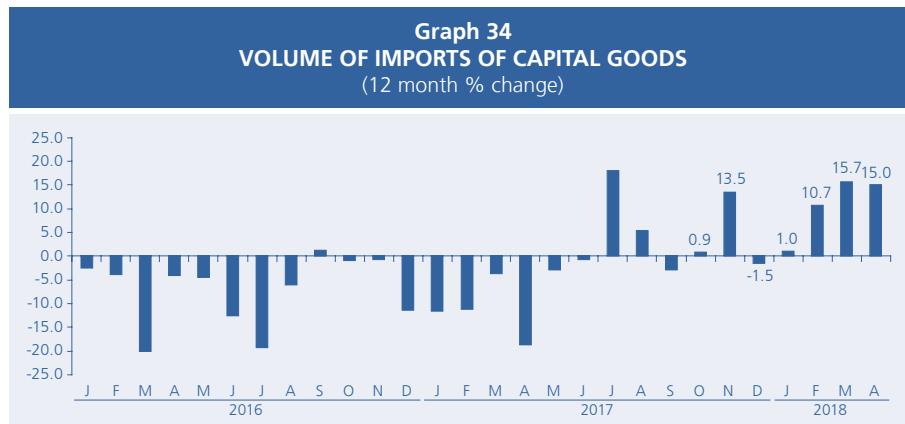
- e) Furthermore, the **average income of total formal workers** grew 4.1 percent in April compared to the same month of 2017, reaching a growth rate of 3.8 percent during the first quarter of 2018. This increase was associated to the higher revenues of the sectors of mining, fishing, commerce, and services.



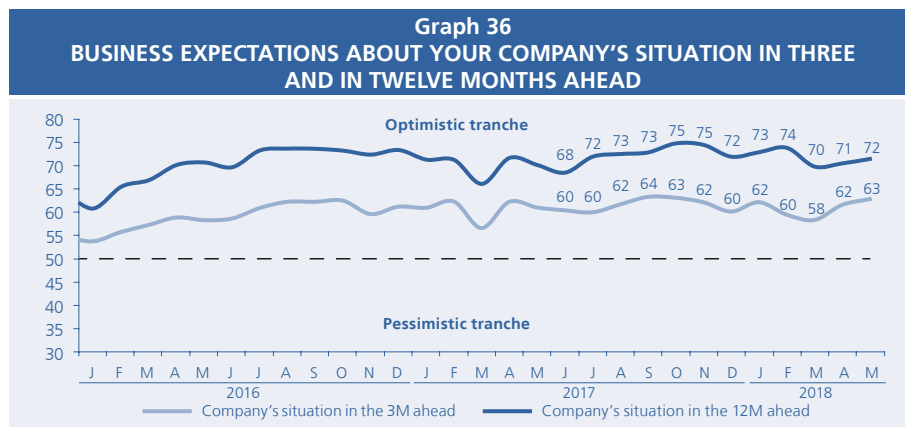
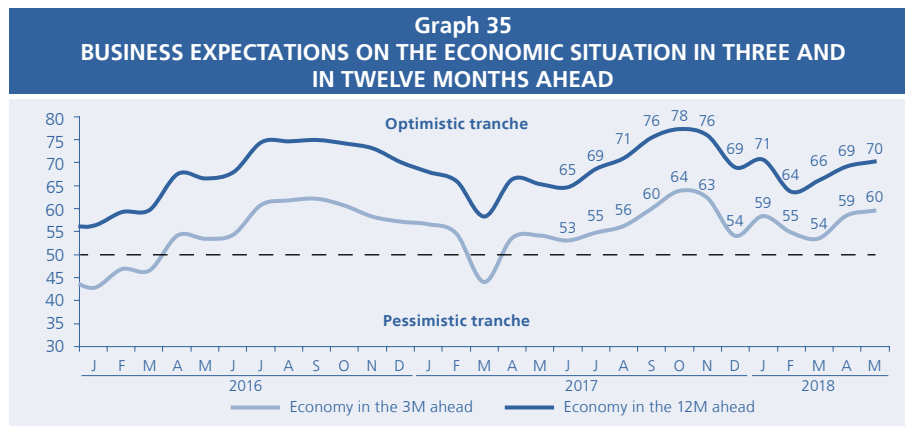
20. As for **private investment**, current and advanced indicators show the following positive trends:

- a) The volume of **imports of capital goods**, excluding construction materials, has been recovering since the second half of 2017 and recorded an annual growth rate of 15.0 percent in April 2018.

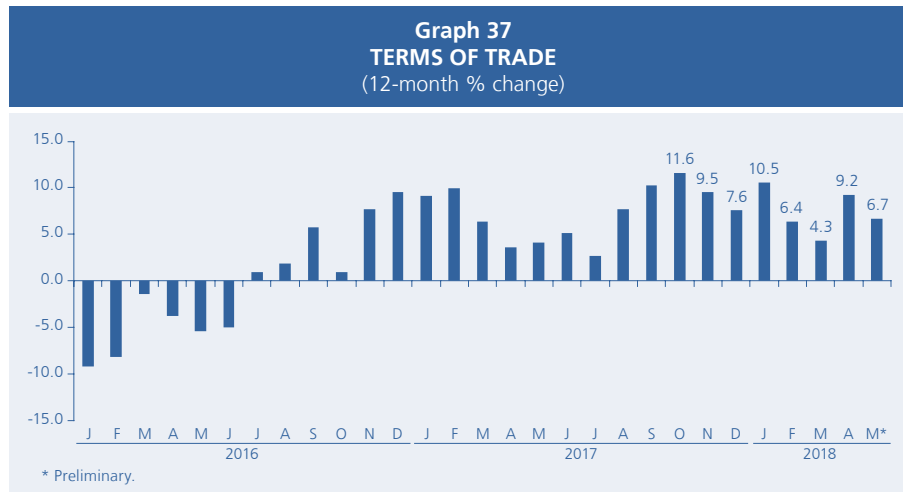




b) **Business expectations about the economy** in three months and in twelve months increased in May and remain on the optimistic area. Moreover, maintaining the recovery trend that started in the second half of 2017, businessmen's expectations about the situation of their companies in three months and in twelve months recorded 63 and 72 points, respectively.



- c) Showing a continuous growth trend during the last 23 months and recording an increase of 6.7 percent in May, the **terms of trade** anticipate increases in investment.



- d) **People’s expectations about the growth of GDP** in 2018 have been revised up. Financial entities have maintain their growth forecasts for 2018 at 3.5 percent between March and June 2018, whereas economic analysts and the representatives of non-financial firms have revised their projections on the upside, from 3.5 to 3.6 percent and from 3.0 to 3.5 percent, respectively. For 2019, non-financial entities have revised their growth estimates slightly down, from 4.0 to 3.8 percent, while economic analysts maintain their growth forecast at 3.8 percent and financial entities have raised their growth estimates from 3.7 to 3.8 percent.

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

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

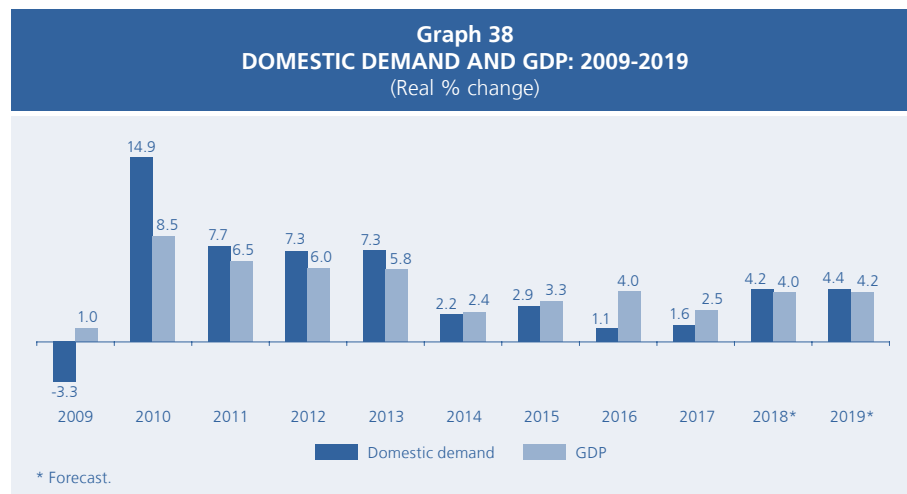
\* Survey date on May 31.

21. The **GDP growth forecast** for 2018 remains at 4.0 percent in this Inflation Report while the growth forecast for 2019 has been revised up from 4.0 to 4.2 percent.





It is estimated that the increased growth of consumption would counterbalance the lower growth of public expenditure in 2018. In addition, a higher growth of domestic demand than that estimated in our previous report is expected in 2019 due mainly to the greater recovery foreseen in private consumption.



**Table 17**  
**GDP AND DOMESTIC DEMAND**  
(Real % change)

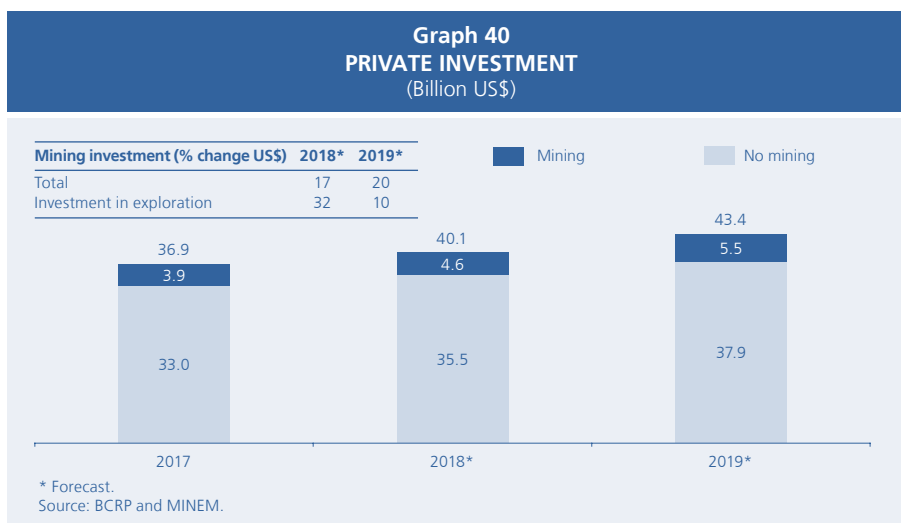
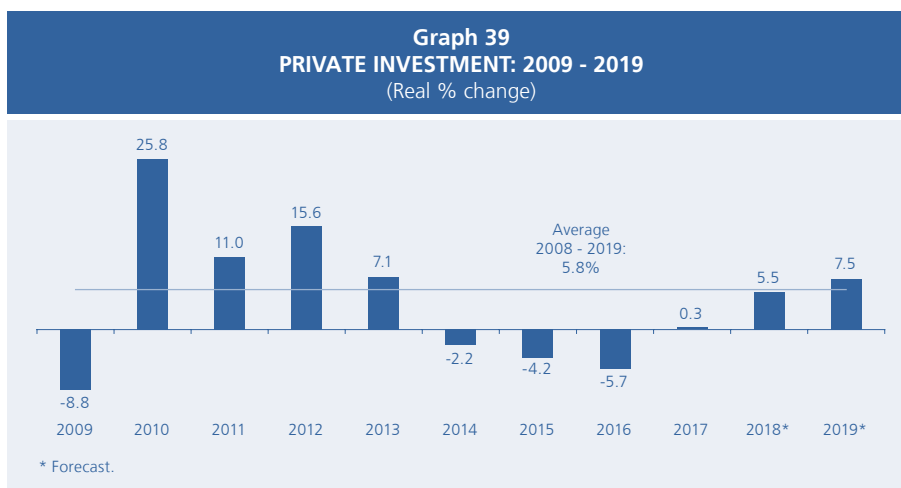
	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>Domestic demand</b>	<b>-0.4</b>	<b>1.6</b>	<b>3.9</b>	<b>4.2</b>	<b>4.2</b>	<b>4.2</b>	<b>4.4</b>
Private consumption	2.2	2.5	3.2	3.2	3.4	3.6	3.7
Public consumption	-8.4	1.0	5.2	4.0	3.8	2.5	2.5
Private investment	-5.3	0.3	5.3	5.5	5.5	7.5	7.5
Public investment	-17.4	-2.3	4.0	14.2	12.6	5.0	5.0
Change on inventories (contribution)	0.6	-0.1	0.1	0.0	0.0	0.0	0.0
<b>Exports</b>	<b>11.1</b>	<b>7.2</b>	<b>4.3</b>	<b>3.2</b>	<b>4.4</b>	<b>3.6</b>	<b>3.9</b>
<b>Imports</b>	<b>0.4</b>	<b>4.0</b>	<b>7.1</b>	<b>4.0</b>	<b>5.1</b>	<b>4.3</b>	<b>4.5</b>
<b>GDP</b>	<b>2.3</b>	<b>2.5</b>	<b>3.2</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>4.2</b>
<u>Memo:</u>							
Public expenditure	-10.5	0.1	5.0	6.8	6.2	3.2	3.2
Domestic demand excluding inventories	-1.1	1.7	3.8	4.2	4.2	4.2	4.4

IR: Inflation Report.  
\* Forecast.

22. A faster pace of growth than that registered in 2017 is foreseen in **private consumption** in the forecast horizon, in line with the recovery paths observed in the indicators of confidence, employment, income, imports, and credit since the beginning of this year. It is expected that the expansionary monetary policy stance as well as the expansion of the construction sector and the positive impact of higher terms of trade will gradually boost the current trend observed. Because

of this, the growth of private consumption in 2018 and 2019 is estimated to reach 3.4 and 3.7 percent, respectively.

23. The growth forecast estimated in our previous report for **private investment** remains unchanged. In 2018, private investment is expected to grow 5.5 percent, driven by a significant growth of mining investment, while the other investment components would grow 4.6 percent as a result of the recovery of business expectations. In 2019, it would grow 7.5 percent considering the better anticipated performance of mining investment (associated with the recovery of metal prices) and non-mining investment, which would grow 6.4 percent as a result of the resumption of some infrastructure projects, such as Lima Metro’s Line 2 and the expansion of the International Airport Jorge Chávez (Lima), among other projects.





The 175 **private investment projects announced** to be carried out in 2018-2019 amount to US\$ 18.8 billion. Increased dynamism is expected in the sector of mining as well as in sectors such as telecommunications, real estate, retail, and other sectors.

**Table 18**  
**PRIVATE INVESTMENT PROJECTS ANNOUNCED**  
(Million US\$)

	Total investment	Number of projects
Mining	7,364	34
Other sectors	4,066	67
Infraestructure	3,850	25
Hydrocarbons	1,875	15
Energy	890	21
Industry	802	13
<b>TOTAL</b>	<b>18,847</b>	<b>175</b>

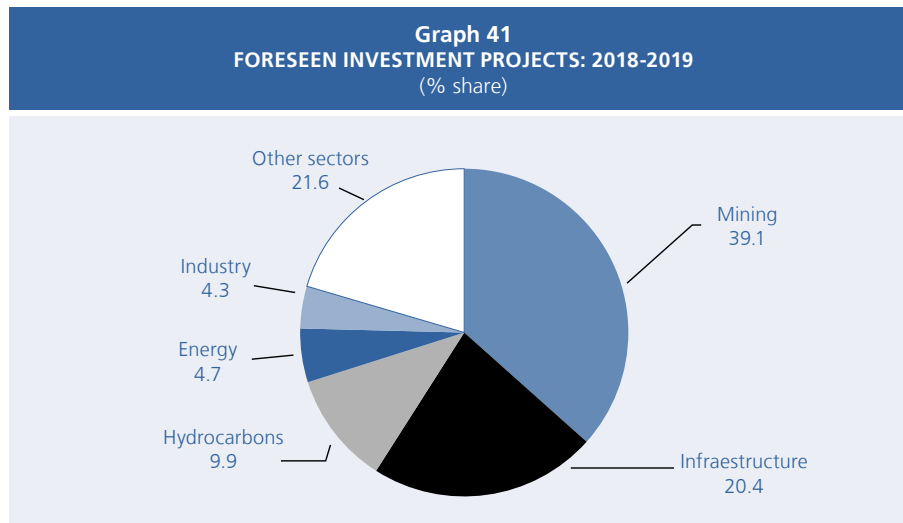
Source: Companies information and media press.

**Table 19**  
**MAIN PRIVATE INVESTMENT PROJECTS ANNOUNCED: 2018-2019**

SECTOR	COMPANIES	PROJECT
<b>Mining</b>	Angloamerican	Quellaveco
	Grupo Breca	Mine Justa and B2
	Chinalco	Expansion of Toromocho
	Jinzhao Mining	Pamapa del Pongo
	Southern Peru Copper Corp	Expansion of Toquepala
	Bear Creek Mining	Corani
	Shougang Corporation	Expansion of Marcona
	Newmont Mining	Quecher Main
Minsur S.A.	San Rafael	
<b>Hydrocarbons</b>	Pluspetrol Perú Corp.	Expansion of capacity transportation
	China National Petroleum Corporation	Exploration: Lot 58
	Calidda Gas Natural del Perú	Massive use of gas
<b>Energy</b>	Interconexión Eléctrica S.A.	Mantaro nueva Yanango connection
	China Three Gorges Corp y Energías Portugal S.A.	San Gabán III
	Grupo Enel	Wayra I
<b>Industry</b>	Corporación Lindley	Storages and infraestructures
	Repsol YPF	Expansion of La Pampilla
	Grupo Celesa	Expansion of Pisco plant
<b>Infraestructure</b>	Consorcio Nuevo Metro de Lima	Line 2 of the Metro Network of Lima and Callao
	Lima Airport Partners	Expansion of international airport (Jorge Chávez)
	ADP	Improvement and new runways for landing
	Consorcio Paracas	San Martín Port Terminal Project
<b>Other sectors</b>	Grupo Telefónica	Expansion and facilities of net LTE-4G
	Entel	Development of services 4G
	America Movil	Expansion of net 4G
	Grupo Falabella	Expansion and new shopping centers
	Inversiones Centenario	Real Estate investments and expansion of shopping centers
	Grupo Interbank	Expansion and New shopping centers
	Grupo Breca	Expansion and new hotels, medical centers and shopping malls.
	Cencosud	Shopping centers

Source: Information of companies and media press.

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



Investments in **the mining sector** in 2018-2019 will include the start of the construction stage of important projects such as Minsur's Mina Justa, which is currently in the stage of detail engineering works, with an estimated investment of US\$ 1.5 billion; Pampa del Pongo, which has recently obtained the construction permit, with an estimated total investment of US\$ 2.5 billion, distributed in US\$ 1.3 billion in the construction of the mine and US\$ 1.2 billion in the construction of the plant; Quellaveco, with an investment of US\$ 4.9 billion, and Corani, with an investment of US\$ 600 million, which would begin construction in 2019.

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 companies. On the other hand, the real estate sector continues to develop new housing projects in Lima and provinces, such as Armas Doomo, Menorca Inversiones, Grupo Caral, and Edifica, among other projects.

In addition to Michiquillay mining project awarded in concession to Southern Peru in the first quarter of the year, investment in projects awarded in concession by **Proinversión** include the concession contract of the Port of Salaverry, which involves an estimated investment of US\$ 229 million. Moreover, according to the schedule of Proinversión, estimated investment in projects to be awarded in 2018-2019 amount to US\$ 3.2 billion.

The projects to be awarded in 2018 include the project entitled *Masificación de Uso de Gas Natural - Distribución de Gas Natural por Red de Ductos* in the regions of Apurímac, Ayacucho, Huancavelica, Junín and Cusco, and Puno and Ucayali







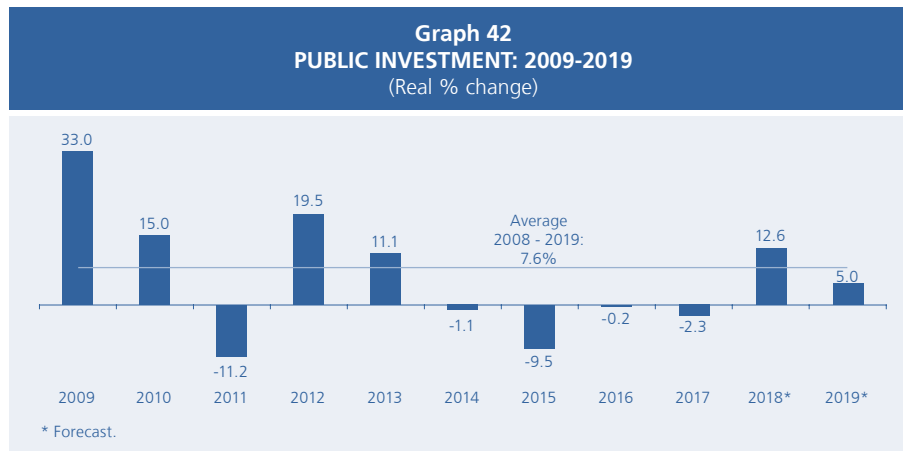
(US\$ 350 million), which is currently going through a tender process, as well as the projects of Ancon Industrial Park (US\$ 500 million), the Installation of broadband in San Martín, La Libertad, Pasco, Huánuco, Arequipa, and Ancash (US\$ 359 million), and the installation of several electricity transmission lines.

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

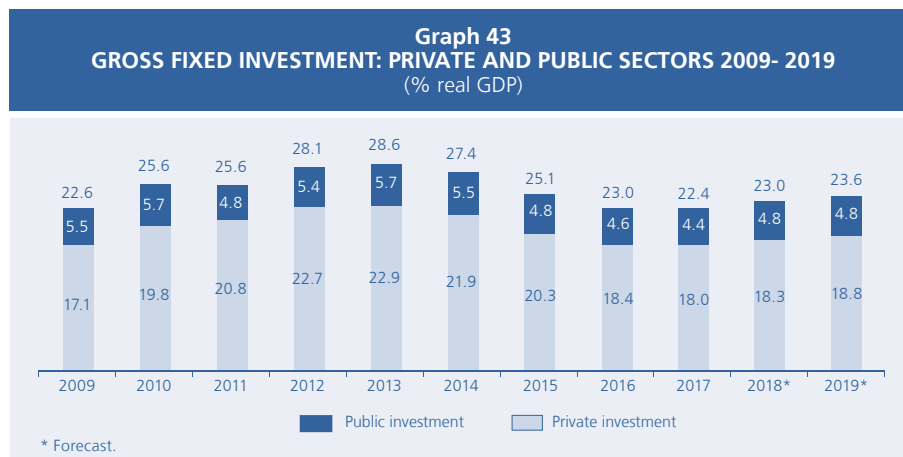
	Estimated investment
<b>A. Awarded</b>	<b>3,655</b>
Broadband for Comprehensive Connectivity and Social Development for Amazonas, Ica, Lima, Moquegua, Tacna, Puno and Junin regions	538
500kV Mantaro - Nueva Yanango -Carapongo Connection and associated sub stations" , and "500 kV Nueva Yanango - Nueva Huanuco connection and associated sub stations	272
The Amazon waterway project	95
Tintaya - Azángaro 220 kV Electric Transmission Line	12
Aguaytía-Pucallpa 138 kV Electric Transmission Line	9
Michiquillay Copper Deposits	2,500
Upgrading and Development of Salaverry Multipurpose Port Terminal	229
<b>B. To award</b>	<b>3,233</b>
<b>B.1 Called</b>	<b>1,649</b>
Massive Use of Natural Gas - Distribution System through a Natural Gas Grid Across The Regions of Apurímac, Ayacucho, Huancavelica, Junin, Cusco, Puno, and Ucayali.	350
Headworks and Conduction for the Drinking Water Supply in Lima	600
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
<b>B.2 To be called</b>	<b>1,584</b>
Ancon Industrial Park	500
Broadband for Comprehensive Connectivity for San Martín, La Libertad, Pasco, Huánuco, Arequipa, and Ancash regions.	359
500kV La Niña - Piura Transmission Line and associated sub stations, 220kV Pariñas - Nueva Tumbes Transmission Line and associated sub stations, 220kV Tingo María - Aguaytía Transmission Line and associated sub stations.	200
Repowering up to 1000 MVA of 500kV Carabayllo-Chimbote-Trujillo Transmission Line and Variable reactive compensator +400/-150 MVAR in Trujillo Norte sub station	90
Piura Nueva - Frontera 500kV Transmission Line and associated sub stations	160
New hospital of high complexity in Piura	144
New hospital of high complexity in Chimbote	110
Improvement of the Sewage System and Treatment for wastewater of the city of Puerto Maldonado	21

Source: Proinversión

24. Considering the evolution of **public spending** during January and February 2018, the growth projection of public investment has been revised down from 14.2 percent to 12.6 percent in 2018 and the projection of public spending in 2019 remains at 5.0 percent.



This evolution of private and public investment will imply a fixed gross investment to GDP ratio of 23.6 percent in 2019.



## Sector GDP

25. The growth of **GDP** showed a recovery during the first quarter of 2018 (3.2 percent) compared to the same period of the previous year, driven by the recovery of the non-primary sectors (3.6 percent) whose contribution to growth in the quarter rose from 1.3 percent in 2017 to 2.8 percent in 2018. This result is explained mainly by increased activity in the construction and services sectors, which grew 5.1 and 4.2 percent, respectively. On the other hand, the primary sectors grew at lower rates than in the same quarter of the previous year due to the contraction of the mining and hydrocarbons sector as a result of a lower extraction of gold resulting from





the lower grades of this mineral and of the lower production of gas and natural gas liquids. In contrast, production in the agricultural sector recovered after being affected by El Niño Costero in the first months of 2017 and grew 5.7 percent.

Table 21 GDP BY PRODUCTION SECTOR (Real % change)								
	2016	2017		2018*			2019*	
	Year	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>Agriculture and livestock</b>	<b>2.7</b>	<b>-0.2</b>	<b>2.8</b>	<b>5.7</b>	<b>4.0</b>	<b>4.8</b>	<b>4.0</b>	<b>4.0</b>
Agriculture	1.8	-3.7	3.0	7.8	4.3	5.1	4.1	4.1
Livestock	3.7	4.4	2.7	3.0	3.4	4.4	3.8	3.8
<b>Fishing</b>	<b>-10.1</b>	<b>37.9</b>	<b>4.7</b>	<b>6.1</b>	<b>23.5</b>	<b>30.0</b>	<b>0.5</b>	<b>-4.2</b>
<b>Mining and hydrocarbons</b>	<b>16.3</b>	<b>4.1</b>	<b>3.2</b>	<b>0.6</b>	<b>2.0</b>	<b>0.1</b>	<b>3.5</b>	<b>4.0</b>
Metallic mining	21.2	3.9	4.2	1.7	2.4	0.5	3.0	3.5
Hydrocarbons	-5.1	5.3	-2.4	-5.9	-0.8	-2.0	7.6	7.6
<b>Manufacture</b>	<b>-1.4</b>	<b>2.3</b>	<b>-0.2</b>	<b>1.0</b>	<b>4.8</b>	<b>5.1</b>	<b>3.5</b>	<b>3.8</b>
Based on raw materials	-0.6	11.7	1.9	0.1	9.9	9.9	4.1	4.1
Non-primary industries	-1.6	-0.5	-0.9	1.4	3.0	3.5	3.4	3.8
<b>Electricity and water</b>	<b>7.3</b>	<b>1.1</b>	<b>1.1</b>	<b>1.4</b>	<b>2.5</b>	<b>3.3</b>	<b>3.5</b>	<b>4.0</b>
<b>Construction</b>	<b>-3.1</b>	<b>-5.2</b>	<b>2.3</b>	<b>5.1</b>	<b>8.5</b>	<b>7.5</b>	<b>8.0</b>	<b>8.0</b>
<b>Commerce</b>	<b>1.8</b>	<b>0.1</b>	<b>1.0</b>	<b>2.7</b>	<b>3.5</b>	<b>3.7</b>	<b>3.8</b>	<b>3.8</b>
<b>Services</b>	<b>4.0</b>	<b>3.1</b>	<b>3.3</b>	<b>4.2</b>	<b>3.7</b>	<b>4.1</b>	<b>4.0</b>	<b>4.2</b>
<b>GDP</b>	<b>4.0</b>	<b>2.3</b>	<b>2.5</b>	<b>3.2</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>4.2</b>
Memo:								
Primary GDP	10.0	4.6	3.0	1.8	3.8	2.9	3.6	3.8
Non-Primary GDP	2.4	1.6	2.3	3.6	4.0	4.3	4.2	4.3

\* Forecast.  
IR: Inflation Report.

26. In addition to the reversal of the negative impacts associated with El Niño Costero observed in the first four months of this year, a greater dynamism of investment and private consumption is expected in the 2018-2019 horizon –associated with better terms of trade and the expansionary monetary policy stance– together with a greater fiscal stimulus for reconstruction and with the unblocking of the main infrastructure projects, as reported in the March Report. A re-composition between the primary and non-primary sectors is projected for both years, in line with the indicators observed during the first quarter of this year, particularly in the sectors of mining, services, and construction.

- a) The **agriculture sector** grew 5.7 percent in the first quarter of 2018 as a result of the normalization of weather conditions, the incorporation of larger areas for the cultivation of export-oriented crops (coffee, grapes, avocados, cacao, and blueberries), and the impulse of rice and hard yellow maize resulting from better water conditions. In addition, agricultural production in the Sierra (potatoes,

maize, and other crops) recovered from the effects of the water deficit at the end of 2016, while agricultural production in the Coast (lemon and sugarcane) recovered from the impact of El Niño Costero in 2017. In addition to this, an increased poultry production contributed with 1.2 percentage points to the growth of the agricultural output in this quarter.

The growth forecast for this sector in 2018 has been revised from 4.0 to 4.8 percent due to a higher-than-expected growth of the products oriented to the domestic market and to agro-industry given the lower impact of La Niña on agricultural activity in the Central Pacific area during the first months of 2018 and the greater availability of water in the North Coast of the country.

The growth forecast for 2019 remains at 4.0 percent, which implies increases in the production for the external market (blueberries, grapes, and cacao, among other crops).

- b) During the first quarter of 2018, the **fishing sector** grew 6.1 percent. This result, which reflects larger landings of anchovy for industrial consumption than in the same period of the previous year, implied a contribution of 3.4 percentage points to the growth of the sector. Moreover, the catch of species for human consumption, such as parrot fish, mackerel, and bonito, increased as well.

The projected growth of the fishing sector in 2018 has been revised up from 23.5 to 30.0 percent since greater anchovy landings for industrial consumption are foreseen due to the quota of 3.3 million tons assigned for the first fishing season in the north-central area and the levels of fish catch observed in the months of April, May, and June. The levels of anchovy catch associated to this forecast are the highest levels registered since 2011.

A normalization of fishing conditions is expected in 2019 after the events of 2017 favored a recovery of fishing in 2018.

- c) In the first quarter of 2018, the **metal mining subsector** grew 1.7 percent due to higher production of copper, zinc, molybdenum, and iron. On the other hand, there was a lower production of gold in Yanacocha, Barrick, as well as in the artisanal production of gold in Madre de Dios.

The growth forecast estimated for this subsector in 2018 has been revised down, from 2.4 to 0.5 percent. Factors accounting for this lower forecast include mainly the lower expected production of copper resulting from the lower expected mineral grades and from problems in mineral extraction in some mining units as well as the downward revision of some companies' annual production plans. Likewise, gold production has been revised down due to the lower mineral grades obtained in Yanacocha and Barrick due to mineral depletion.





**Table 22**  
**MINING PRODUCTION**  
(% change)

	2015	2016	2017	2018*	2019*
Copper	25.8	40.1	4.5	0.8	4.3
Gold	4.8	4.2	-1.2	-7.8	1.0
Zinc	8.0	-5.9	10.2	2.7	-3.5

\* Forecast.

- d) Production in the **hydrocarbons subsector** dropped 5.9 percent in the first quarter of 2018 due to the lower extraction of natural gas liquids (-17.0 percent) and natural gas (-12.2 percent). This lower production is explained by the lower exports of Lot 56 (Pluspetrol) and by the lower demand for gas of the thermoelectric generation plants, which affects Pluspetrol's Lot 88 mainly. In contrast, oil production recovered with respect to 2017 since Lot 192 did not produce at full capacity in the first quarter of last year.

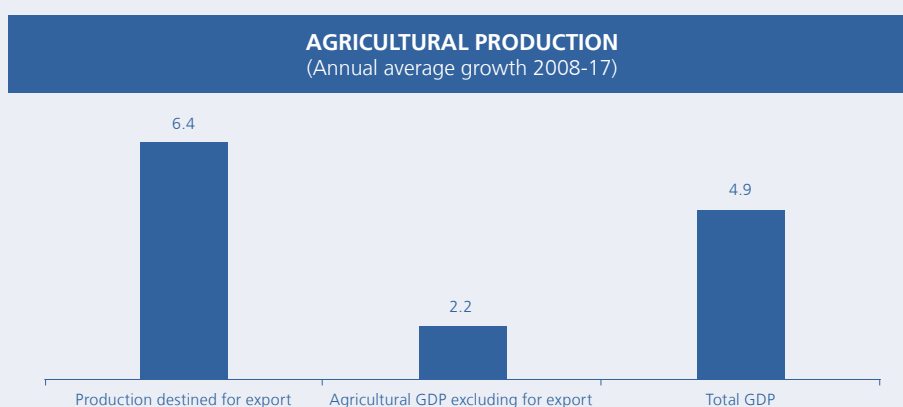
The subsector's projection for 2018 is revised downwards due to the maintenance that Pluspetrol will carry out in the third quarter in Camisea, which will affect the production of gas and liquid gas in that area. As for oil production, it is expected that the Norperuano Pipeline will continue operating and that production will increase in comparison to the previous year. In 2019, the subsector is estimated to grow 7.6 percent due to the recovery of the production of natural gas and natural gas liquids.

- e) Output in **non-primary manufacturing** grew 1.4 percent in the first quarter of 2018 due to the higher production of goods linked to exports and to mass consumption.

In 2018 the sector is projected to recover and grow 3.5 percent, continuing with this path in 2019 with a growth rate of 3.8 percent. This growth trend associated with the estimated recovery of domestic demand would be reflected in a greater production of mass consumer goods, inputs, and capital goods.

**Box 1**  
**DEVELOPMENT OF AGRICULTURAL EXPORTS**

Agricultural production destined for export has grown at an average annual rate of 6.4 percent, higher than the rest of the agricultural sector (2.2 percent) and higher than the economy as a whole. Measured in dollars, the value of agricultural exports grew 9.3 percent per year in the last decade.



In addition to this growth, the products exported show such a diversification that the 3 main export products represented 40.3 percent of total agro-exports in 2000 and 32.1 percent in 2017. Moreover, Peru has gained an international leadership in products such as artichokes, asparagus, avocados, and blueberries, among other crops.

**WORLD RANKING: NON-TRADITIONAL EXPORTS**

Crops	2017
Asparagus	2
Organic Banana	9
Avocados	2
Artichokes	1
Mangoes	3
Blueberries	2
Grapes	4
Tangerines	4
Onion	7
Garlic	9

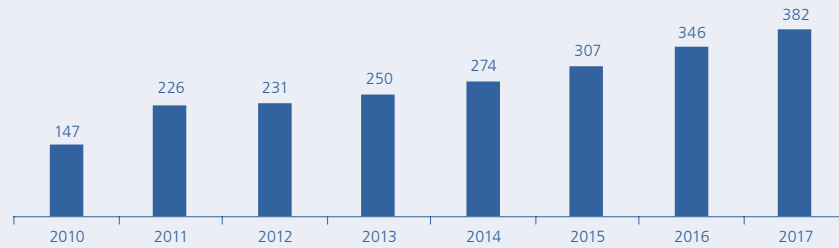
Source: Comtrade, FAO.

This growth of agricultural production for export has brought about a growth in private formal employment in this sector. The number of workers under the Agrarian Promotion Regime has grown by 160 percent in the last 7 years, from 147 thousand to 382 thousand workers.





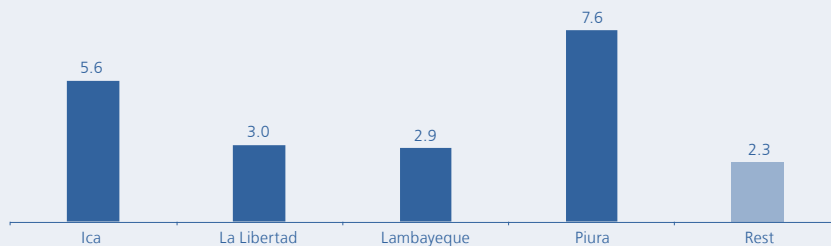
### WORKERS UNDER THE AGRARIAN PROMOTION REGIME (Thousand)



Source: SUNAT.

The reduction of informality and the increase of productivity in the sector have allowed workers with low education levels and high poverty levels to have access to wages on average above the minimum wage (with an average annual growth rate of 2.3 percent, 1.9 percent above the minimum wage). In terms of occupational category, the real income of the salaried labor force has grown 4.5 percent per year on average since 2004, while the income of the independent labor force has grown 2.0 percent. As a result, the ratio of the average income of salaried workers to that of independents rose from 1.4 in 2004 to 1.9 in 2017.

### VALUE ADDED PER WORKER IN THE AGRICULTURAL SECTOR (Annual average growth, 2009-2017)



Source: INEI.

### MINIMUM WAGE AND AVERAGE WAGE ON THE FORMAL AGRICULTURAL SECTOR (S/ of 2017)



Source: MTPE.

**REAL INCOME OF THE SALARIED LABOR FORCE IN THE AGRICULTURAL SECTOR \***  
(S/ of 2017)



\* The average income of the labor force, by occupational category, excludes the unpaid workers and the non-income employed labor force. Besides, the total income per worker of the main occupation is considered.  
Source: INEI.

The higher income generated by the increased demand for labor in those departments with companies under the promotion regime of the agrarian sector has allowed a strong reduction of poverty. In the departments where agro-export companies predominate, the poverty rate has decreased by over 60 percent between 2004 and 2017. The Region of Ica, where the boom of agro-exports began and where poverty has almost been eliminated today, stands out as an example.

**POVERTY 2004-2017**  
(In %)

	2004	2017
<b>Peru</b>	<b>58.7</b>	<b>21.7</b>
Ica	43.1	3.3
La Libertad	58.9	23.5
Lambayeque	58.3	18.5
Piura	73.4	28.7

Source: INEI.

These favorable outcome in terms of production, employment, and the income of workers are the result of the sustained application of a labor and tax regime that takes into account the characteristics of agricultural activity oriented to external markets.

Today, it is estimated that Peru can expand the extension of agricultural land used in modern export-oriented agriculture from 224 thousand hectares to 397 thousand hectares (77 percent) as a result of the development and completion of irrigation projects on the coast (i.e. Chavimochic, Majes Sihuas, Olmos, and Alto Piura) and the inclusion of agricultural land in the Andean areas.







**Box 2**  
**JOBS IN THE FORMAL SECTOR - ELECTRONIC PAYROLL**

The electronic payroll prepared by SUNAT with data on formal employment has recently begun to be processed. This employment indicator is also used by other countries such as the United States<sup>1</sup> and New Zealand<sup>2</sup>.

The recent trends observed in total formal jobs reflect a greater dynamism in employment, which is consistent with the growth of economic activity and domestic demand in recent quarters. Showing a higher rate than the average rate recorded in 2017, jobs at the national level increased 4.0 percent in April in YoY terms, this growth of employment being observed especially in the private sector, both in Lima and in the rest of Peru<sup>3</sup>.

**TOTAL FORMAL JOB ELECTRONIC PAYROLL**  
(12 month % change)



Source: Sunat-Electronic payroll.

The information on formal jobs is consistent with changes in the number of formal jobs reported recently by SUNAT since they share similar growth rates. The difference between the number of jobs and the number of employees is explained by the fact that some job positions may be filled by one single jobholder.

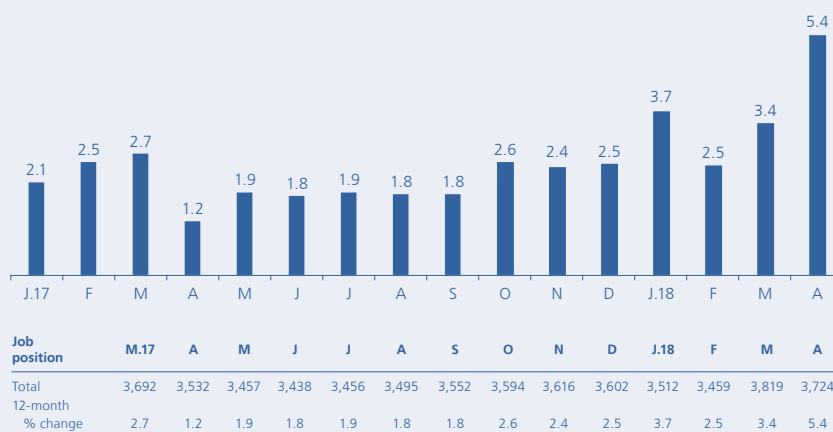
1 [https://www.bls.gov/web/empsit/ces\\_cps\\_trends.htm#intro](https://www.bls.gov/web/empsit/ces_cps_trends.htm#intro)  
 2 [http://archive.stats.govt.nz/browse\\_for\\_stats/income-and-work/employment\\_and\\_unemployment/different-employment-measures.aspx#linked](http://archive.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/different-employment-measures.aspx#linked)  
 3 The distinction about the geographical area is based on the address reported by companies to SUNAT, which may be different from the area where the companies carry out their activities.

NUMBER OF JOBS AND THE NUMBER OF EMPLOYEES				
	In thousand		12 month % change	
	Number of employees	Number of jobs	Number of employees	Number of jobs
<b>2018</b>				
January	4,567	4,902	3.0	3.4
February	4,544	4,853	2.5	2.3
March	4,728	5,196	2.4	2.7

Source: Sunat-Electronic payroll.

The highest growth of formal jobs in recent months has taken place in the private sector, where it grew 5.4 percent in April and 3.2 percent in the first quarter of the year.

### TOTAL FORMAL JOB IN THE PRIVATE SECTOR ELECTRONIC PAYROLL (12 month % change)



Source: Sunat-Electronic payroll.

Moreover, 192 thousand new jobs were created in April 2018, this figure exceeding the one recorded in the last 9 quarters. This growth of formal private employment was observed mainly in the sectors of services (72 thousand jobs) –basically in activities linked to restaurants, telecommunications, and architecture and engineering–; manufacturing (46 thousand jobs) –in activities related to agro-exports mainly –; and agriculture (34 thousand jobs).





**TOTAL FORMAL JOB IN THE PRIVATE SECTOR 1/**  
(Number of jobs)

	2017				2018*				Var. Thousand (12 month)			
	Jan.	Feb.	Mar.	Apr.	Jan.	Feb.	Mar.	Apr.	Jan.	Feb.	Mar.	Apr.
<b>Total 2/</b>	<b>3,387</b>	<b>3,376</b>	<b>3 692</b>	<b>3,532</b>	<b>3,512</b>	<b>3,459</b>	<b>3,819</b>	<b>3,724</b>	<b>126</b>	<b>83</b>	<b>127</b>	<b>192</b>
Agricultural	278	267	310	246	325	274	347	280	46	7	38	34
Fishing	23	22	23	24	23	23	19	20	0	0	-4	-3
Mining	89	90	99	95	100	100	108	103	11	10	9	8
Manufacturing	512	511	542	514	519	515	575	560	7	4	33	46
Of which:												
Agricultural for exports 3/	81	79	76	74	89	83	107	107	8	4	31	33
Others	430	432	466	440	430	432	468	453	0	0	2	12
Electricity	10	11	11	11	11	11	12	11	1	1	0	0
Construction	188	185	187	181	191	190	195	190	3	5	8	8
Commerce	534	531	589	545	547	545	593	563	14	14	4	18
Services	1,578	1,584	1,748	1,733	1,616	1,620	1,782	1,805	38	36	34	72

1/ The payrolls refers to number of jobs. According to Sunat about 149 thousand workers were reported for two or more employers in December 2017.

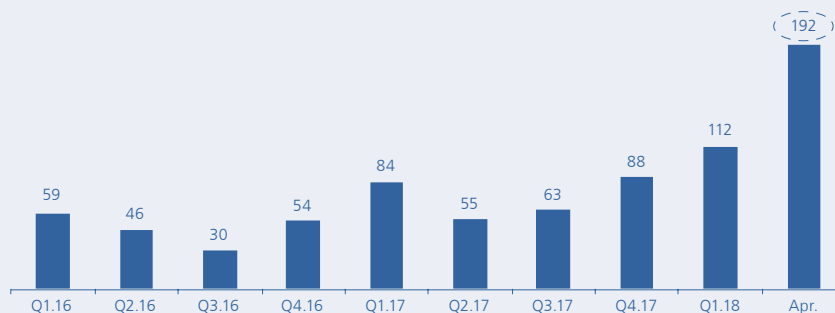
2/ The sum of employment by sectors is not the total due to the number of workers that can not be classified by economic sector.

3/ Processing and preservation of fruits and vegetables.

Source: Sunat-Electronic payroll.

**CHANGE ON FORMAL JOB IN THE PRIVATE SECTOR**

(Thousand jobs, quarterly average)

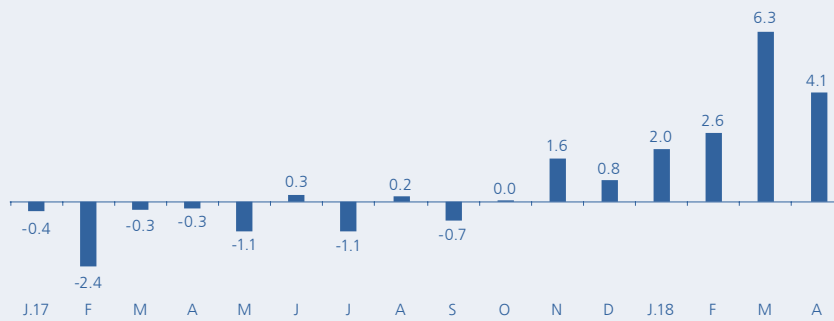


Source: Sunat-Electronic payroll.

Furthermore, showing a higher pace of growth than in the last eight quarters, 112 thousand new jobs were created in already established enterprises in the first quarter of 2018.

On the other hand, based on the income data declared to SUNAT, in April the average real income and the payroll grew 4.1 and 8.0 percent, respectively, the sectors of fishing, mining, commerce, and services accounting mainly for this increase.

**TOTAL AVERAGE INCOME  
ELECTRONIC PAYROLL**  
(12 month % change)



Wage bill	A.17	M	J	J	A	S	O	N	D	J.18	F	M	A
Total (In fixed soles)	1,754	1,694	1,712	2,702	1,675	1,680	1,678	1,692	2,879	1,811	1,853	2,326	1,826
12 month % change	-0.3	-1.1	0.3	-1.1	0.2	-0.7	0.0	1.6	0.8	2.0	2.6	6.3	4.1

Source:Sunat-Electronic payroll.

**TOTAL WAGE BILL  
ELECTRONIC PAYROLL**  
(12 month % change)



Average income	A.17	M	J	J	A	S	O	N	D	J.18	F	M	A
Total (In million fixed soles)	8,652	8,247	8,316	13,173	8,236	8,374	8,444	8,555	14,549	8,906	9,040	12,151	9,341
12 month % change	1.0	0.7	2.0	0.7	2.1	1.2	2.5	3.9	3.2	5.5	5.1	9.4	8.0

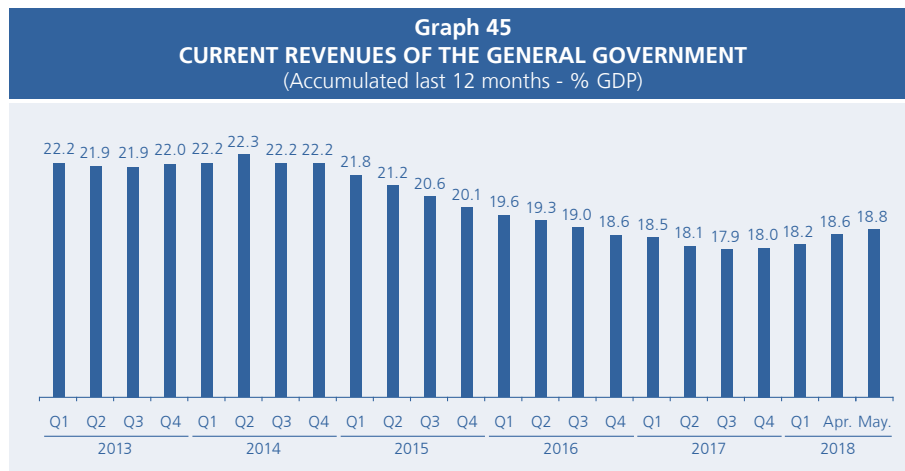
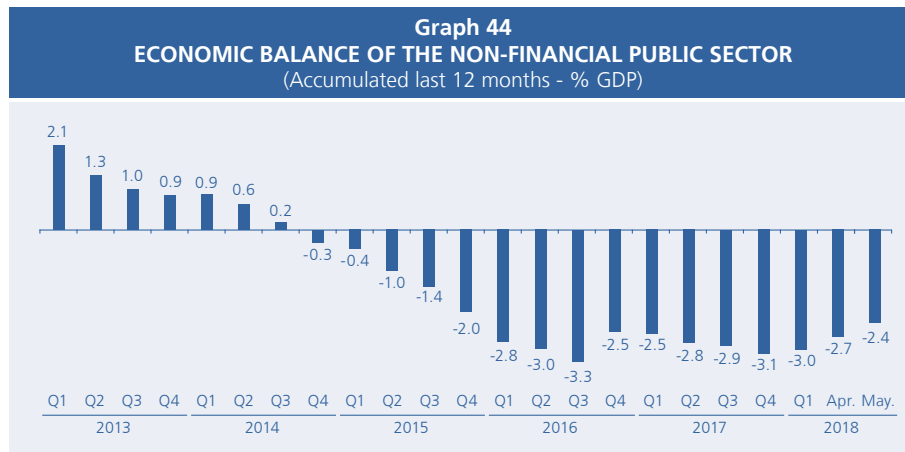
Source:Sunat-Electronic payroll.

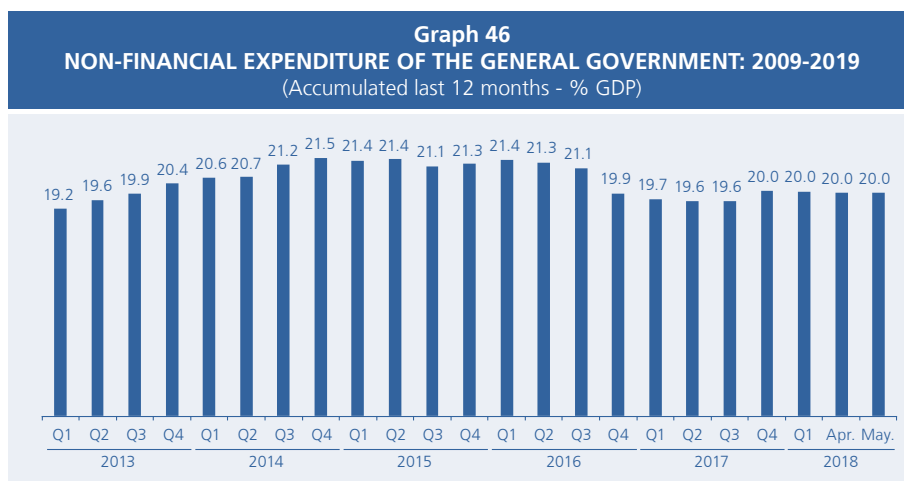




## IV. Public Finances

27. In May 2018, the **fiscal deficit** accumulated in twelve months decreased to 2.4 percent of GDP after having reached a peak of 3.1 percent of GDP at the end of 2017. This reduction of the deficit results from the recovery of the current revenues of the general government due to higher tax revenue from the regularization of the income tax –which reached a historic maximum level–, lower tax refunds, and higher revenue from the value added tax (VAT).





28. The projection of the fiscal deficit growth rate in 2018 has been lowered from 3.5 of GDP in the previous report to 3.1 percent of GDP due to the increase in revenues, although the scenario still considers that the growth of expenditure will be led by public investment. Subsequently, total expenditure would moderate in 2019 to comply with the fiscal deficit rule of 2.9 percent of GDP.

**Table 23**  
**NON-FINANCIAL PUBLIC SECTOR**  
(% GDP)

	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>1. General government current revenues <sup>1/</sup></b>	<b>19.9</b>	<b>18.0</b>	<b>20.4</b>	<b>18.3</b>	<b>18.7</b>	<b>18.5</b>	<b>18.8</b>
<i>Real % change</i>	0.3%	0.4%	7.6%	7.4%	9.6%	5.6%	5.0%
<b>2. General government non-financial expenditure <sup>2/</sup></b>	<b>16.9</b>	<b>20.0</b>	<b>16.9</b>	<b>20.3</b>	<b>20.4</b>	<b>20.0</b>	<b>20.3</b>
<i>Real % change</i>	-2.0%	4.2%	5.7%	7.7%	7.3%	2.5%	4.0%
Of which:							
Current expenditure	13.5	15.3	14.0	15.3	15.4	15.1	15.3
<i>Real % change</i>	-4.3%	3.9%	9.1%	5.9%	6.0%	2.6%	4.0%
Gross capital formation	2.3	4.0	2.4	4.3	4.3	4.3	4.2
<i>Real % change</i>	-13.5%	1.6%	11.8%	15.7%	14.5%	2.9%	2.6%
<b>3. Others</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>
<b>4. Primary balance (1-2+3)</b>	<b>3.1</b>	<b>-1.9</b>	<b>3.5</b>	<b>-2.2</b>	<b>-1.8</b>	<b>-1.6</b>	<b>-1.6</b>
<b>5. Interests</b>	<b>1.9</b>	<b>1.2</b>	<b>2.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>
<b>6. Overall Balance</b>	<b>1.1</b>	<b>-3.1</b>	<b>1.3</b>	<b>-3.5</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.9</b>
<b>Memo:</b>							
Weighted fiscal impulse	0.1	0.0	-0.5	0.5	0.4	-0.2	0.0
Output gap	-1.1	-1.1	-1.0	-0.6	-0.6	-0.1	0.0

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.

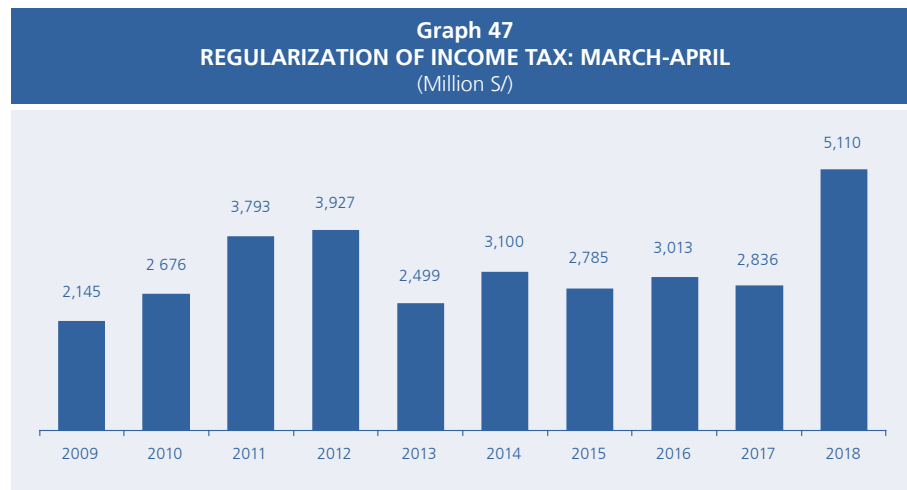
IR: Inflation Report.





### Tax Revenues

29. In January-May 2018, the **current revenues of the general government** increased by 1.8 percentage points of GDP compared to the same period of 2017, reversing the downward trend observed since 2014. This result was mainly due to the increase in revenue from the **income tax** (0.9 percentage points of GDP) associated with the campaign promoting the regularization of the income tax of FY 2017, especially in the case of mining companies (the latter recorded higher profits in the year, in line with the better international prices of metals). On the other hand, 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 the 0.6 point reduction in tax refunds.



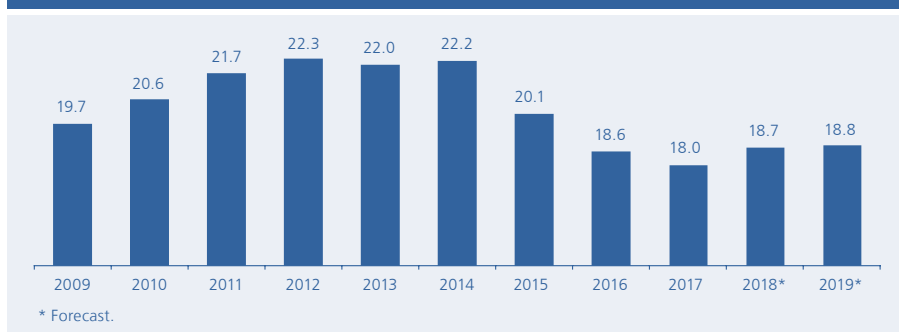
It is estimated that current revenues would reach 18.7 percent and 18.8 percent of GDP in 2018 and 2019, respectively. This scenario of recovery of revenue takes into account the following factors: i) the higher tax revenue of the mining sector associated with the better international prices of metals; ii) the return of tax refunds to their historical levels; iii) the impact of the increase in the excise tax on fuels, automobiles, cigarettes, and alcoholic and sugary beverages, effective since May 2018; and iv) the faster pace of growth of domestic demand.

**Table 24**  
**CURRENT REVENUES OF THE GENERAL GOVERNMENT**  
(% GDP)

	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>TAX REVENUES</b>	<b>14.2</b>	<b>13.3</b>	<b>15.4</b>	<b>13.9</b>	<b>14.2</b>	<b>14.2</b>	<b>14.4</b>
Income tax <sup>1/</sup>	6.6	5.2	6.8	5.4	5.6	5.6	5.7
Value added tax	8.3	7.8	8.5	7.9	8.0	8.0	8.0
Excise tax	1.0	0.9	0.9	0.9	1.0	0.9	1.1
Import duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other tax revenues	1.2	1.6	1.4	1.7	1.7	1.6	1.6
Municipal taxes	0.6	0.4	0.6	0.4	0.4	0.4	0.4
Temporary tax on net assets	0.0	0.7	0.0	0.6	0.6	0.6	0.6
Fines, Tax Amnesty, and regularization	0.2	0.2	0.3	0.2	0.3	0.2	0.2
Special Taxes on Mining	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tax refunds	-3.0	-2.5	-2.4	-2.2	-2.3	-2.1	-2.2
<b>NON-TAX REVENUES</b>	<b>5.7</b>	<b>4.7</b>	<b>5.1</b>	<b>4.4</b>	<b>4.5</b>	<b>4.3</b>	<b>4.4</b>
Contributions to social security	2.2	2.1	2.2	2.1	2.1	2.1	2.1
Own resources and transfers	2.6	1.7	1.7	1.4	1.4	1.4	1.4
Oil and gas royalties and other royalties	0.6	0.6	0.7	0.6	0.7	0.6	0.6
Other	0.3	0.4	0.4	0.3	0.3	0.3	0.3
<b>TOTAL</b>	<b>19.9</b>	<b>18.0</b>	<b>20.4</b>	<b>18.3</b>	<b>18.7</b>	<b>18.5</b>	<b>18.8</b>

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

**Graph 48**  
**CURRENT REVENUES OF THE GENERAL GOVERNMENT: 2009-2019**  
(% GDP)



## Public Expenditure

30. In the period of January-May 2018, the **non-financial expenditure** of the general government grew 6.3 percent in real terms compared to the same period of 2017,







the higher increases being recorded in salaries and wages and in investment. The increase in the case of the former was due to salary rises implemented in 2017, mainly to teachers and health professionals, while the increase in the case of the latter was associated mostly with a greater execution of road projects for the Pan American Games and with the project of Line 2 of Lima's Metro. This increase in spending was in part offset by lower capital transfers given the extraordinary transfer made for the capitalization of Petroperú in the previous year.

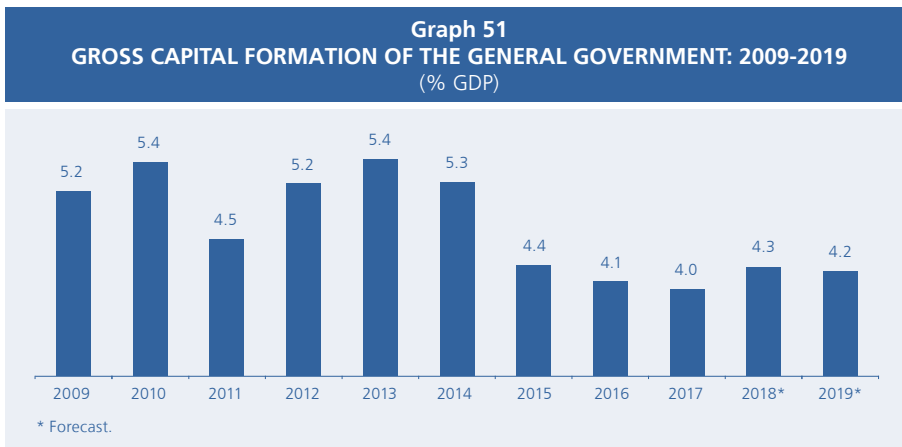
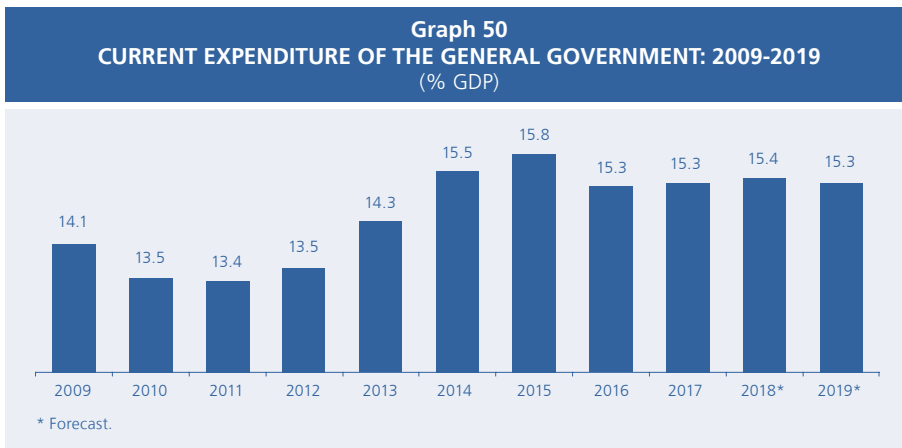
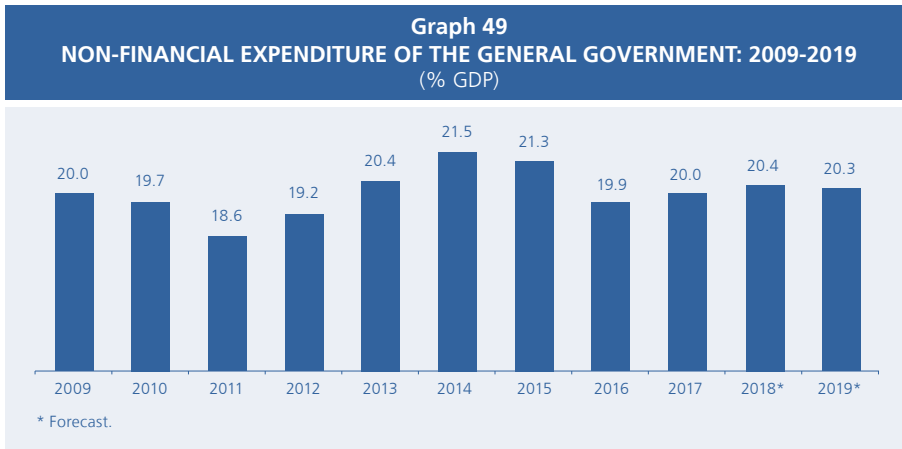
In 2018, expenditure would represent 20.4 percent of GDP, 0.4 percentage points of GDP more than in 2017. This projection is based, on the one hand, on the assumption that current expenditure would show a more moderate pace of growth in the rest of the year than that observed in the first months of 2018, reflecting, in part, the application of austerity measures in the acquisition of goods and services approved in May (Emergency Decree 005-2018). On the other hand, the emphasis on investment spending is mainly the execution of projects and public works within the framework of the Plan of Reconstruction with Changes and the Pan American Games.

Moreover, in 2019 expenditure would reach 20.3 percent of GDP, 0.1 percentage points less than in 2018, following the process of consolidating expenditure that would start in 2019.

**Table 25**  
**NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT**  
(% GDP)

	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>Current expenditure</b>	<b>13.5</b>	<b>15.3</b>	<b>14.0</b>	<b>15.3</b>	<b>15.4</b>	<b>15.1</b>	<b>15.3</b>
National Government	9.2	10.5	9.4	10.5	10.5	10.2	10.5
Regional Governments	2.8	3.3	3.1	3.2	3.2	3.2	3.2
Local Governments	1.5	1.6	1.5	1.6	1.6	1.7	1.7
<b>Capital expenditure</b>	<b>3.4</b>	<b>4.7</b>	<b>3.0</b>	<b>5.0</b>	<b>5.0</b>	<b>4.9</b>	<b>5.0</b>
<b>Gross capital formation</b>	<b>2.3</b>	<b>4.0</b>	<b>2.4</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>	<b>4.2</b>
National Government	0.7	1.4	0.9	1.5	1.5	1.6	1.7
Regional Governments	0.5	0.8	0.4	0.9	0.9	0.8	0.8
Local Governments	1.1	1.8	1.1	1.9	1.9	1.9	1.8
<b>Others</b>	<b>1.1</b>	<b>0.7</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>
<b>TOTAL</b>	<b>16.9</b>	<b>20.0</b>	<b>16.9</b>	<b>20.3</b>	<b>20.4</b>	<b>20.0</b>	<b>20.3</b>
National Government	11.0	12.5	10.7	12.7	12.6	12.4	12.8
Regional Governments	3.2	4.1	3.5	4.1	4.2	4.0	4.0
Local Governments	2.6	3.4	2.7	3.6	3.6	3.6	3.5

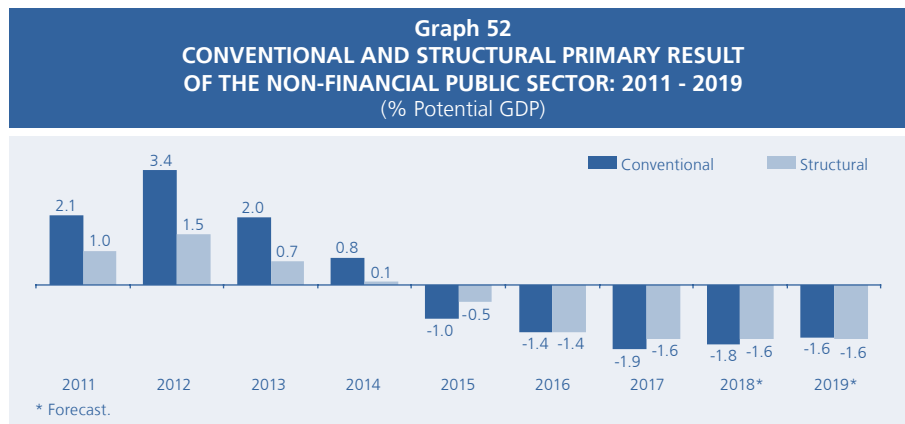
\* Forecast.  
IR: Inflation Report.



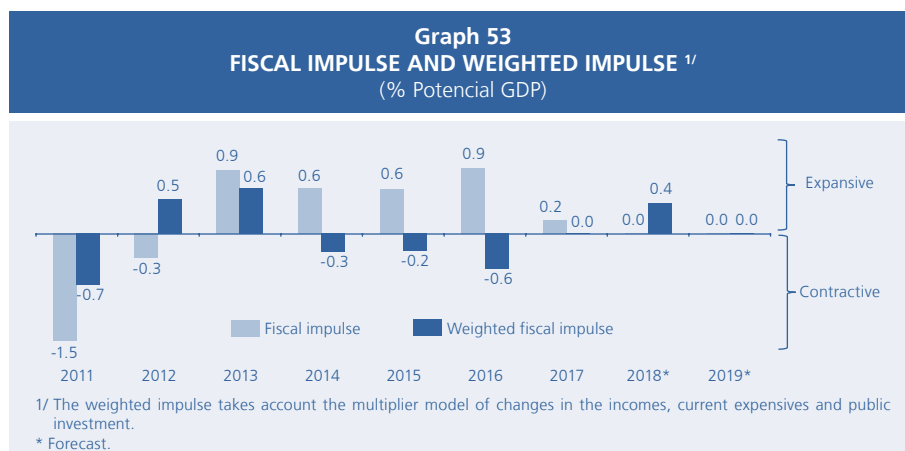


### Structural Primary Balance and Fiscal Impulse

31. The primary balance reflects the difference between income (both current and capital income) and current and capital expenditure, without taking into account the net maturities of the interests of the domestic public debt and the external debt. 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 continue to be observed in 2018 and 2019.



The **fiscal impulse** measures the change in the fiscal stance, isolating the endogenous factors of the macroeconomic variables of the fiscal accounts. In order to determine the effect of tax policies on the level of economic activity, we weigh it according to the differentiated multiplier effect of changes in the treasury's revenues and expenditures. Taking this into account, it is projected that the weighted fiscal impulse in 2018 will be 0.4 percentage points of the potential output due mainly to the growth of investment. In 2019 the **weighted fiscal impulse** would be nil, in line with the reduction of expenditure programmed.



**Table 26**  
**FISCAL WEIGHTED IMPULSE**  
(% Potential GDP)

	2015	2016	2017	2018*	2019*
<b>1. Fiscal impulse (a+b)</b>	<b>0.6</b>	<b>0.9</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>
a. By revenues	0.9	1.6	0.3	-0.4	0.0
b. By expenditures (i+ii)	-0.3	-0.7	-0.1	0.4	0.0
i. Current <sup>1/</sup>	0.2	0.0	-0.2	0.1	0.0
ii. Capital	-0.4	-0.7	0.1	0.3	0.0
<b>2. Weighted fiscal impulse <sup>2/</sup></b>	<b>-0.2</b>	<b>-0.6</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>
a. By revenues	0.2	0.4	0.1	-0.1	0.0
b. By expenditures (i+ii)	-0.5	-1.0	-0.1	0.5	0.0
i. Current <sup>1/</sup>	0.2	0.0	-0.1	0.1	0.0
ii. Capital	-0.6	-0.9	0.1	0.4	0.0

1/ Includes public enterprises.

2/ Weighted by 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.

\* Forecast.

## Public Debt

32. The **financing required** to cover the fiscal deficit and the amortization of the public debt would decline from S/ 39 billion in 2017 to S/ 28 billion in 2019. In GDP terms, these financial requirements decrease from 5.6 percent of GDP in 2017 to 3.5 percent of GDP in 2019. This reduction is explained mainly by the fact that there was an extraordinary repayment of the external debt as a result of a debt management operation.

**Table 27**  
**FINANCIAL REQUIREMENTS OF THE NON-FINANCIAL PUBLIC SECTOR AND ITS FUNDING**  
(Million soles)

	2017		2018*			2019*	
	Q1	Year	Q1	IR Mar.18	IR Jun.18	IR Mar.18	IR Jun.18
<b>I. USES</b>	<b>-434</b>	<b>39,428</b>	<b>-256</b>	<b>29,912</b>	<b>27,109</b>	<b>27,911</b>	<b>27,986</b>
1. Amortization	1,391	17,695	1,980	3,662	3,808	5,007	5,048
a. External	754	13,566	472	1,510	1,600	3,731	3,771
b. Domestic	637	4,130	1,507	2,153	2,209	1,276	1,276
<i>Of which: Recognition bonds</i>	<i>203</i>	<i>818</i>	<i>538</i>	<i>825</i>	<i>941</i>	<i>658</i>	<i>658</i>
2. Overall balance (Negative sign indicates surplus)	-1,825	21,733	-2,236	26,250	23,300	22,903	22,938
<b>II. SOURCES</b>	<b>-434</b>	<b>39,428</b>	<b>-256</b>	<b>29,912</b>	<b>27,109</b>	<b>27,911</b>	<b>27,986</b>
1. Disbursements and other	5,467	33,080	2,674	19,074	17,703	22,835	22,841
2. Change on deposits and other <sup>1/</sup>	-5,901	6,348	-2,930	10,838	9,405	5,076	5,146
Memo:							
<u>% GDP</u>							
Gross debt balance	23.7	24.8	26.2	25.3	25.2	26.3	26.1
Net debt balance <sup>2/</sup>	6.8	9.5	12.6	12.3	11.8	14.8	14.1

1/ A positive sign indicates a reduction of deposits.

2/ Defined as the difference between gross public debt and NFPS deposits.

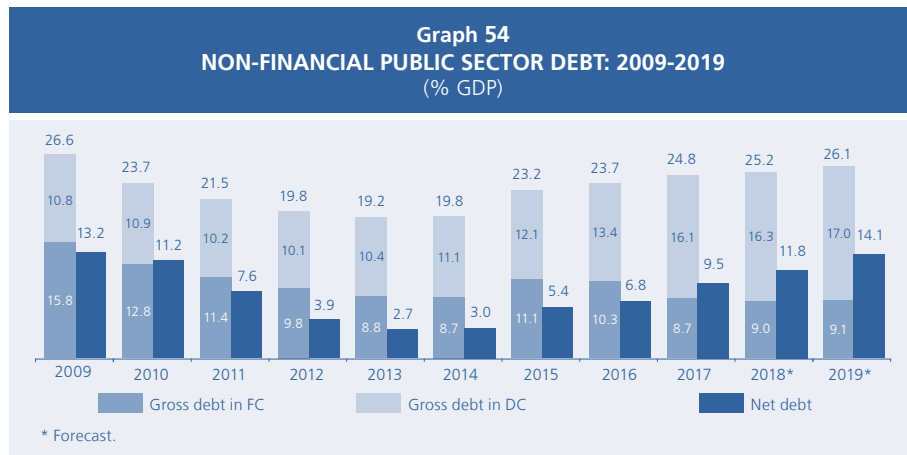
\* Forecast.

IR: Inflation Report.

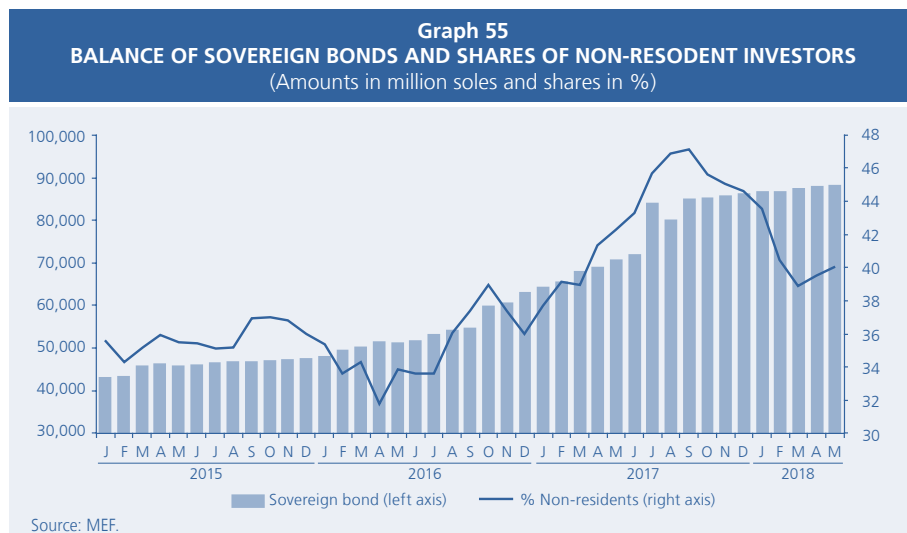




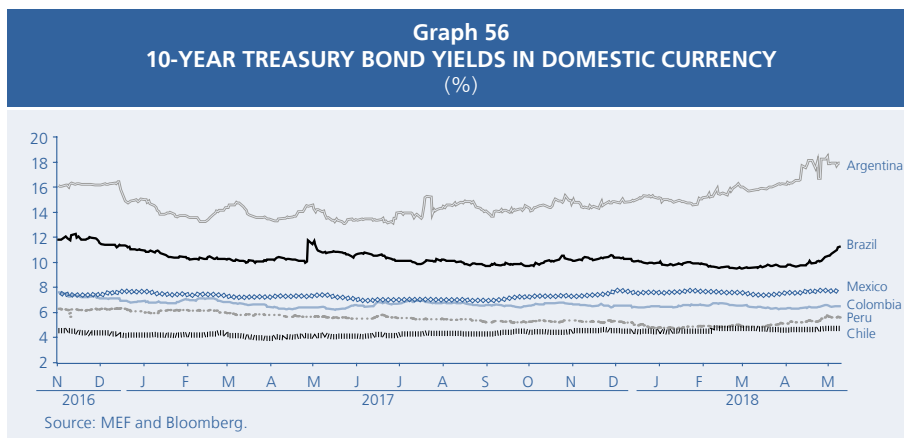
The **balance of the gross debt of the non-financial public sector** would be equivalent to 26.1 percent of GDP at the end of the forecast horizon. It is worth noting that the ratio of local currency in the debt portfolio would reach 65 percent in 2019, 25 percentage points of GDP above the ratio recorded at the end of 2009. On the other hand, the net debt would increase to 14.1 percent of GDP by 2019.



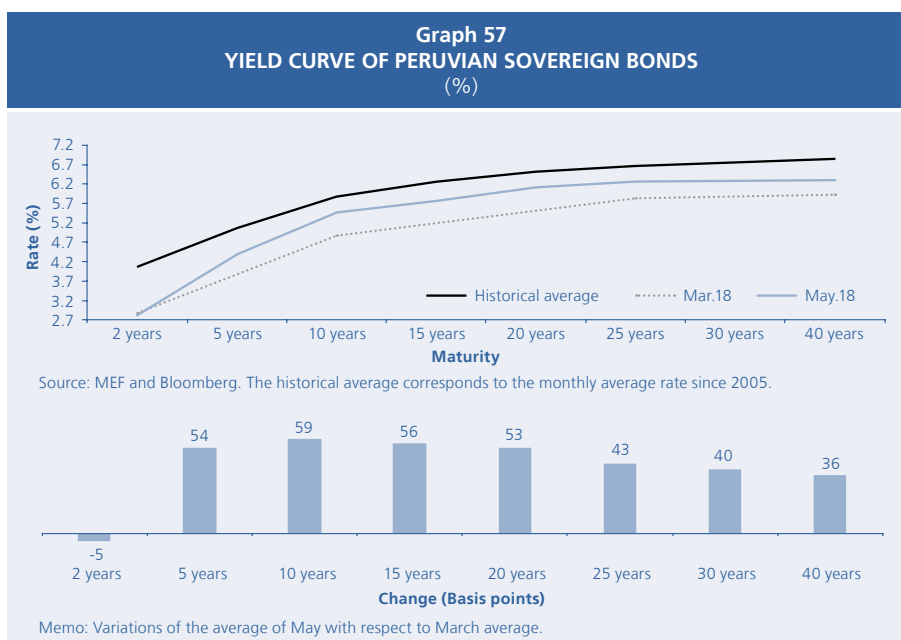
33. The balance of Peru's **sovereign bonds** in May 2018 was S/ 88.48 billion, S/ 823 million higher than the balance in March 2018. The participation of non-resident investors stands out as the main investors in these securities since their bond holdings increased from S/ 34.11 billion in March to S/ 35.37 billion in May in a context still marked by risk aversion in the emerging economies. On the other hand, administrators of private pension funds (AFPs) stand out as the main suppliers of sovereign bonds, their sales of bonds amounting to a total of S/ 2.37 billion.



In the region, the interest rates on 10-year bonds in local currency rose by an average of 92 basis points between March and May 2018. Higher risk aversion in international financial markets, together with regional volatility, have affected the interest rates of government debt securities. It is worth pointing out that Peru has one of the lowest interest rate levels for a 10-year bond, only Chilean bonds having a lower interest rate.



In Peru, the yield curve of sovereign bonds showed declines in bonds with maturities due in terms longer than 5 years, in line with the increase in the interest rate of the 10-year US Treasury bonds. It should be noted that the interest rates on sovereign bonds are lower than their historical average levels.



**Box 3****IMPACT OF RECENT CHANGES IN THE EXCISE TAX ON INFLATION AND TAX REVENUE**

The excise tax was amended in the month of May so that it would include fuels, sugary drinks, alcoholic beverages, cigarettes, and motor vehicles. It is estimated that these changes will increase revenues from this tax by S/ 2.41 billion in an annual period, which is equivalent to 0.3 percent of GDP. The effect on the Consumer Price Index (CPI), on the other hand, is estimated at 0.3 percent.

The increase in the excise tax on **fuels** was higher in the case of diesel, 84 octane gasohol and residuals, which are types of fuel that are more harmful to the environment. It is worth mentioning, however, that there is still a subsidy of S/ 0.37 per gallon for the diesel used by cars that is covered by the Fuel Price Stabilization Fund.

It is also worth mentioning that, after taking this measure, the government reached an agreement with public transportation unions and accepted to return part of the diesel tax to transporters, which would affect the harmfulness criterion associated with this tax increase as well as future collection.

**EXCISE TAX ON FUELS**

Fuels	Excise tax (S/ per gallon)			Harmfulness index
	Previous	Actual	Change	
Diesel B5	1.40	1.70	0.30	14.9
Diesel B5 (S-50)	1.10	1.49	0.39	12.2
Gasohol 84 Plus	0.88	1.22	0.34	30.2
Gasohol 90 Plus	0.99	1.16	0.17	7.5
Gasohol 95 Plus	1.07	1.13	0.06	5.2
Gasohol 97 Plus	1.13	1.13	-	5.2
Gasohol 98 Plus	1.13	1.13	-	5.2
Industrial fuel 6	0.68	0.92	0.24	27.9
Industrial fuel 500	0.63	1.00	0.37	37.8

On the other hand, a new structure of the excise tax was established for **alcoholic beverages**, which sets progressive tax rates for these beverages depending on their alcohol content.

Alcoholic Beverages	Previous excise tax		Actual excise tax		Differences	
	Rate	S/ x Liter	Rate	S/ x Liter	Rate	S/ x Liter
Vol % alcohol:						
0 - 6° (Beer)	30%	1.25	35%	1.25	5%	0.00
6 - 12°	25%	2.50	25%	2.50	0%	0.00
12 - 20° (Wines)	25%	2.50	30%	2.70	5%	0.20
+ 20° (Ron, Whiskey)	25%	3.40	40%	3.40	15%	0.00

An additional tax was also established on **non-alcoholic beverages** with a sugar content of more than 6 gr. per ml. with the aim of contributing to reduce the negative effect of

sugar consumption on health. This measure will affect sugary waters and soft drinks, which generally exceed the sugar content limit.

Goods		Excise tax (%)		
		Previous	Actual	Change
Non-alcoholic beverages except fruit or vegetable juices. Includes mineral and carbonated water, with more sugar or other sweetener or flavored and beer without alcohol.	Sugar content < 6 g/100ml	17%	17%	-
	Sugar content >= 6 g/100ml	17%	25%	8%

On the other hand, the excise tax on **cigarettes** was increased from S/ 0.18 to S/ 0.27 per unit, which implies an effect of 9 percent on the final price.

Goods	Excise tax (S/ per unit)		
	Previous	Actual	Change
Black tobacco cigarettes and blond tobacco cigarettes	0.18	0.27	0.09

The structure of the excise tax on **automotive vehicles** was modified according to the type of fuel they use, penalizing more polluting fuels such as diesel while favoring the use of gas, dual fuel, hybrid, or electric systems. The tax is extended to include motorcycles as well and maintains a higher tax rate for used vehicles.

It should be pointed out that new gasoline cars, which were previously not taxed, will now have an excise tax of 10 percent. On the other hand, the 10 percent tax on dual system vehicles (gas-gasoline, gas-diesel), hybrids (piston engine and electric), and electric vehicles has been eliminated for new vehicles, while the tax rate for used cars has been lowered from 30 to 10 percent. Additionally, the excise tax on all new cargo vehicles has been eliminated.

#### EXCISE TAX ON AUTOMOTIVE VEHICLES

	Previous		Actual		Weight CPI	Change	
	New	Used	New	Used		New	Used
<b>Cars (CPI)</b>					<b>1.57</b>		
Hybrids, gas, and electric system 1/	10%	30%	0%	10%		-10%	-20%
Gasoline	-	30%	10%	40%		10%	10%
Diesel	10%	30%	20%	40%		10%	10%
Pick-ups	10%	30%	0%	40%		-10%	10%
Motorcycles							
Electric systems	-	-	0%	10%		-	10%
Gasoline	-	-	10%	40%		10%	40%
Buses	-	30%	-	40%		-	10%
Trucks	-	30%	-	40%		-	10%

1/ The new cars using gas and dual (gas-gasoline) remain with a 0% tax rate.







### Impact of These Measures

In terms of revenue, it is estimated that these series of excise tax measures will increase tax revenues by S/ 2.41 billion per year (0.3 percent of GDP), of which S/ 2.12 billion would come from the excise tax and the rest from the associated VAT (given that the excise tax is part of the tax base of the VAT). This would contribute to close in part the deficit from the source of ordinary resources this year.

#### IMPACT OF THESE MEASURES IN TERMS OF REVENUE

(Million S/)

Item	Excise tax	VAT 1/	Total
Fuels	754	47	800
<i>Gasohol and gasoline</i>	116	7	123
<i>Diesel</i>	624	39	663
<i>Rest</i>	14	0	14
Cigarettes	62	11	73
Sugar beverages drinks	226	41	267
Alcoholic beverages	484	87	572
Vehicules	589	106	695
<b>Total</b>	<b>2 116</b>	<b>292</b>	<b>2 407</b>

1/ 35% of consumption corresponds to households, in case of gasoline.

Finally, the direct impact of these changes in the excise tax is expected to be a one-time increase in the prices of the goods affected, given the price variations and the weight of the goods in the CPI basket. Assuming that the increases in the excise tax are completely transferred to the final price of the goods, these modifications would have at most a total direct impact of 0.3 percentage points on inflation.

#### LONG-TERM EFFECT OF THE EXCISE TAX INCREASE ON INFLATION

Item	Change on the excise tax	Weight		Estimation		
		Implicit to April 2018	% chg.	Weighted contribution in p.p.		
<b>CPI excluding food and energy</b>						
Purchase of vehicules 1/	0% to 10%	1.57	10.0	<b>0.16</b>		
Cigarretes 2/	S/ 0.18 to S/ 0.27	0.25	9.0	<b>0.02</b>		
<b>Food and energy</b>						
Beberages and sodas 3/	17% to 25%	1.22	6.8	<b>0.08</b>		
Beer 4/	30% to 35%	0.84	3.8	<b>0.03</b>		
Gasoline and lubricants 5/		1.19	2.2	<b>0.03</b>		
Beverages with a high alcohol content 6/	25% to 40%	0.04	13.1	<b>0.00</b>		
Beverages with low alcohol content 7/	25% to 30%	0.09	4.0	<b>0.00</b>		
<b>Total</b>				<b>0.33</b>		

The percentage margins of sales with respect to final prices remain constant.

1 / Increase for new cars using gasoline. Total of the item corresponds to this type of vehicles.

2 / Average price of S / 0.50.

3 / Impact is only for soft drinks and not for other non-alcoholic beverages with total sugar content equal to or greater than 6g / 100ml.

4 / Corresponds to alcoholic beverages from 0 to 6 degrees of alcohol.

5 / Impact is on diesel, gasoline 84, 90 and 95.

6 / Impact is on ron and whiskey.

7 / Impact is on wine (between 12 and 20 degrees of alcohol); average price of S / 20.

**Box 4**  
**MECHANISM OF EFFECTIVE PUBLIC INVESTMENT**  
**FOR THE 2019 PAN AMERICAN GAMES**

In October 2013, Lima was selected as the host city of the XVIII Pan American Games and VI Parapan American Games (hereinafter Pan American Games) to be held between July 26 and August 11, 2019 and between August 23 and September 1, respectively.

Hosting this event requires the construction and remodeling of sports infrastructure and related road works, the National Government and the Municipality of Metropolitan Lima being in charge of carrying out these projects. The sports infrastructure includes eight major public investment projects, along with the construction of temporary infrastructure and renting other venues, while the road infrastructure includes thirteen road works. All of these projects would account for 30 percent of the estimated growth of public investment in 2018.

A more expeditious public investment mechanism had to be established in order to be able to meet the deadlines and have the world-class infrastructure required for this event.

**Sports infrastructure**

In April 2017, the Peruvian government signed a government-to-government assistance and collaboration agreement with the Department of International Trade of the United Kingdom for the organization of the Pan-American Games due to the experience this entity had had in organizing the London 2012 Olympic Games.

The contracting team is in charge of developing previous actions, the pre-qualification stage, and the bidding process, among other actions. It also has established specific deadlines, and promoted participation and competence. In the previous stage, bidders were required to submit not only the audited financial statements of the last three years, but also to sign a commitment to integrity within the framework of an anti-corruption policy.

The contract modality used is the New Engineering Contract (NEC 3). It is worth highlighting that the characteristics of NEC 3 contracts reduce the likelihood of disputes between the contracting parties and the simple language used in the contracts reduces the margins of legal interpretation in contract execution. In addition, these contracts establish incentives for a more expeditious physical execution of the projects and for the reduction of the cost of the works, without compromising the quality of the same, as well as objective responsibilities for each of the parties and a dispute resolution mechanism considering mainly the technical aspects involved.

In the projects in which the NEC 3 is implemented, the winning bidder assumes responsibility for the project and manages it, but may subcontract the preparation of the technical file, the execution, and the supervision of the project work. The calling entity is responsible for





overseeing contract execution. It is worth pointing out that the integration of the design –the development of the technical file– and construction contributes to a better control of risks in project implementation.

The execution of five projects has been awarded within the framework of this experience:

- Villa Panamericana to Besco-Besalco consortium in September 2017<sup>4</sup>.
- Villa Deportiva Nacional (VIDENA) to COSAPI in December 2017.
- Complejo Deportivo Villa María del Triunfo to Sacyr-SACEEM consortium in December 2017.
- Complejo Deportivo Yahuar Huaca to Sacyr in March 2018.
- Polideportivo de Gimnasia to consortium Obrascom-JE Constructores Generales in March 2018.

Competition in the selection process is a particularly important aspect to highlight. In the process of the Pan American Village, for example, 300 companies submitted proposals initially, 59 passed the first stage, 44 the second (pre-qualification), and 7 companies participated in the third stage.

The execution of the sports infrastructure projects for the Pan American Games has been carried out as programmed. The eight main projects have a Modified Institutional Budget (MIB) of S/ 1.04 billion for this year and show a level of progress of 19 percent in the month of May. It should be pointed out that 92 percent of the MIB was executed in 2017.

#### PAN AMERICAN GAMES: SPORTS INFRASTRUCTURE (Million S/)

Item	Cost	Award date	End of work	Contract amount	Execution 2017	MIB 2018	Accrued Jan-May.18
Villa Panamericana	412	Sep.2017	Feb.2019	324	123	200	50
VIDENA	625	Dec.2017	Mar.2019	490	152	342	38
Complejo Deportivo Villa María del Triunfo	270	Dec.2017	Mar.2019	226	75	162	16
Polideportivo de Gimnasia	139	Mar.2018	Mar.2019	90	3	95	34
Parque Zonal Yahuar Huaca	258	Mar.2018	Mar.2019	152	8	148	56
Club de Tiro	50	In bidding	Feb.2019	-	0	38	0
Club Ecuestre	48	In bidding	Mar.2019	-	0	41	1
Centro Alto Rendimiento de Surf. Punta Negra	28	-	Jun.2019	-	0	18	0
<b>TOTAL</b>	<b>1,832</b>			<b>-</b>	<b>361</b>	<b>1,044</b>	<b>196</b>

Source: MEF and COPAL.

<sup>4</sup> The original project of the Pan American Village was redesigned from a project that consisted of the construction of twenty seven-floor buildings to a project that included seven buildings, each with twenty storeys, with the consequent provision of additional areas with commercial value. Another project of the Pan-American Games (the Gymnastics Sports Center) is being carried out in part of this area.

## Roadworks

Law No. 30624, approved in June 2017, authorized the Ministry of Transportation and Communications (MTC) to make financial transfers to the Municipality of Metropolitan Lima for up S/ 374 million in 2017 to finance the execution of road works within the framework of the Pan American Games projects. Additional authorizations were made thereafter.

In December 2017, the Municipality of Lima signed a Resource Management Agreement with the International Organization for Migration (IOM) for the execution of the project entitled "Road Works to Improve Accessibility to the Pan American Games, Lima 2019" (*Obras Viales para la Accesibilidad de los Juegos Panamericanos y Parapanamericanos Lima 2019*) and the transference of S/ 113.3 million for the execution of two projects. In April 2018, it approved an addendum to transfer S/ 478.4 million to IOM for the execution of six road projects, and in May, an additional addendum to transfer of S/ 308.2 million for the execution of one project. These projects will be financed with the resources transferred by the MTC and the Municipality of Lima.

### PAN AMERICAN GAMES: ROADWORKS (Million S/)

Item	Cost	Award date	MIB 2018	Accrued Jan-May.18
Av. Nicolás Arriola. Tranche: Javier Prado - Circunvalación	58	May.2018	56	55
Connection Costa Verde and Bajada Armendáriz	52	May.2018	52	52
Av. Los Héroes, Av. Pachacútec, and others	304	In bidding	274	273
Antigua Panamericana Sur: Puente Arica - Santa María del Mar	113	In bidding	113	113
Antigua Panamericana Sur: Mateo Pumacahua - Conchán	90	In bidding	90	90
Antigua Panamericana Sur: Av. Pedro Miota	39	In bidding	39	39
Av. Costa Verde: Tranche Av. Rafael Escardó - Jr. Virú	322	-	271	1
Av. La Molina: Tranche Javier Prado - Av. Melgarejo	32	-	12	12
Av. Paseo de la República: Tranche Av. Domingo Orué - Av. Aramburú	14	-	14	14
Av. Agustín de la Rosa Toro and Av. del Aire	17	-	17	17
<b>TOTAL</b>	<b>1 041</b>	<b>-</b>	<b>937</b>	<b>666</b>

Source: MEF and IOM.



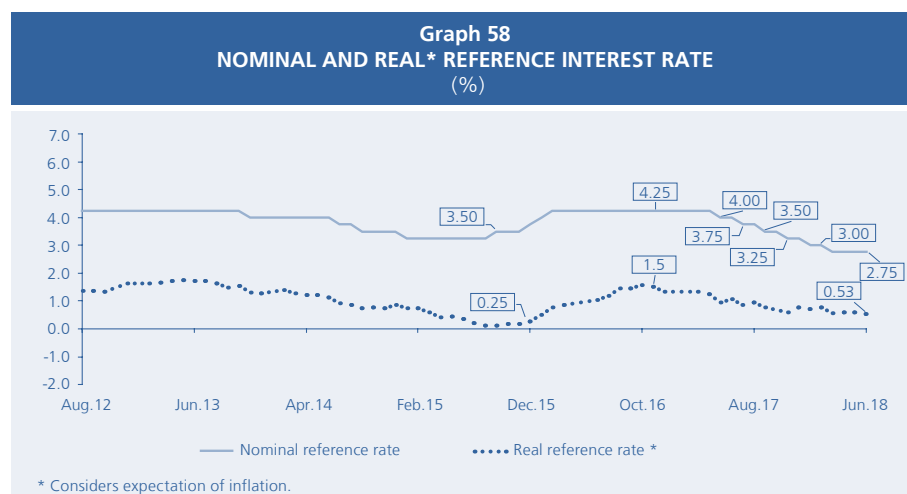


## V. Monetary Policy and Financial Markets

### Monetary Policy Actions

34. In the second quarter of 2018, the **monetary policy** actions of BCRP continued to be oriented to 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 cyclical recovery of economic activity and by the reversal of supply shocks, which have reflected in a rate of inflation that is transitorily below the lower band of the inflation target range (1.0 percent).

In this context, the Board of BCRP maintained the **benchmark interest rate** at 2.75 percent in this quarter, in line with the information provided in the monetary policy communiqués. In its communiqué of June, the Board said 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 at 0.5 percent, below its natural level which is estimated at 1.75 percent. This monetary

policy stance is consistent with a level of inflation that returns to the target range in the second quarter of 2018 and converges gradually to 2 percent by the end of the year.

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

i. **Year-on-year inflation** reached a bottom level of 0.4 percent in March and then increased to 0.93 percent in May, a rate still below the lower band of the target range (1.0 percent). This result is mainly explained by the reversal of supply shocks amid a context in which economic activity is lower than its potential level of growth. On the other hand, measurements of trend inflation show rates near the middle of the target range.

Moreover, inflation without food and energy remained around the midpoint of the inflation target range, rising from 1.97 percent in February to 2.0 percent in May.

ii. **Expectations of inflation in 12 months** remained around 2.2 percent until May 2018.

iii. Indicators of **economic activity** show clear signals of a greater 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 quarter of the year would indicate that there are no demand inflationary pressures.

iv. The **world economy** continues to show favorable indicators, although uncertainty is still observed in international financial markets.

### Interest rates

36. Expansionary monetary conditions in recent months have allowed **interest rates** in the money and credit markets to fall below their historical average levels. Between March and May of 2018, the interbank rate stood at its benchmark level, while the 3-month corporate lending prime rate registered 3.33 percent in the same period, in line with lower expectations of a reduction of the benchmark rate. Moreover, the interest rates in the credit market fell by an average of 46 basis points in five of the six loan segments, the consumer segment standing out since its rate decreased from 43.9 to 41.6 percent.

On the other hand, the interest rates on 30-day deposits registered 2.69 percent (88 basis points below their historical average level) and the rates on deposits for terms up to 360 days registered 3.16 percent (103 basis points below their historical average level).



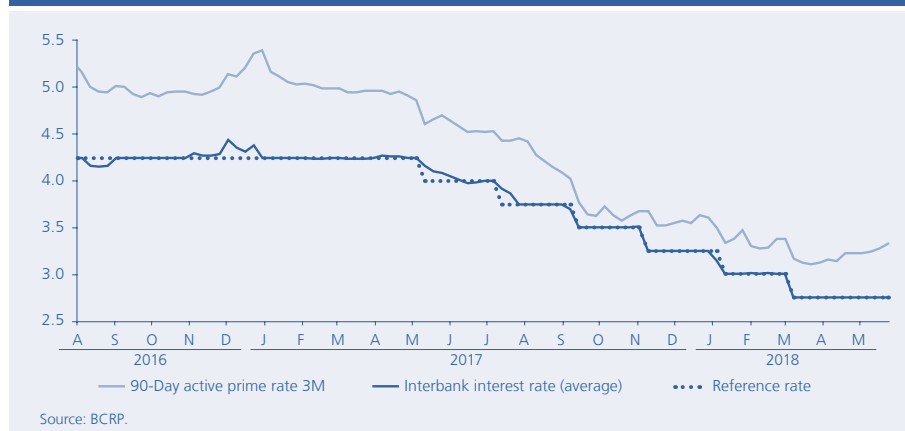


**Table 28**  
**INTEREST RATE IN DOMESTIC CURRENCY**  
(%)

	Dec.15	Dec.16	Mar.17	Jun.17	Sep.17	Dec.17	Mar.18	Apr.18	May.18	Average Hist.
<b>Passive</b>										
Deposits up to 30-day	3.88	4.31	4.05	3.89	3.08	2.97	2.65	2.59	2.69	3.57
On 31 to 180-day term deposits	4.53	4.73	4.42	4.18	3.60	3.30	2.76	2.69	2.76	3.75
On 181 to 360-day term deposits	4.77	4.86	4.77	4.35	4.08	3.61	3.19	3.08	3.16	4.19
<b>Active</b>										
90-day corporate prime	5.01	5.37	4.97	4.53	3.64	3.63	3.11	3.22	3.33	4.68
Corporates	6.18	5.88	5.78	5.31	4.49	4.03	3.75	3.94	4.07	5.57
Large companies	7.12	7.12	7.52	7.04	6.68	6.23	6.41	6.12	6.20	7.10
Medium-sized enterprises	10.23	10.39	10.47	10.56	10.42	9.68	9.76	9.97	9.71	10.50
Small businesses	20.45	21.65	21.54	20.78	20.27	19.76	19.78	19.57	19.32	21.67
Consumer	44.03	46.77	45.24	45.64	48.34	48.56	43.94	41.49	41.59	41.88
Mortgage	8.95	8.52	8.73	8.53	8.05	7.65	7.42	7.42	7.39	8.93

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

**Graph 59**  
**90-DAY CORPORATE PRIME, INTERBANK OVERNIGHT, AND REFERENCE RATE**  
**IN DOMESTIC CURRENCY**  
(%)



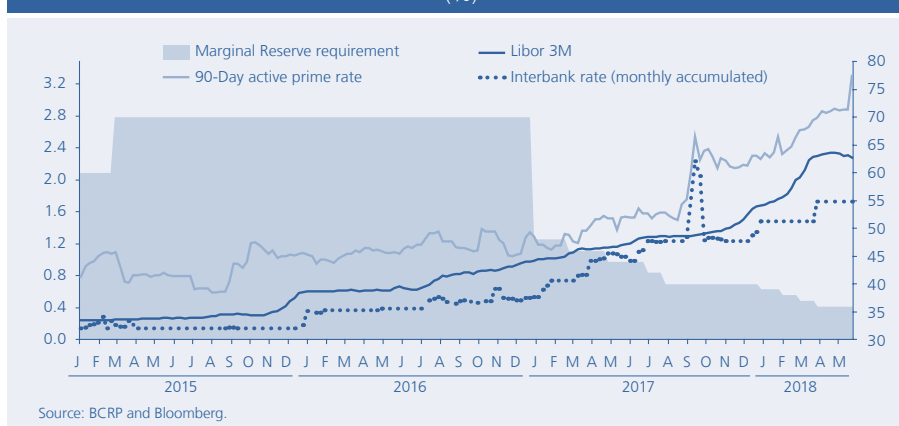
Interest rates in dollars maintain the upward trend prevailing in international financial markets. In the local money market, the interbank interest rate and the 90-day corporate prime rate increased by 25 and 55 basis points, respectively. On the other hand, the interest rates of the bank loan market showed an average increase of 7 basis points, in line with the evolution of the 1-month and 3-month Libor rates. The higher rate increases were observed in the segments of loans to medium-sized companies and corporate loans.

**Table 29**  
**INTEREST RATE IN FOREIGN CURRENCY**  
(En porcentaje)

		Dec.15	Dec.16	Mar.17	Jun.17	Sep.17	Dec.17	Mar.18	Apr.18	May.18	Average Hist.
<b>Passive</b>	Deposits up to 30-day	0.16	0.23	0.50	0.65	1.12	1.10	1.15	1.24	1.32	0.48
	On 31 to 180-day term deposits	0.38	0.51	0.69	0.87	1.13	1.32	1.43	1.44	1.52	0.70
	On 181 to 360-day term deposits	0.48	0.61	0.77	0.73	1.01	1.05	1.12	1.54	1.52	0.74
<b>Active</b>	Corporates	2.33	2.47	3.03	2.42	3.13	3.22	2.98	3.19	3.56	3.01
	Large companies	5.54	5.02	5.12	5.29	4.98	5.25	5.14	5.27	5.00	5.40
	Medium-sized enterprises	8.06	6.91	7.07	6.98	6.70	6.35	6.65	6.97	7.54	8.27
	Small businesses	11.26	10.67	9.83	10.56	8.56	7.29	10.09	9.44	9.53	12.76
	Consumer	32.07	32.08	32.54	33.53	33.51	32.91	34.12	33.91	33.94	27.69
	Mortgage	6.71	6.14	6.35	6.13	5.94	5.90	5.92	5.89	5.76	7.43

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

**Graph 60**  
**90-DAY CORPORATE PRIME, INTERBANK OVERNIGHT, AND LIBOR 3 MONTHS**  
**IN FOREIGN CURRENCY**  
(%)



Source: BCRP and Bloomberg.

37. Between December 2017 and June 2018, the interest rates on **CDBCRP** decreased by an average of 38 basis points for terms of 3 to 18 months, in line with the reduction of 50 basis points in the benchmark rate of BCRP. On the other hand, between May and June 2018, the interest rates on CDBCRP have increased 12 basis points on average, reflecting lower market expectations of additional reductions in the benchmark rate in the following months.

It should be pointed out that as from June 12 of this year, BCRP publishes every day on its website the **yield curve of CDBCRP** in soles, with which these instruments are valued in the repos operations carried out between banks and the Central Bank.







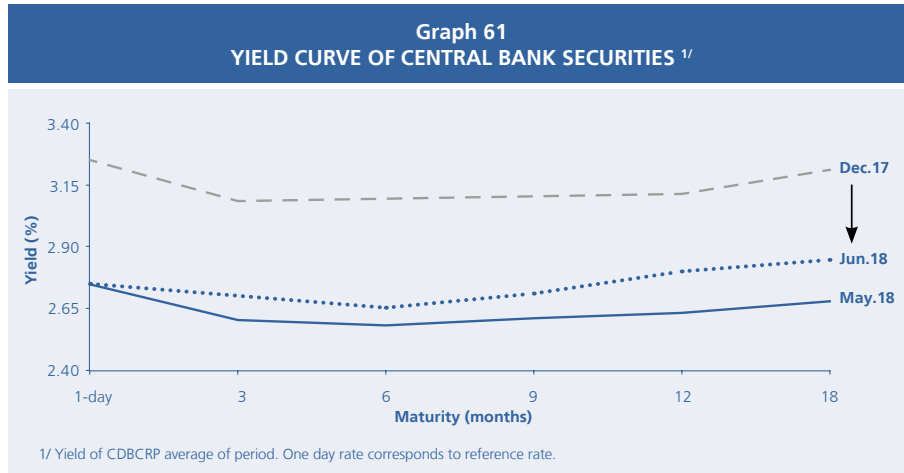
This information, which will contribute to price formation in the secondary market of CDBCRP, will contribute in turn to a further development of the short-term yield curve in soles and therefore serve as a basis for the valuation of other instruments in the money market<sup>5</sup>.

**Table 30**  
**INTEREST RATE OF AUCTIONS OF CD BCRP**  
(%)

	Term (months)				
	1	3	6	12	18
1.Mar.18				2.69	
5.Mar.18			2.66		
6.Mar.18			2.66		
7.Mar.18		2.66	2.67		2.65
8.Mar.18			2.66	2.67	
9.Mar.18			2.65	2.65	
12.Mar.18			2.65	2.65	
13.Mar.18		2.60		2.60	
14.Mar.18			2.60	2.60	2.63
15.Mar.18			2.60	2.60	
16.Mar.18			2.60		
19.Mar.18			2.59		
21.Mar.18					2.63
22.Mar.18				2.58	
26.Mar.18			2.55		
28.Mar.18					2.63
2.Apr.18			2.56		
4.Apr.18					2.63
5.Apr.18				2.57	
9.Apr.18			2.55		
11.Apr.18					2.64
12.Apr.18		2.64	2.56	2.56	
16.Apr.18			2.62		
17.Apr.18		2.64	2.60		
18.Apr.18		2.62	2.60		2.68
19.Apr.18		2.60	2.59	2.58	
23.Apr.18			2.58		
26.Apr.18				2.63	
30.Apr.18			2.58		
2.May.18					2.65
3.May.18				2.58	
7.May.18			2.56		
9.May.18					2.70
10.May.18				2.60	
14.May.18				2.58	
15.May.18			2.55	2.57	
16.May.18			2.55	2.58	2.70
17.May.18				2.58	
21.May.18			2.57		
23.May.18					2.70
24.May.18				2.68	
28.May.18			2.61		
30.May.18					2.75
31.May.18				2.82	

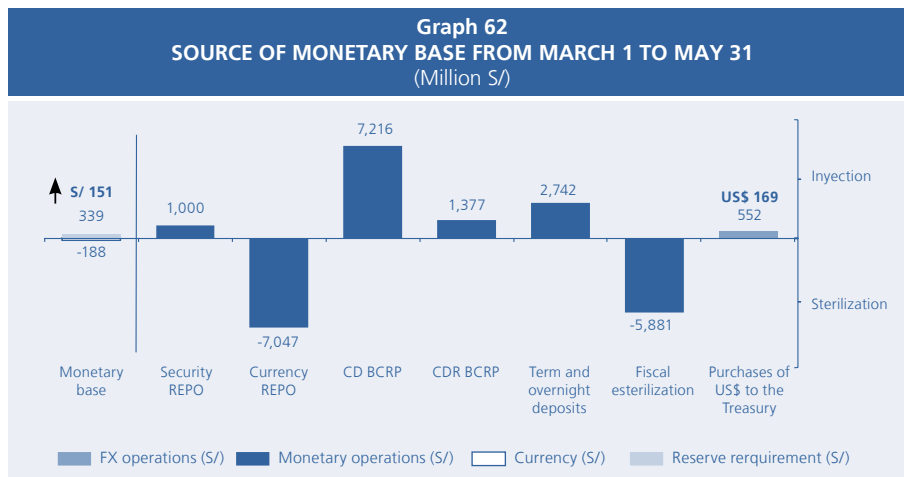
Source: BCRP.

<sup>5</sup> For further information, see: <http://www.bcrp.gob.pe/estadisticas/curva-de-rendimiento-de-cd-bcrp.html>



### Monetary Operations

38. Between March and May, the **monetary operations of the Central Bank** were oriented to meet the demand for liquidity in domestic currency in a period characterized by an increased demand for liquidity associated with the regularization of the payment of income tax and the maturity of currency repos (S/ 7.05 billion). As a result, the public sector increased its deposits in the BCRP by S/ 5.88 billion, in view of which BCRP injected liquidity through the net maturity of CDBCRP (S/ 7.22 billion), term deposits (S/ 2.74 billion), and CDRBCRP (S/ 1.38 billion), as well as through the placement of security repos (S/ 1 billion). Additionally, BCRP auctioned Public Treasury deposits for a total of S/ 1.80 billion.



As a result of these operations, the balance of reporting operations came to represent 5.7 percent of the net assets of the BCRP (in February 2018, it represented 8.2 percent).





Moreover, in terms of their composition, the liabilities of BCRP reflected the increase of public sector deposits at the BCRP, which was offset by the reduction of the BCRP sterilization instruments. Thus, public sector deposits remained the most important liability of BCRP, increasing their ratio in terms of the BCRP net liabilities from 30.1 percent to 33.9 percent in the same period (and reflecting the higher collection of taxes associated with the regularization of the income tax). On the other hand, the ratio of sterilization instruments of BCRP went from representing 18.6 percent of the BCRP liabilities to representing 13.5 percent, which reflected the greater injection of liquidity carried out through the maturity of the CDBCRP.

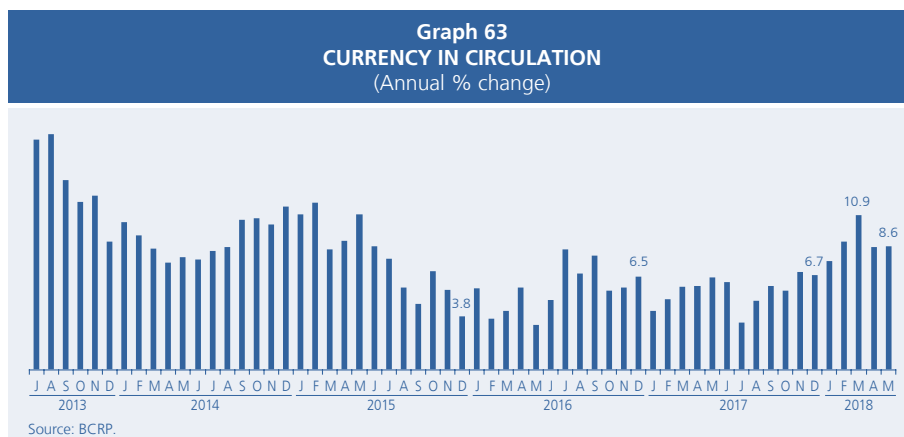
**Table 31**  
**SIMPLIFIED BALANCE SHEET OF THE BCRP\***  
(As % of Net Assets)

	Dec.15	Dec.16	Dec.17	Feb.18	May.18
<b>I. Net assets</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Net International Reserves</b>	<b>87.4%</b>	<b>87.8%</b>	<b>90.3%</b>	<b>91.8%</b>	<b>94.3%</b>
<i>(In millions)</i>	<i>(US\$ 61,485)</i>	<i>(US\$ 61 686)</i>	<i>(US\$ 63 621)</i>	<i>(US\$ 61,885)</i>	<i>(US\$ 60,109)</i>
<b>Repos</b>	<b>12.6%</b>	<b>12.2%</b>	<b>9.7%</b>	<b>8.2%</b>	<b>5.7%</b>
<b>II. Net liabilities</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>1. Total public sector deposits</b>	<b>32.7%</b>	<b>34.0%</b>	<b>32.0%</b>	<b>30.1%</b>	<b>33.9%</b>
In domestic currency	13.0%	12.2%	18.7%	16.7%	20.3%
In foreign currency	19.7%	21.8%	13.4%	13.4%	13.6%
<b>2. Total financial system deposits</b>	<b>37.1%</b>	<b>33.4%</b>	<b>29.9%</b>	<b>27.2%</b>	<b>26.6%</b>
In domestic currency	4.5%	4.6%	5.0%	4.4%	4.8%
In foreign currency	32.6%	28.8%	24.9%	22.8%	21.8%
<b>3. BCRP instruments</b>	<b>10.0%</b>	<b>11.1%</b>	<b>14.8%</b>	<b>18.6%</b>	<b>13.5%</b>
CD BCRP	6.5%	9.9%	13.6%	15.6%	12.9%
CDLD BCRP	0.0%	0.0%	0.2%	0.6%	0.0%
CDR BCRP	3.0%	0.3%	0.4%	0.9%	0.2%
Term deposits	0.4%	0.0%	0.0%	1.4%	0.0%
Overnight deposits	0.1%	0.9%	0.7%	0.2%	0.3%
<b>4. Currency</b>	<b>15.7%</b>	<b>17.2%</b>	<b>19.5%</b>	<b>20.0%</b>	<b>21.1%</b>
<b>5. Others*</b>	<b>4.5%</b>	<b>4.3%</b>	<b>3.7%</b>	<b>4.1%</b>	<b>4.9%</b>

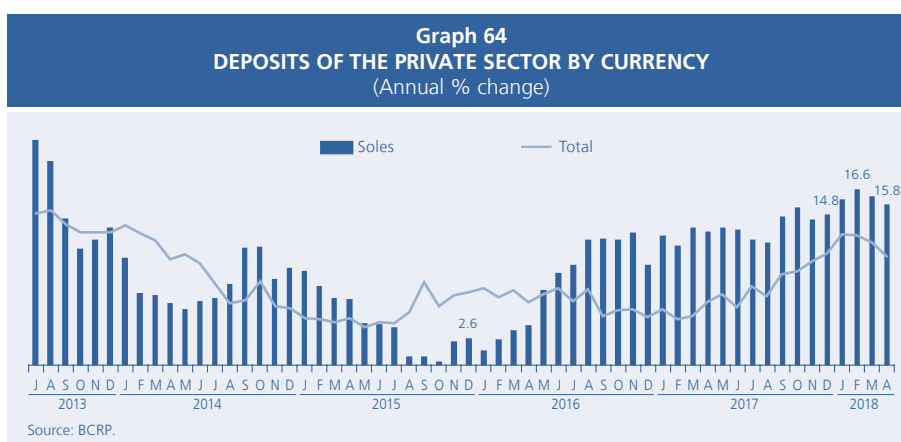
\* Includes interests, discounts and net profits.

## Liquidity

39. Maintaining a higher growth rate than the average rate observed in 2017, **currency in circulation** –the monetary aggregate more directly associated with the economic transactions of households and businesses– showed a year-on-year growth rate of 8.6 percent in May 2018. This rate reflects the recovery of aggregate expenditure and private consumption.



The YoY growth rate of **private sector deposits** registered 10.7 percent in April. A greater dynamism was observed in deposits in soles, which grew at a YoY rate of 15.8 percent in April, while deposits in dollars grew 3.6 percent, reflecting people's higher preference for saving in soles.



**Table 32**  
**MONETARY AND CREDIT ACCOUNTS OF THE DEPOSITORY CORPORATIONS (END-OF-PERIOD)**  
(12-month % change)

	Mar.16	Jun.16	Sep.16	Dec.16	Mar.17	Jun.17	Sep.17	Dec.17	Mar.18	Apr.18
Currency in circulation (average)	4.1	4.9	8.0	6.5	5.8	6.2	5.9	6.7	10.9	8.6
Deposits in domestic currency	3.5	9.0	12.4	9.8	13.6	13.3	14.6	14.8	16.6	15.8
Total deposits 1/	7.4	7.6	4.8	4.7	4.8	5.7	8.9	11.0	12.1	10.7
Broad money in domestic currency	4.1	8.4	11.1	9.0	11.5	10.7	11.8	12.5	14.7	13.9
Total broad money 1/	7.0	7.5	5.2	5.1	4.9	5.2	8.0	10.1	11.9	10.8
Credit to the private sector in domestic currency	24.1	17.0	9.5	7.2	4.4	3.9	5.2	5.3	7.4	8.5
Credit to the private sector 1/	8.7	7.4	5.0	5.6	4.5	4.5	5.3	6.6	7.7	8.6

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





This faster pace of growth of deposits in soles in comparison with deposits in dollars has contributed to reduce the dollarization ratio of deposits to 38.8 percent in April, this being particularly noteworthy in the case of the deposits of households, whose ratio of dollarization has fallen 1 basis point to 33.6 percent since December 2017. On the other hand, the ratio of dollarization of corporate deposits has decreased by half a basis point to 49 percent.

Table 33 DOLLARIZATION RATIO OF DEPOSITS (%)					
	Dec.16	Apr.17	Dec.17	Mar.18	Apr.18
<b>Individuals</b>	<b>35.5</b>	<b>35.6</b>	<b>34.6</b>	<b>34.0</b>	<b>33.6</b>
<i>At current exchange rate</i>	36.3	35.6	34.6	33.9	33.7
Demand deposits	51.3	49.2	47.1	45.5	47.1
Savings deposits	39.1	39.7	38.7	37.5	37.6
Term deposits	30.2	29.2	30.3	29.7	28.0
CTS	29.4	29.8	26.7	26.9	26.9
<b>Business</b>	<b>53.4</b>	<b>53.5</b>	<b>49.5</b>	<b>48.4</b>	<b>49.0</b>
<i>At current exchange rate</i>	54.3	53.5	49.5	48.4	49.1
Demand deposits	51.3	50.8	47.1	45.5	47.1
Savings deposits	56.7	62.0	52.6	59.8	46.5
Term deposits	61.8	60.1	58.9	56.8	56.1
<b>TOTAL</b>	<b>41.5</b>	<b>41.5</b>	<b>39.5</b>	<b>38.9</b>	<b>38.8</b>
<i>At current exchange rate</i>	42.4	41.5	39.5	38.8	38.9

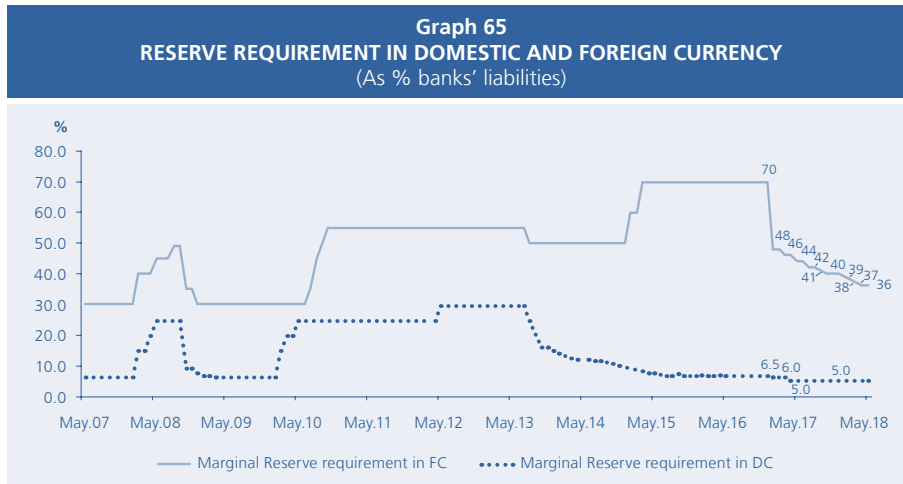
### Credit to the Private Sector

**40. Credit to the private sector** grew at a YoY rate of 8.6 percent in April, showing a faster pace of growth for 10 straight months. Furthermore, credit to the private sector shows a dollarization ratio of 28.8 percent. By type of loans, credit to business has grown 7.6 percent in YoY terms, an increase being observed in all of the credit segments, while personal loans have grown 10.2 percent.

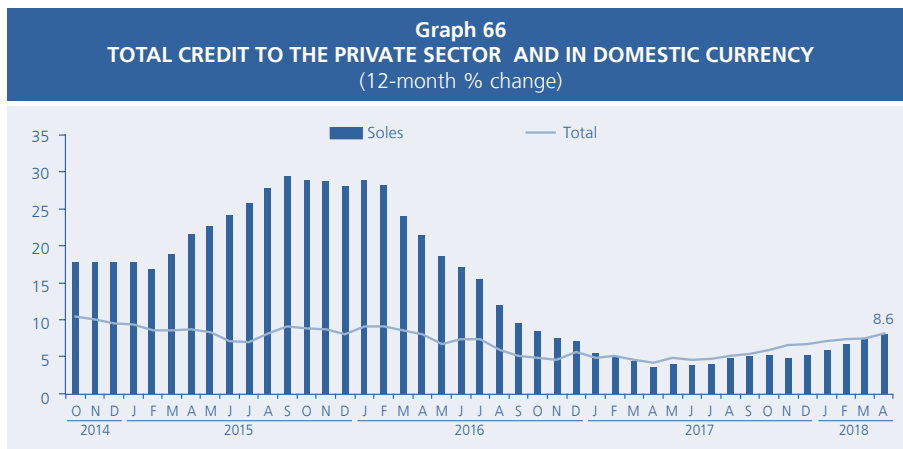
Table 34 CREDIT TO THE PRIVATE SECTOR (12-month % change)				
	Dec.16	Dec.17	Mar.18	Apr.18
<b>Businesses</b>	<b>4.8</b>	<b>5.4</b>	<b>6.6</b>	<b>7.6</b>
Corporate and large companies	4.5	6.0	8.0	9.3
Medium-sized enterprises	2.7	0.7	1.9	3.0
Small business and Microbusinesses	7.8	9.5	8.6	8.8
<b>Individuals</b>	<b>7.2</b>	<b>8.7</b>	<b>9.6</b>	<b>10.2</b>
Consumer	8.7	8.8	10.3	11.1
Car loans	-6.9	-4.2	-0.6	-0.2
Credit cards	8.2	3.0	3.8	4.9
Rest	10.2	13.0	14.6	15.2
Mortgage	5.0	8.6	8.7	9.0
<b>TOTAL</b>	<b>5.6</b>	<b>6.6</b>	<b>7.7</b>	<b>8.6</b>

By currencies, personal loans in soles grew 11.7 percent in YoY terms in April, while credit to business showed a lower average pace of growth with a rate of 5.7 percent. On the other hand, personal loans in dollars fell by 0.4 percent in YoY terms whereas credit to business in dollars increased 10.7 percent.

In April, the Central Bank lowered the **cap of the average reserve rate and the marginal rate of reserve requirements** in dollars to 36 percent –after reducing it to 37 percent in the first quarter of the year– to maintain expansionary domestic financial and credit conditions and to offset the effect of the increase in international interest rates on monetary and credit conditions in dollars.



41. By currencies, total credit in dollars and in soles grow at similar inter-annual rates. The growth of credit in dollars is explained by the recovery of lending to the corporate sector, while the growth of credit in soles is explained by the recent dynamism of mortgage loans and by lending to small and medium-sized businesses.





**Table 35**  
**CREDIT TO THE PRIVATE SECTOR**  
(Annual % change)

	Dec.16	Jun.17	Sep.17	Dec.17	Apr.18
Domestic currency	7.2	3.9	5.2	5.3	8.5
Foreign currency	1.9	5.9	5.8	9.9	8.8
<b>Total</b>	<b>5.6</b>	<b>4.5</b>	<b>5.3</b>	<b>6.6</b>	<b>8.6</b>

In April, the **ratio of dollarization** of credit measured at a constant exchange rate recorded 28.8 percent. In addition to this, the ratio of dollarization of personal loans continues to decline, especially in the segments of mortgage loans and car loans. Furthermore, dollarization has also continued to decrease in the case of lending to small and micro businesses, and medium-sized enterprises.

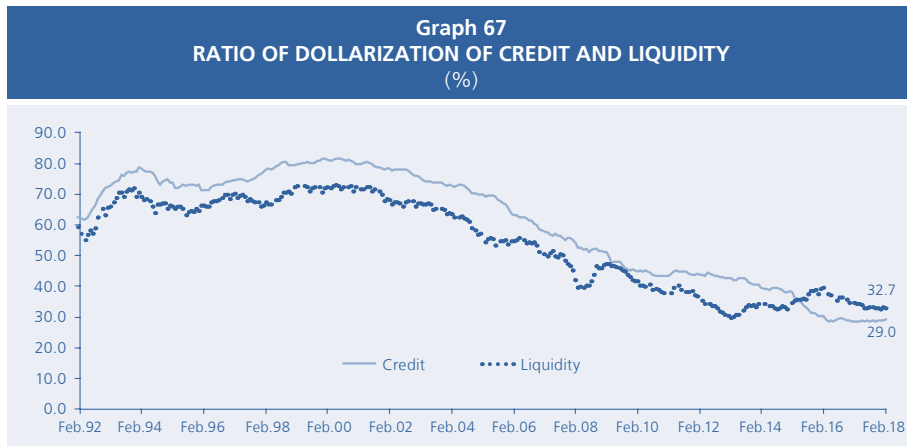
**Table 36**  
**RATIO OF DOLLARIZATION OF CREDIT TO THE PRIVATE SECTOR**  
(%)

	Dec.16	Apr.17	Dec.17	Mar.18	Apr.18
<b>Businesses</b>	<b>37.4</b>	<b>38.3</b>	<b>39.7</b>	<b>39.6</b>	<b>39.4</b>
Corporate and large companies	48.3	50.2	53.9	53.5	53.1
Medium-sized enterprises	42.0	42.0	40.5	40.2	40.1
Small business and Microbusinesses	6.8	6.3	6.7	6.4	6.2
<b>Individuals</b>	<b>12.9</b>	<b>12.5</b>	<b>11.9</b>	<b>11.4</b>	<b>11.3</b>
Consumer	6.7	6.7	6.8	6.6	6.6
Car loans	26.1	23.6	20.2	17.5	17.1
Credit cards	6.2	6.5	6.9	7.1	7.2
Rest	5.7	5.7	6.0	5.7	5.1
Mortgage	21.8	20.9	19.3	18.5	18.2
<b>TOTAL</b>	<b>28.4</b>	<b>28.7</b>	<b>29.3</b>	<b>28.9</b>	<b>28.8</b>
<i>At current exchange rate</i>	29.1	28.7	29.3	28.8	28.8

Additionally, since March 2018 BCRP has reformulated the calculation used to determine the limit on credit in foreign currency on which additional reserve requirements will be applied. The purpose of this is to continue reducing the dollarization of credit to business and to promote a more competitive environment in the supply of credit in foreign currency. This limit is the highest value of the following three measurements:

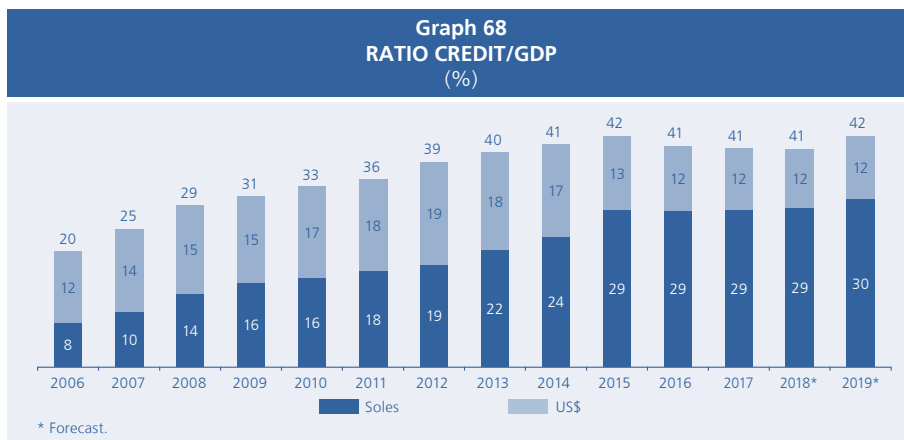
- 80 percent of the balance of credit in foreign currency on September 30, 2013 (excluding credit for foreign trade operations);
- The amount resulting from applying a rate of 40 percent to the flow of credit in soles, expressed in dollars, compared to the balance on December 31, 2017 (excluding the average balance of loans for foreign trade and the average balance of loans for over US\$ 10 million and maturities of over 3 years granted from January 1, 2015), and

- (c) 1.04 times the balance of credit in foreign currency on December 31, 2017 (excluding the average balance of loans for foreign trade and the average balance of loans for over US\$ 10 million and maturities of over 3 years granted from January 1, 2015). This measure guarantees that the process of de-dollarization of credit will continue in a context in which total credit shows a faster pace of growth.



**Forecast on Credit to the Private Sector**

**42. Credit to the private sector and liquidity** in the 2018-2019 forecast horizon are expected to show a faster pace of growth than the pace of growth of nominal GDP and therefore the ratio of credit-to-GDP is expected to increase to 42 percent in 2019. In 2018, total credit is forecast to grow 8.5 percent, while in 2019, it would grow 8.8 percent. These forecasts are in line with the monetary easing actions implemented by BCRP, both in terms of lowering the benchmark interest rate and reducing the rates of reserve requirements in both domestic currency and foreign currency, as well as in line with the recovery in the pace of growth of domestic demand.







## Non-Performing Loans

43. The ratio of non-performing loans in April was 3.4 percent, slightly higher than the average rate registered in December 2017 (3.3 percent). The credit segments that showed higher rates of non-performing loans were loans to medium-sized businesses and loans to small and micro businesses.

Table 37 NON-PERFORMING LOANS INDEX (%)					
	Dec.15	Dec.16	Dec.17	Mar.18	Apr.18
<b>Businesses</b>	<b>3.12</b>	<b>3.28</b>	<b>3.33</b>	<b>3.48</b>	<b>3.51</b>
Corporate and large companies	0.47	0.41	0.47	0.54	0.57
Medium-sized enterprises	5.28	6.10	7.02	7.38	7.49
Small business and Microbusinesses	7.46	7.16	7.12	7.53	7.64
<b>Individuals</b>	<b>2.65</b>	<b>3.05</b>	<b>3.29</b>	<b>3.27</b>	<b>3.31</b>
Consumer	3.32	3.66	3.70	3.60	3.63
Car loans	4.41	5.60	6.10	6.14	6.25
Credit cards	4.10	4.86	5.13	4.89	4.89
Mortgage	1.84	2.28	2.78	2.86	2.90
<b>TOTAL</b>	<b>2.87</b>	<b>3.09</b>	<b>3.31</b>	<b>3.40</b>	<b>3.44</b>

The delinquency rates of loans in dollars are higher than those of loans in soles in the case of personal loans and loans to small and micro businesses –the segments with the lower capability to protect themselves against foreign exchange risks–. The delinquency rate of personal loans in dollars reaches 4.5 percent, whereas the corresponding rate of personal loans in soles is 3.16 percent. On the other hand, the delinquency rate of loans in dollars to small and micro businesses is 19.71 percent and the delinquency rate of loans in soles is 7.28 percent.

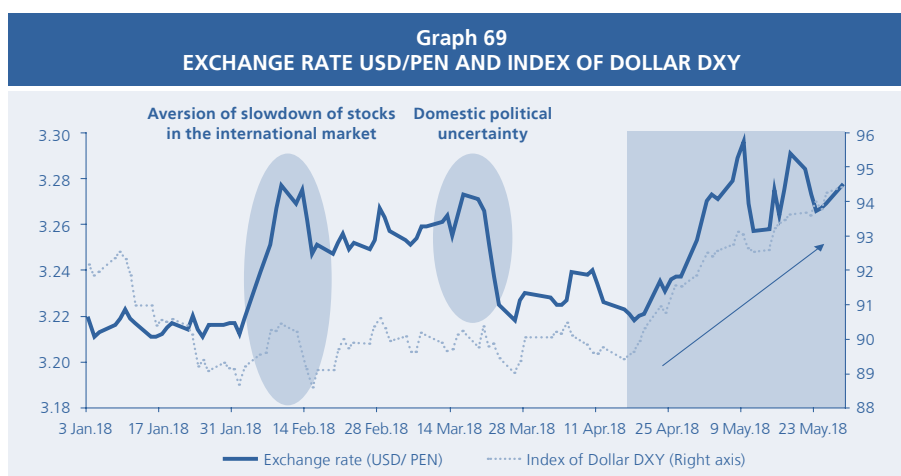
Table 38 NON-PERFORMING LOANS INDEX: DOMESTIC CURRENCY (%)					
	Dec.15	Dec.16	Dec.17	Mar.18	Apr.18
<b>Businesses</b>	<b>3.30</b>	<b>3.63</b>	<b>3.96</b>	<b>4.23</b>	<b>4.27</b>
Corporate and large companies	0.22	0.20	0.47	0.56	0.57
Medium-sized enterprises	5.04	6.07	7.11	7.67	7.84
Small business and Microbusinesses	6.90	6.63	6.76	7.18	7.28
<b>Individuals</b>	<b>2.53</b>	<b>2.90</b>	<b>3.14</b>	<b>3.11</b>	<b>3.16</b>
Consumer	3.23	3.57	3.64	3.54	3.58
Car loans	1.91	2.58	3.90	4.00	4.14
Credit cards	4.20	5.03	5.32	5.08	5.09
Mortgage	1.46	1.87	2.41	2.50	2.55
<b>TOTAL</b>	<b>2.87</b>	<b>3.18</b>	<b>3.61</b>	<b>3.74</b>	<b>3.78</b>

Table 39 NON-PERFORMING LOANS INDEX: FOREIGN CURRENCY (%)					
	Dec.15	Dec.16	Dec.17	Mar.18	Apr.18
<b>Businesses</b>	<b>2.84</b>	<b>2.72</b>	<b>2.33</b>	<b>2.31</b>	<b>2.33</b>
Corporate and large companies	0.78	0.64	0.48	0.52	0.57
Medium-sized enterprises	5.55	6.15	6.90	6.94	6.97
Small business and Microbusinesses	15.70	19.58	17.22	18.68	19.71
<b>Individuals</b>	<b>3.28</b>	<b>4.08</b>	<b>4.42</b>	<b>4.53</b>	<b>4.50</b>
Consumer	4.58	5.29	4.75	4.72	4.60
Car loans	7.52	13.86	14.79	16.22	16.45
Credit cards	2.62	2.59	2.59	2.50	2.47
Mortgage	2.88	3.70	4.30	4.46	4.47
<b>TOTAL</b>	<b>2.87</b>	<b>2.84</b>	<b>2.61</b>	<b>2.59</b>	<b>2.61</b>

### Exchange Rate and Intervention in the Forex Market

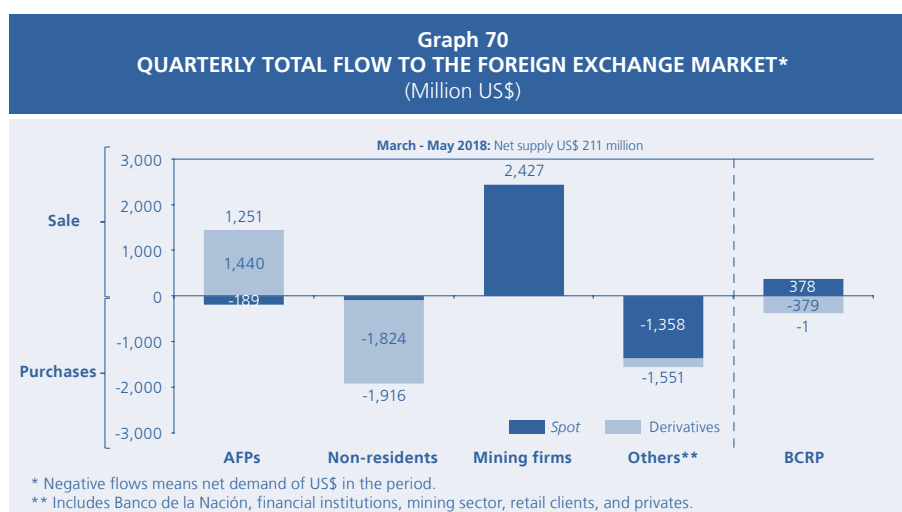
44. Between March and May 2018, the PEN appreciated 0.2 percent against the US dollar, from S/ 3.267 to S/ 3.272 per dollar, as a result of which the PEN registers an accumulated depreciation of 1.1 percent year-to-date. In this period, however, the dollar-PEN exchange rate showed a differentiated evolution.

Between March and the first weeks of April, the sol appreciated 1.5 percent as local political uncertainty decreased, but depreciated 1.7 percent thereafter since the end of April. This is mainly explained by the strengthening of the dollar in international financial markets as well as by an increase in dollar yields, which has resulted in a slowdown in capital flows to the emerging market economies.





As regards the **currency flows in the local foreign exchange market**, a slight supply of dollars (US\$ 221 million) was observed between March and May 2018 in spite of the depreciation mentioned above. The supply of dollars came mostly from mining companies (US\$ 2.43 billion) and AFPs (US\$ 1.25 billion), whereas the demand, on the other hand, came from non-residents agents (US\$ 1.9 billion) mainly from the market of derivatives where economic agents sought to speculate and/or seek foreign exchange hedging for their assets in soles.

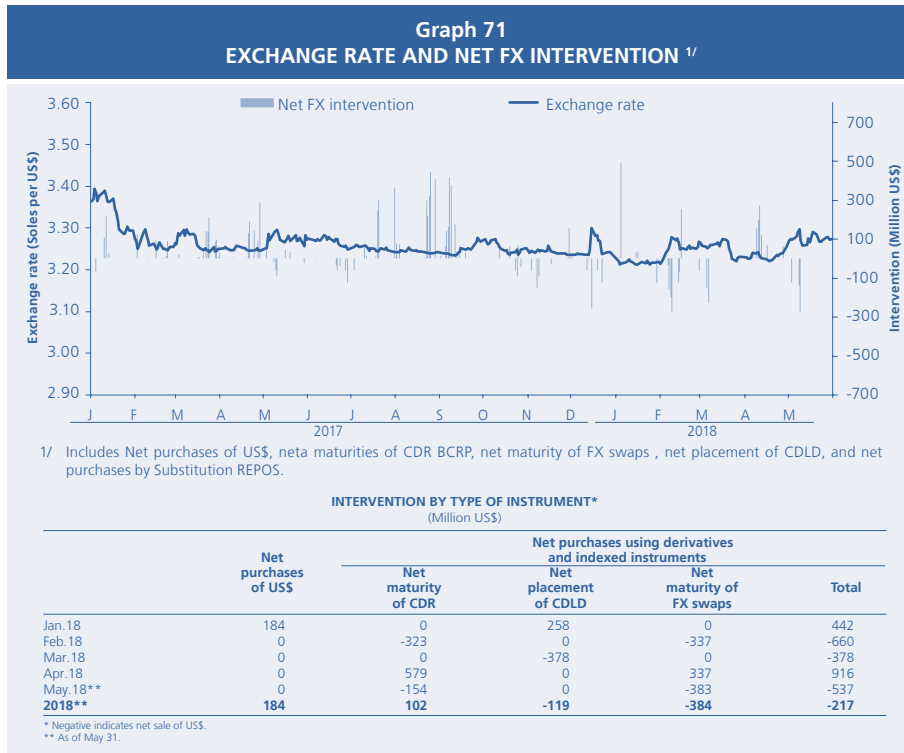


Year-to-date, and particularly in the second quarter of the year, the Central Bank has seldom intervened in the foreign exchange market. So far in the second quarter of 2018, it has done so on 3 occasions, placing CDRs and FX swaps-sell for a total of US\$ 539 million. This took place in a context of high depreciation pressures observed in the currencies of the region, although such pressures dissipated in the case of the PEN due to the greater supply provided by mining companies (spot market) and administrators of private pension funds (forwards).

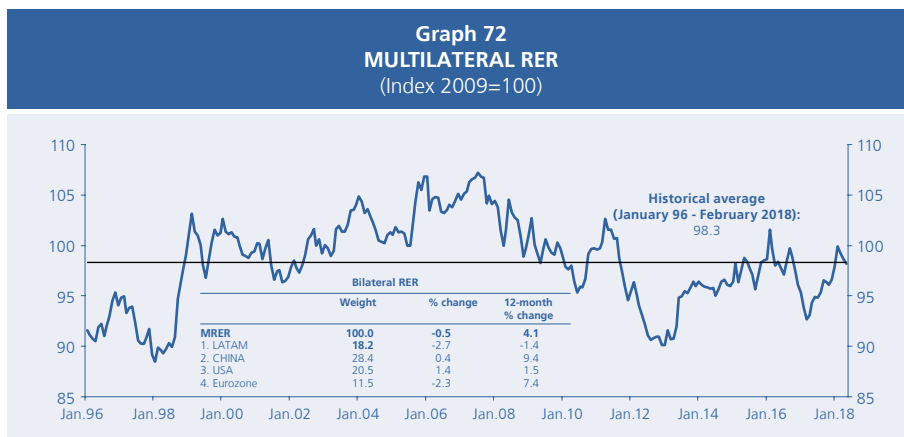
**Table 40**  
**FX INTERVENTION**

	Days of trade	Number of days of intervention		
		Spot market	Placement of derivatives and indexed instruments	Total (spot and/or placement)
<b>2017</b>	249	55	23	63
<b>Jan.18 - Mar 18</b>	61	4	8	11
<b>Apr.18 - May 18</b>	42	0	3	3
<b>2018*</b>	103	4	11	14

\* As of May 31.



45. The multilateral real exchange rate index (RER) showed a level of 98.2 in May, a level 4.1 percent higher than that recorded in the same period of 2017. This increase in the RER index in the last 12 months has been associated mainly with the increase of the real exchange rate relative to the currencies of China (9.4 percent), the Eurozone (7.4 percent), and the United States, offset by the decline of Latin American currencies (1.4 percent). It is worth highlighting that the current level of the RER is very close to the historical average level of the multilateral real exchange rate, estimated at 98.3.





**Box 5**

**THE IMPORTANCE OF THE TONE OF COMMUNICATION IN MONETARY POLICY**

This box shows how monetary policy communication can be an additional mechanism that contributes to the effectiveness of BCRP in terms of changes in the benchmark interest rate.

In order to perform an exercise of textual analysis of the monetary policy communiqués, we first constructed a dictionary of the terms and phrases that qualify the monetary policy stance in each policy statement. The dictionary divides the words into two categories: on the one hand, the phrases associated with the withdrawal of monetary stimulus (hawkish phrases) and, on the other hand, those associated with easing the monetary policy stance (dovish phrases).

- The dictionary of *hawkish* terms (contractionary stance) includes about 200 phrases such as “faster pace of growth”, “above the target”, “GDP expansion”, “higher credit growth”, “inflationary pressures”, which refer to direct or indirect inflationary pressures that may be associated with increases in the benchmark interest rate.
- The dictionary of *dovish* terms (expansionary stance) has a similar number of sentences and contains phrases such as “appreciation of the domestic currency” “continues below its potential”, “weak investment”, “inflation expectations remain anchored”, “prospects of lower growth”, among others. In contrast with contractionary phrases, the expansionary ones point to downward pressures on inflation and are therefore associated with rate cuts in the benchmark interest rate, or with an unchanged benchmark interest rate.

We then count the number of phrases or terms associated with the withdrawal of monetary stimulus as well as the number of phrases associated with monetary policy easing in each policy communiqué and we construct an indicator of the tone of communication using the following formula

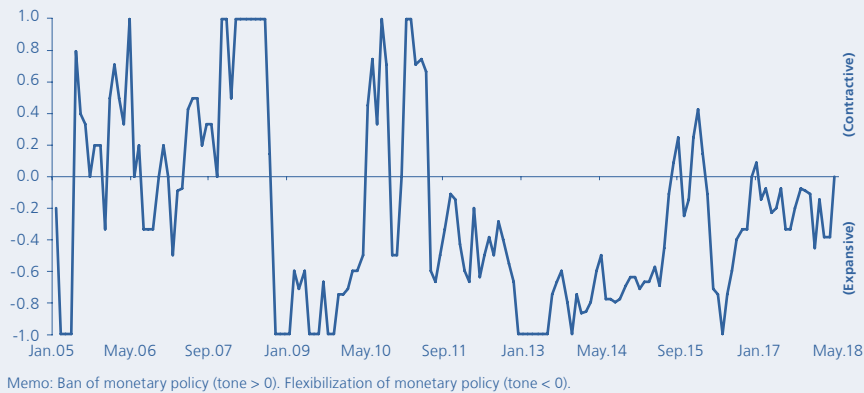
$$tone_i = \frac{H_i - D_i}{H_i + D_i} \quad (1)$$

Where  $tone_i$  is the indicator of the tone used in the policy communiqué of month  $i$ ,  $H_i$  is the number of hawkish phrases, and  $D_i$  the number of dovish phrases.

The following graph shows that the indicator of the tone of monetary policy statements becomes more informative since 2007. From early that year until August 2008 the communiqués become contractionary due to the prevailing inflationary pressures observed then, but in September 2008 they change strongly to show an expansionary tone and remain so until mid-2010. Then, between mid-2010 and mid-2011, they have a contractionary tone (indeed, the benchmark rate was raised in this period).

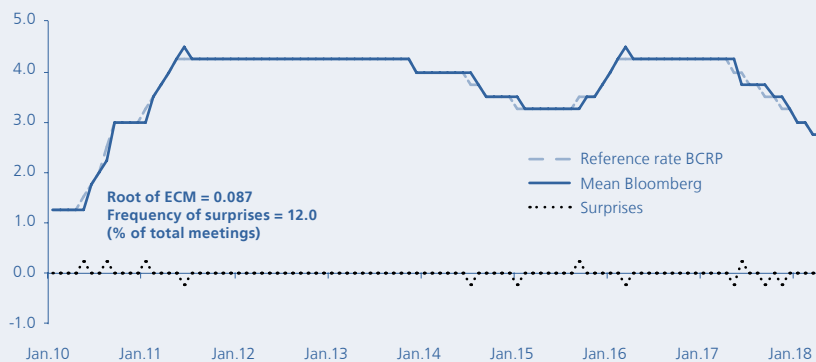
The tone changed to expansionary again between mid-2011 and mid-2015, period in which the Central Bank maintained the interest rate or lowered it. As of the second half of 2015, the tone becomes contractionary, coinciding with the period of interest rate rises. Since then, the tone of communiqués has been more expansionary. As one can see, changes in the tone of monetary policy announcements are associated with explicit changes in the benchmark interest rate, but can also provide additional information that guides the behavior of other variables.

**THE INDICATOR OF THE TONE OF MONETARY POLICY STATEMENTS: 2005-2018**



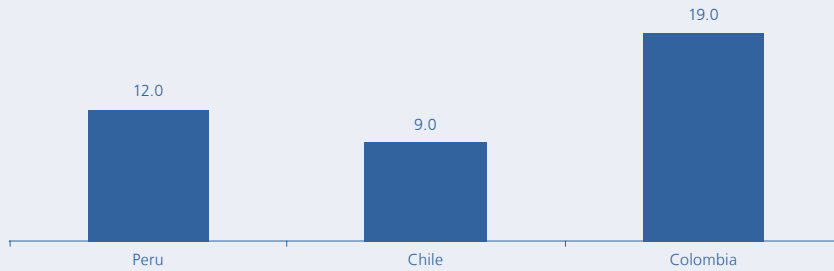
The effectiveness of the communication of BCRP is also reflected in the predictability of monetary policy decisions. The graph below shows how predictable the forecasts of the analysts surveyed by Bloomberg have been. We see that “surprises”, defined as the difference between the benchmark rate and its forecast, have been scarce, lower than 20 percent. In general, therefore, the benchmark interest rate is predictable.

**BENCHMARK INTEREST RATE, FORECASTS OF THE ANALYSTS SURVEYED BY BLOOMBERG, AND SURPRISES IN THE MONETARY POLICY: 2010-2018 (%)**





**INDICATOR OF SURPRISES IN THE MONETARY POLICY: 2010-2018\***  
(% total meetings)



\*As of April 2018.  
Source: Bloomberg.

An effective monetary policy contributes to anchor inflation expectations effectively. Recent evidence shows that Latin American countries with inflation targeting schemes have managed to anchor inflation expectations within their target ranges. Confirming this, Gondo and Yetman (2018) find that the anchor of inflation expectations does not differ significantly from the inflation target and that they are within the tolerance range.

**ESTIMATED ANCHOR AND INFLATION TARGETING: 2009-2016**

	Estimated anchor	Inflation targeting 1/		Estimated anchor	Inflation targeting 1/
Brazil	4.88	4.5	Guatemala	7.83	4.5
Chile	2.98	3.0	Mexico	3.54	3.0
Colombia	3.45	3.3	Paraguay 2/	5.10	4.8
Costa Rica	6.09	5.1	Peru	2.55	2.0
Dominican Republic 2/	5.84	4.6	Uruguay	6.67	5.0

1/ The inflation targeting is the simple average of the target range.

2/ For countries that adopted the inflation targeting scheme after 2009, such as the Dominican Republic and Paraguay, the sample begins in 2012 and 2011, respectively.

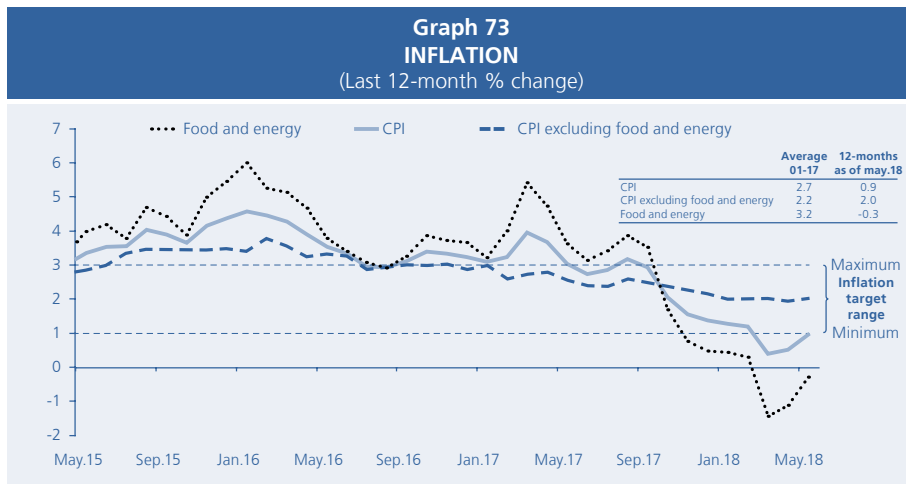
Source: Gondo y Yetman (2018), DT N° 2018-003: "Anclaje de expectativas de inflación en América Latina, Banco Central de Reserva del Perú".

In conclusion, the indicators shown above reflect the effectiveness of the BCRP policy actions implemented through changes in the benchmark interest rate as well as the effectiveness of the monetary policy communiqués. Not only has predictability regarding the benchmark interest rate been achieved, but also inflation expectations have been anchored within the target range.

## VI. Inflation Forecast and Balance of Risks

### Inflation at May 2018

46. The YoY rate of **inflation** declined from 1.4 percent in December 2017 to 0.9 percent in May 2018, with prices in the group of goods included in food and energy inflation showing a negative rate of -0.3 percent while inflation in the group of goods without food and energy showed a rate of 2.0 percent. Thus, trend inflation shows a rate in the center of the monetary policy target range (1 – 3 percent).



**Prices in the group of food and beverages**, which have a weight of 38 percent in the consumer basket, fell by 1.4 percent in May compared to the same month of 2017 as a result of the reversal of the negative impacts of El Niño Costero on food supply and food distribution during 2017. For this reason, food and energy prices showed a reduction of 0.3 percent in May.

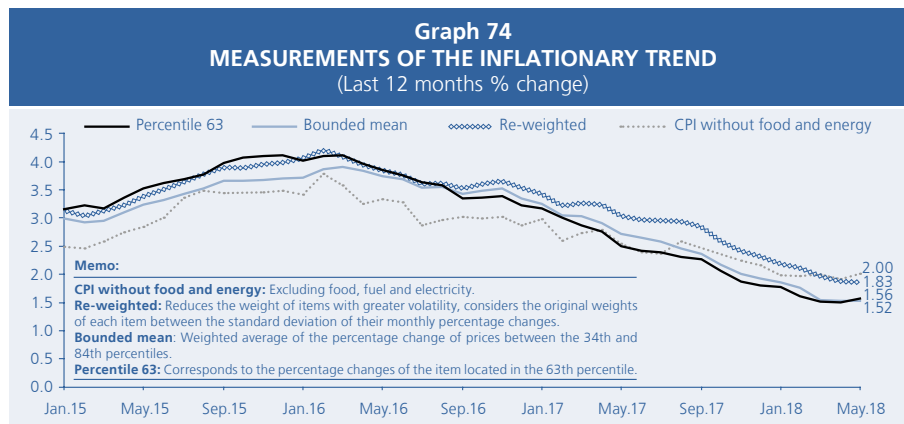






Table 41 INFLATION (% change)								
	Weight	2013	2014	2015	2016	2017	2018	
							Jan.-May.	12-months
<b>CPI</b>	<b>100.0</b>	<b>2.86</b>	<b>3.22</b>	<b>4.40</b>	<b>3.23</b>	<b>1.36</b>	<b>0.75</b>	<b>0.93</b>
<b>1. CPI excluding food and energy</b>	<b>56.4</b>	<b>2.97</b>	<b>2.51</b>	<b>3.49</b>	<b>2.87</b>	<b>2.15</b>	<b>1.04</b>	<b>2.00</b>
a. Goods	21.7	2.62	2.43	3.57	3.41	1.24	0.70	1.24
b. Services	34.8	3.18	2.55	3.44	2.54	2.70	1.25	2.46
<b>2. Food and energy</b>	<b>43.6</b>	<b>2.73</b>	<b>4.08</b>	<b>5.47</b>	<b>3.66</b>	<b>0.46</b>	<b>0.40</b>	<b>-0.30</b>
a. Food and beverages	37.8	2.24	4.83	5.37	3.54	0.31	0.12	-1.37
b. Fuel and electricity	5.7	6.09	-0.85	6.20	4.48	1.55	2.31	7.44
Fuel	2.8	5.95	-5.59	-6.33	0.61	3.95	3.83	6.78
Electricity	2.9	6.23	4.37	18.71	7.53	-0.21	1.14	<b>7.97</b>

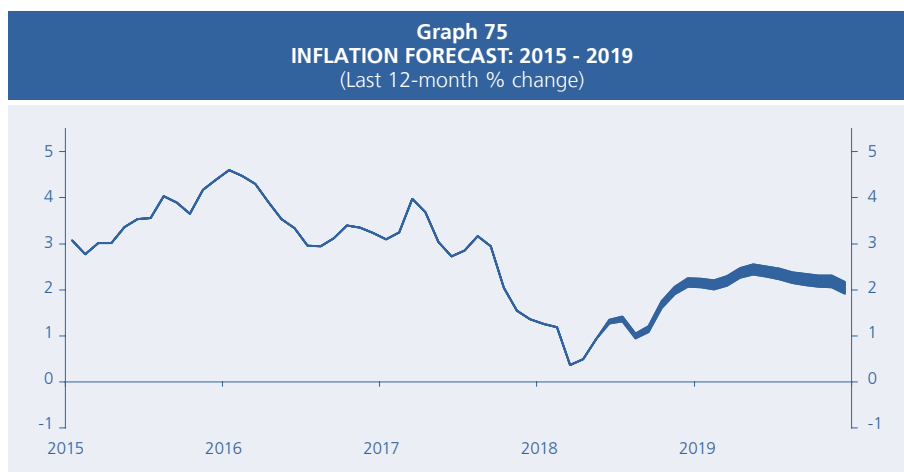
47. The different measurements of the **inflationary trend** show an annual rate between 1.5 and 2.0 percent and confirm that this rate has stabilized in that range.



**2018-2019 Forecast**

48. 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, 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 climatic factors observed in early 2017 (El Niño Costero) as well as of a negative output gap.



The rapid normalization of the supply shocks observed has been correcting the path followed by inflation expectations and leading them towards the midpoint of the target range. This trend in inflation expectations, together with the absence of inflationary demand pressures as well as 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.

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.

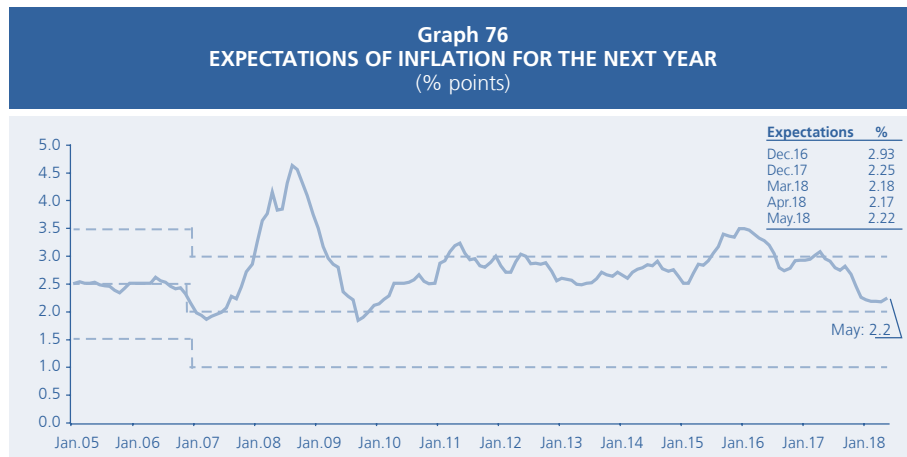
This is consistent with an inflation rate that remains low during most of 2018. The surveys on expectations already show a reduction in inflation expectations in 2018 and 2019, as shown in the following table.

**Table 42**  
**SURVEY ON MACROECONOMIC EXPECTATIONS: INFLATION**  
(% change)

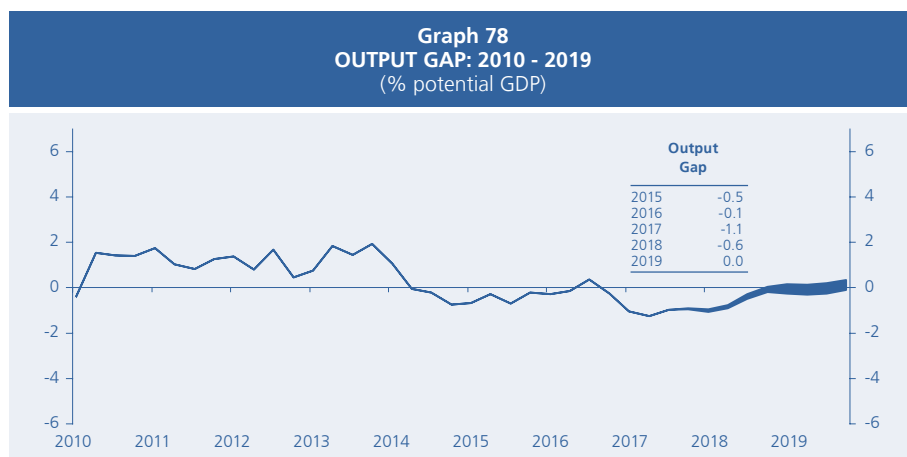
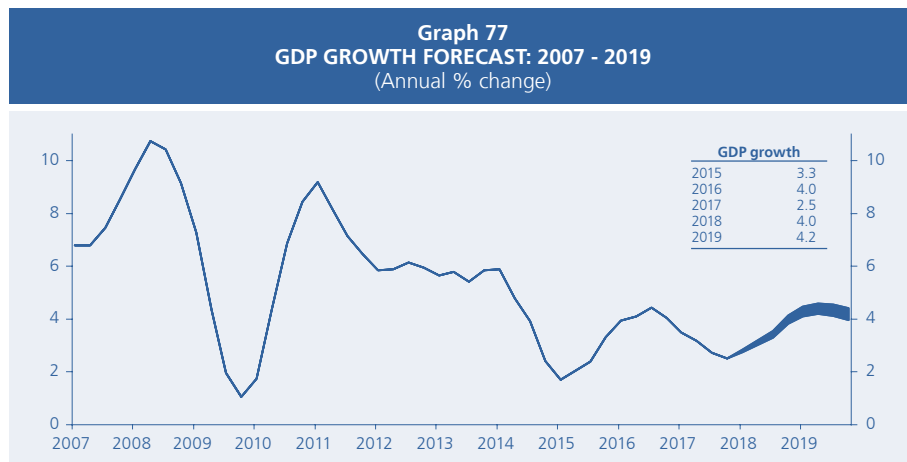
	IR Jun.17	IR Sep.17	RI Dec.17	IR Mar.18	IR Jun.18*
<b>Financial entities</b>					
2018	2.8	2.6	2.5	2.0	2.0
2019	2.8	2.8	2.7	2.5	2.4
<b>Economic analysts</b>					
2018	2.8	2.8	2.5	2.3	2.1
2019	2.8	2.7	2.6	2.5	2.5
<b>Non-financial firms</b>					
2018	3.0	3.0	3.0	2.5	2.4
2019	3.0	3.0	3.0	2.5	2.5

\* Survey conducted during May 31.  
IR: Inflation Report.



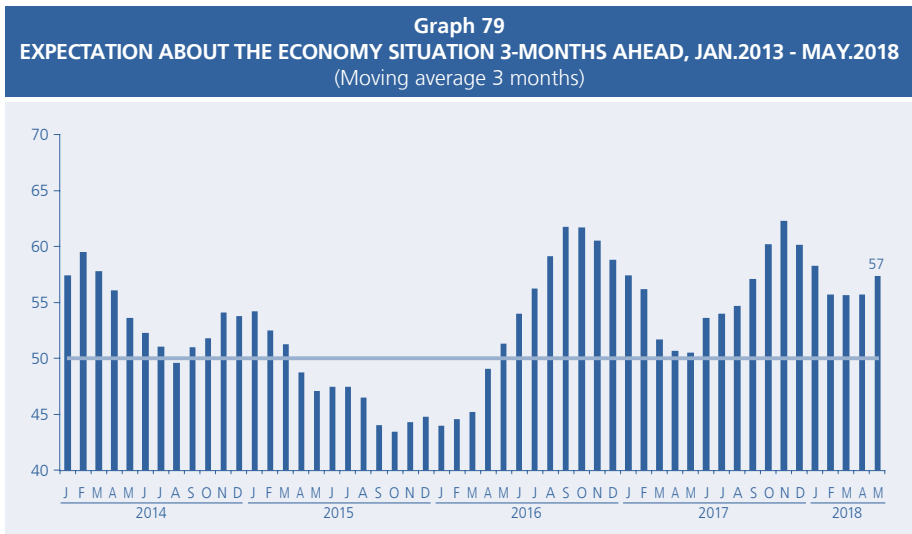


- b) The **GDP growth forecast** in the 2018-2019 horizon, which considers a growth rate of 4.0 percent in 2018 and a growth rate of 4.2 percent in 2019, is consistent with this gradual recovery of the output gap.

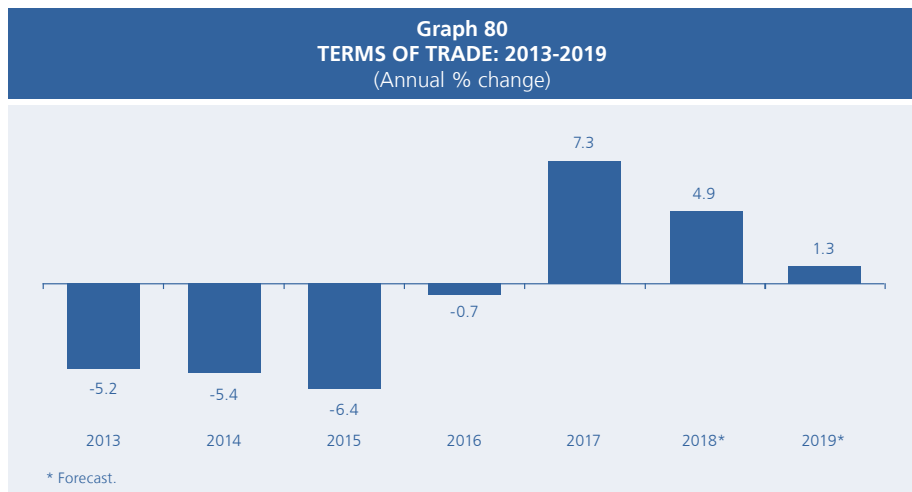


The main determinants of the forecast of the **output gap** are:

- **Business confidence:** Confidence will continue to recover and will remain within the optimistic side in the forecast horizon, in line with the foreseen 5.5 percent growth of private investment in 2018.



- **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 in the forecast horizon.

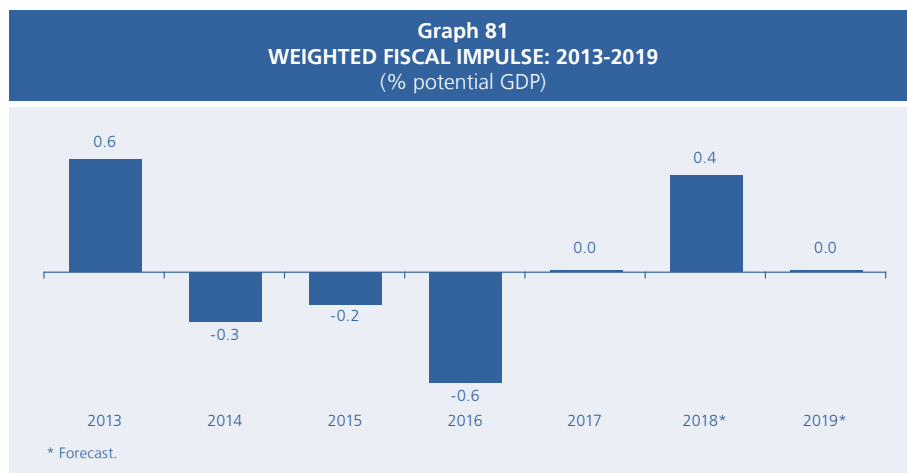


- **Fiscal impulse:** The weighed fiscal impulse estimated for 2018 would be significant, increased expenditure associated with the reconstruction of

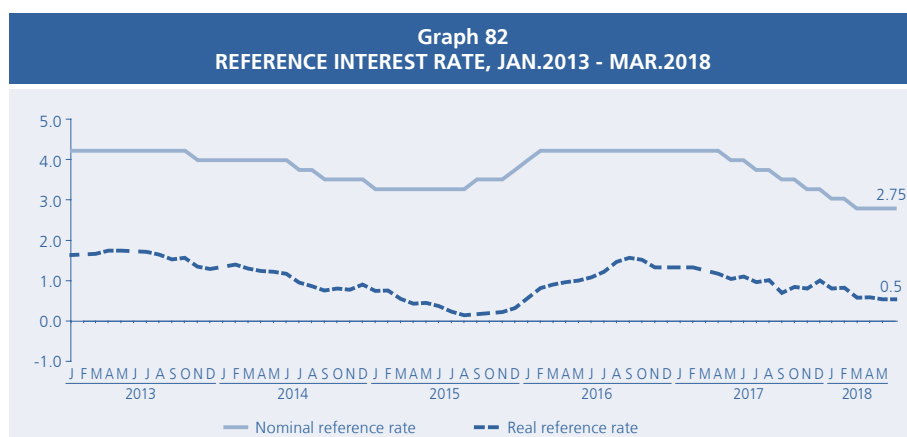




the infrastructure affected by El Niño Costero and with the construction of infrastructure for the Pan American Games accounting for this. In 2019, the fiscal impulse would show a neutral position due to the consolidation of public finances.



- **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. The real interest rate estimated in May is 0.5 percent, lower than the neutral interest rate of 1.75 percent.



- 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 March due mainly to market expectations of higher import prices, particularly higher oil

prices, as well as due to expectations of a higher exchange rate given the recent appreciation of the dollar.

Table 43 SURVEY ON MACROECONOMIC EXPECTATIONS: EXCHANGE RATE (\$/ per US\$)					
	IR Jun.17	IR Sep.17	IR Dec.17	IR Mar.18	IR Jun.18*
<b>Financial entities</b>					
2018	3.40	3.30	3.29	3.25	3.30
2019	3.48	3.44	3.28	3.25	3.33
<b>Economic analysts</b>					
2018	3.40	3.35	3.30	3.28	3.28
2019	3.44	3.40	3.35	3.35	3.35
<b>Non-financial firms</b>					
2018	3.40	3.40	3.34	3.30	3.29
2019	3.50	3.43	3.40	3.35	3.32

\* Survey conducted during May 31.  
IR: Inflation Report.

- d) The annual change in the **prices of food and energy** 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 44 INFLATION FORECAST (Annual rates)			
	2017	2018	2019
<b>CPI</b>	<b>1.4</b>	<b>2.2</b>	<b>2.0</b>
<b>1. CPI excluding food and energy</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>
i. Goods	1.2	1.7	1.8
ii. Services	2.7	2.2	2.2
<b>2. Food and energy</b>	<b>0.5</b>	<b>2.5</b>	<b>2.0</b>
i. Alimentos	0.3	2.3	2.1
ii. Energy	1.6	3.7	1.4

### Balance of Risks in the 2018- 2019 Horizon

49. 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 different rate of inflation than the one originally forecast. The main factors that could more likely deviate the inflation forecast from the baseline scenario include the following:





**a. Negative shocks on 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. As a result of this, inflation would tend to show rates below the baseline scenario. This risk has declined in comparison with that considered in our previous balance of risks.

**b. Supply shocks**

The risk that an increase in the prices of fuels and some imported food products could divert inflation from the midpoint of the inflation target range is considered in the baseline scenario.

This risk is also lower than in our previous Inflation Report.

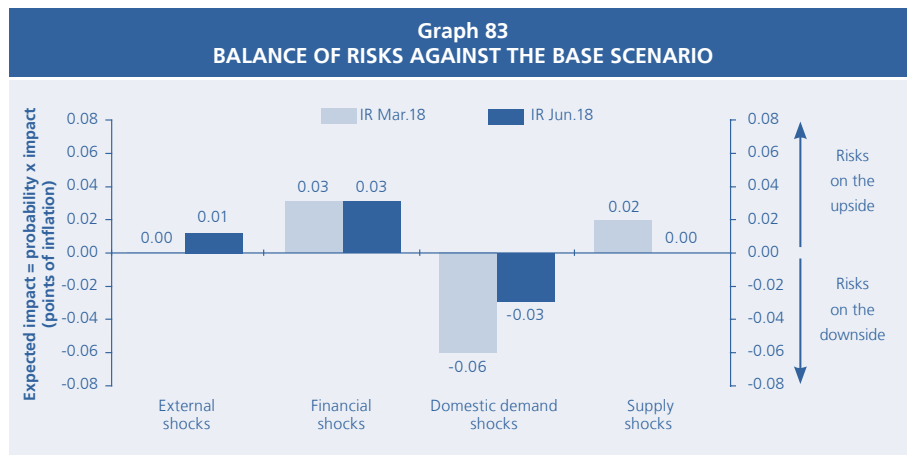
**c. External demand shocks**

Additional protectionist measures by the United States and trade reprisals from affected countries (e.g. China) could generate greater uncertainty about global economic activity. This risk has increased with respect to the previous Inflation Report.

**d. Volatility in international financial markets**

Abrupt adjustments in the Fed interest rates and increased capital flows to the United States would push the exchange rate upwards and, in the short-term, could increase inflation deviating it from the trend consistent with the central forecast scenario. This risk remains.

The balance of risks of the inflation forecast shows a neutral balance, which means that the impact of factors that could affect inflation on the upside is counterbalanced by the impact of factors that could affect inflation on the downside.



## **Conclusions**

50. Inflation is expected to show rates below its long-term level until the second quarter of 2018 due to the correction of the supply shocks that increased prices between the last months of 2016 and the first half of 2017, converging gradually thereafter towards 2.0 percent due to the gradual recovery of aggregate demand. Moreover, inflation without food and energy and inflation expectations are foreseen to show rates around 2 percent in the forecast horizon, in a context of growth without demand inflationary pressures.





**Box 6****UPDATE OF THE CONSUMER PRICE INDEX BASKET OF GOODS**

The consumer price index (CPI) is currently measured using a basket of goods and services that is approximately 10 years old, which was obtained from the application of the National Survey of Family Budgets (ENAPREF) carried out between May 2008 and April 2009. Therefore, the goods and services in this basket and their relative weight may not be representative of the current average consumer.

According to the Manual of the Consumer Price Index<sup>6</sup>, the basket of goods and services of the CPI base period should be updated at least every 5 years.

**Compared with a sample of 20 countries with inflation targeting regimes, Peru is one of the countries that has one of the oldest basic basket base years.** While 15 countries have a more recent base year than Peru, 2 countries (Slovakia and Colombia) have an older base year and 2 other countries (Brazil and Greece) have the same base year as Peru.

**RECENT BASE YEAR OF CPI BASKET WITH INFLATION TARGETING REGIMES**

Countries	Recent base year
Paraguay	2017
South Africa	2016
Israel	2016
Canada	2015
South Korea	2015
Japan	2015
United Kingdom	2015
Czech Republic	2015
Thailand	2015
New Zealand	2014
Chile	2013
India	2012
Indonesia	2012
Mexico	2010
Dominican Republic	2010
Uruguay	2010
Brazil	2009
<b>Peru</b>	<b>2009</b>
Colombia	2008
Turkey	2003

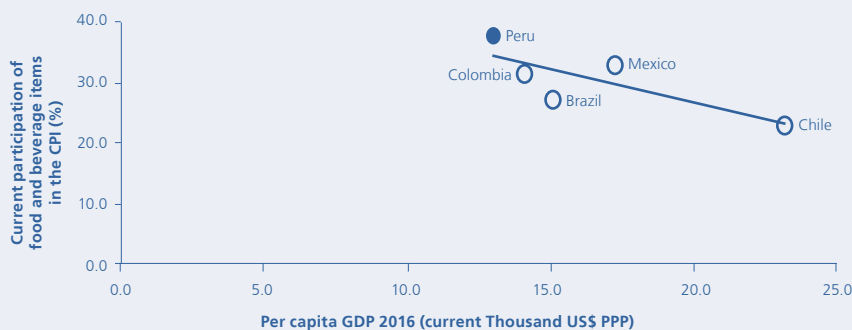
**Consumer preferences change in response to changes in income levels and the percentage structure of their expenses is modified.** With higher incomes, for example, the percentage of income earmarked for food tends to decrease and more income is usually

6 Consumer Price Index Manual: Theory and Practice - 2004. IMF, OECD, the World Bank, Eurostat, UNO, and ILO.

earmarked for some superior goods and services. **The outdated base year could be biasing the calculation of inflation relevant to a representative consumer.**

Taking into account the level of income of the countries of the region and the current participation of food and beverage items, we see that the weighting in Peru is above average, which could be explained by the age of the CPI basket.

**RELATION BETWEEN PARTICIPATION OF FOOD AND BEVERAGE ITEMS AND INCOME LEVELS - LATAM \***



\* For Colombia and Mexico the adjustment was made for attributed income.

Country	Base year	Participation of food items in the CPI*	Per capita GDP 2016 Current thousand US\$ PPP
Brazil	2009	27.3	15.1
Chile	2012	23.1	23.2
Colombia	2008	31.8	14.2
Mexico	2010	33.0	17.3
<b>Peru</b>	<b>2009</b>	<b>37.8</b>	<b>13.0</b>

\* For Colombia and Mexico the adjustment was made for attributed income.  
Source: INEI, IBGE, OECD, and World Bank.

These changes in the structure of consumer spending are important in the case of **technological items**. For example, the 2009 basket could include some goods that are missing or increase the weight of some goods that have a low participation (e.g. smartphones, tablets, and laptops) and, on the other hand, exclude or reduce the participation of others (e.g. personal computers, DVDs, and cameras).

In the case of **communications services**, some of these services should have a higher weight (e.g. cable television, the internet, mobile data, and mobile telephony), while others should have a lower weight (e.g. fixed telephony, long distance telephony, and internet booths).

**Other services** that could be included in the updated basket are those provided by taxis called through mobile apps, urban transportation by train, early stimulation, postgraduate studies, pre-university centers, and delivery services.

**These are some of the reasons why it is important to bear in mind that the CPI is used by different economic agents in the public and private sectors to update monetary values.**



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