INFLATION REPORT

September 2019

Recent trends and macroeconomic forecasts 2019-2020

CENTRAL RESERVE BANK OF PERU

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Recent Trends and Macroeconomic Forecasts 2019 - 2020

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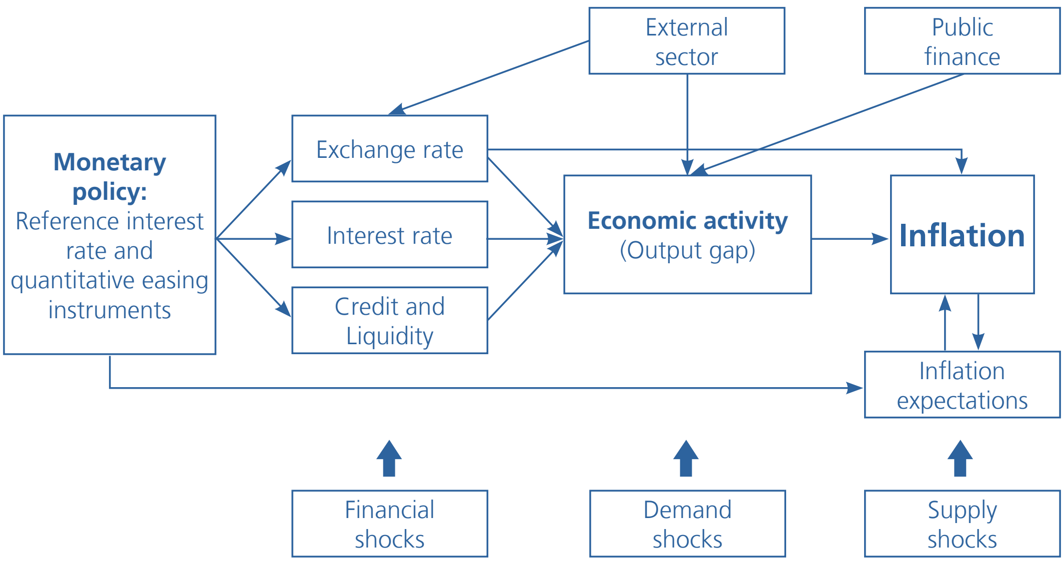

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INFLATION REPORT:

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BOXES

This ***Inflation Report*** was prepared using data on the balance of payments and the gross domestic product as of the second quarter of 2019, and data on monetary accounts, the operations of the non-financial public sector, inflation, financial markets, and the exchange rate as of August 2019.

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 between 1 and 3 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 those originating in climate factors. It should 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. Thus, through reserve requirements and interventions in the foreign exchange market, the Central Bank reduces excessive volatility in the exchange rate and prevents excessive variations in the volume and composition, by currencies and terms, of credit in the financial system.

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

- This Inflation Report was approved by the Board of Directors of BCRP on September 17, 2019.

- The following Inflation Report will be published on Friday, December 20, 2019.

Summary

i. **Global growth** is expected to slow down from 3.6 percent in 2018 to 3.1 percent in 2019 (3.3 percent was estimated in the June Inflation Report) and to 3.3 percent in 2020 (3.4 percent estimated in the previous Report) as a result of the uncertainty caused by commercial tensions. However, this slower pace of global economic activity is expected to be accompanied by more favorable external financial conditions associated with more expansionary monetary positions in the central banks of the advanced economies and the emerging economies.

ii. The **terms of trade** have been deteriorating due to the increase of trade tensions between the United States and China and to expectations of lower global growth, and are, therefore, projected to decline 2.6 percent in 2019 and 1.1 percent in 2020. Moreover, a lower annual average copper price (US$ 2.62 per pound) is projected for 2020 in this report (vs. US$ 2.75 in the previous report), while the annual average price of gold projected for this year is higher (US$ 1,495 per troy ounce vs. US$ 1,350 per ounce projected in the previous report).

iii. Because of the lower value of exports compared to the one forecast in June, the projection of the **deficit in the current account of the balance of payments** has been revised up (from 1.6 to 1.9 percent of GDP in 2019 and from 1.9 to 2.1 percent in 2020). For the same reason, the trade balance surplus projected has been revised from US$ 6.3 billion in the June Report to US$ 5.7 billion in this Report. Counterbalancing this evolution in the trade of goods, the financial account flows show favorable trends amid an international environment with more flexible financing conditions, so capital inflows are expected to be higher than those projected in June. Moreover, at an aggregate level in the balance of payments, the increase in net international reserves has been revised up from US$ 6.0 billion in June to US$ 8.5 billion in this report.

iv. In the second quarter of 2019, **economic activity** increased by 1.2 percent, as a result of which GDP accumulated an expansion of 1.7 percent in the first half of the year, lower than 4.4 percent registered in the first half of 2018. This slower pace of economic growth is explained by the impact of transitory events that affected primary production as well as by the slowdown of growth of non-primary production associated with the evolution of domestic demand. However, as from the second half of 2019, activity in the primary

industries is expected to register a gradual normalization and a progressive recovery of growth is expected in the non-primary industries, with GDP growth being projected to reach 2.7 percent in 2019 and 3.8 percent in 2020 (3.4 percent in 2019 and 4.0 percent in 2020 projected in the previous Report).

v. On the side of expenditure components, the slowdown observed in the first half of the year reflects the evolution of traditional exports –which were affected by lower primary production– and the deterioration of economic conditions in the domestic and the international scenarios, which limited the growth of domestic demand. Factors accounting for the revision in the GDP growth rate include the delay in the normalization of primary activity –and thus of exports–, the lower-than-expected growth rate of public investment, and the moderation of labor market conditions, which have been affecting private consumption this year. In the forecast horizon, domestic demand is projected to show a gradual recovery in a context of political and social stability.

vi. The **fiscal deficit** projected for 2019 has been revised slightly down, from 2.1 to 2.0 percent of GDP in this report, due to the higher revenues estimated. This deficit level is expected to remain in 2020, in line with the recovery foreseen in economic activity and in public investment.

vii. The Board of BCRP lowered the **benchmark interest rate** by 25 basis points in August to 2.5 percent, in a context marked by a more gradual-than-expected closure of the output gap and a downward bias in the inflation forecast. With this, BCRP expands monetary stimulus, with a real interest rate of 0.2 percent.

viii. In line with the expansionary monetary stance, **credit to the private sector** grew 8.1 percent year-on-year in August, this result reflecting mainly the growth of lending in the segment of personal loans (11.4 percent). In the forecast horizon, credit to the private sector as a percentage of GDP would increase from 42 percent in 2018 to 44 percent in 2020. The latter projection considers flexible monetary conditions and a more gradual recovery of the demand's rate of growth.

ix. In August, year-on-year **inflation** declined from 2.3 percent in June to 2.0 percent, the midpoint of the inflation target range. Moreover, inflation expectations, which remain within the target range since March 2017, showed levels of 2.3 percent in August and are expected to decrease gradually in a context in which inflation is foreseen to remain around 2 percent in the forecast horizon.

x. The balance of **inflation risk factors** considered in this Report –domestic demand shocks, external demand shocks, and international financial shocks– continues to show a bias on the downside in the inflation forecast. This bias considers a greater relative risk of a possible lower inflation resulting from a lower pace of growth in the demand.

SUMMARY OF INFLATION REPORT FORECAST

	2017	2018	2019[1/]		2020[1/]	
			IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
Real % change						
1. Gross Domestic Product	2.5	4.0	3.4	2.7	4.0	3.8
2. Domestic demand	1.4	4.2	3.3	3.0	4.0	3.7
a. Private consumption	2.6	3.8	3.5	3.0	3.7	3.7
b. Public consumption	0.5	0.8	2.0	2.0	2.5	2.5
c. Fixed private investment	0.2	4.2	3.8	4.4	5.5	4.5
d. Public investment	-1.8	6.8	1.0	0.5	5.0	5.0
3. Exports (good and services)	7.6	2.7	2.6	0.9	5.4	5.6
4. Imports (good and services)	4.0	3.4	2.1	1.8	5.5	5.6
5. Economic growth in main trading partners	3.7	3.7	3.3	3.1	3.3	3.2
Memo:						
Output gap [2/] (%)	-0.8	-0.4	-1.0 ; -0.3	-1.4 ; -0.9	-0.7 ; 0.2	-1.3 ; -0.4
% change						
6. Inflation	1.4	2.2	2.1	2.0	2.0	2.0
7. Expected inflation [3/]	2.8	2.1	2.5	2.2	2.5	2.4
8. Expected depreciation [3/]	-3.4	4.2	-1.2	0.3	0.8	-0.3
9. Terms of trade	7.5	-0.2	-2.8	-2.6	-0.7	-1.1
a. Export prices	13.4	6.3	-4.0	-3.6	0.7	-0.2
b. Import prices	5.4	6.5	-1.3	-1.1	1.5	0.9
% change						
10. Currency in circulation	6.7	7.9	6.0	5.7	6.0	6.0
11. Credit to the private sector	6.7	8.7	8.1	7.3	9.0	8.5
% GDP						
12. Gross fixed investment	21.9	22.4	22.3	22.6	22.7	22.8
13. Current account of the balance of payments	-1.2	-1.6	-1.6	-1.9	-1.9	-2.1
14. Trade balance	3.1	3.2	2.6	2.5	2.5	2.4
15. Long-term external financing of the private sector [4/]	1.8	2.0	2.7	2.7	2.1	2.1
16. Current revenue of the general government	18.1	19.3	19.6	19.7	19.5	19.7
17. Non-financial expenditure of the general government	20.0	20.2	20.2	20.2	20.0	20.1
18. Overall balance of the non-financial public sector	-3.0	-2.3	-2.1	-2.0	-2.1	-2.0
19. Balance of total public debt	24.9	25.8	26.5	26.5	26.9	27.1
20. Balance of net public debt	9.5	11.3	13.1	13.0	14.5	14.4

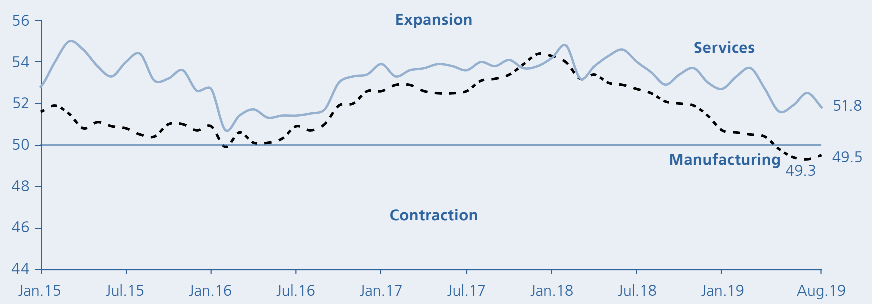
IR: Inflation Report.
1/ Forecast.
2/ Differential between GDP and potential GDP (%).
3/ Survey on expectations to the analysts and financial entities.
4/ Includes net direct investment, portfolio investment and private sector's long term disbursement.

I. External Sector

Global Economy

1. Recent activity indicators in most developed and emerging economies suggest a greater-than-expected economic slowdown. Global growth in the second quarter of the year was lower than in the first quarter and the global manufacturing activity index (PMI index), which maintained its downward trend, reached its lowest level in July –a level not observed since October 2012– and remained in the contraction zone for the fourth consecutive month. Moreover, the services PMI index has maintained a decreasing trend during the year.

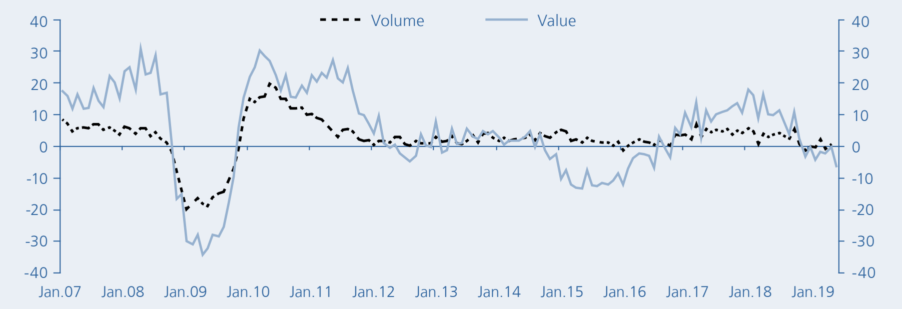
Graph 1
MANUFACTURING AND SERVICES PMI GLOBAL INDICES



Source: JP Morgan.

2. An important part of this slowdown is explained by the lower dynamism of world trade as a result of the escalation of trade tensions as well as by political noise in various countries (the United Kingdom, Italy, and Spain, among other countries). These factors, in addition to their direct impact, have affected consumers and investors’ confidence and increased volatility in international markets as well.

Graph 2
WORLD EXPORTS: VOLUME AND VALUE
(Last 12-month % change)

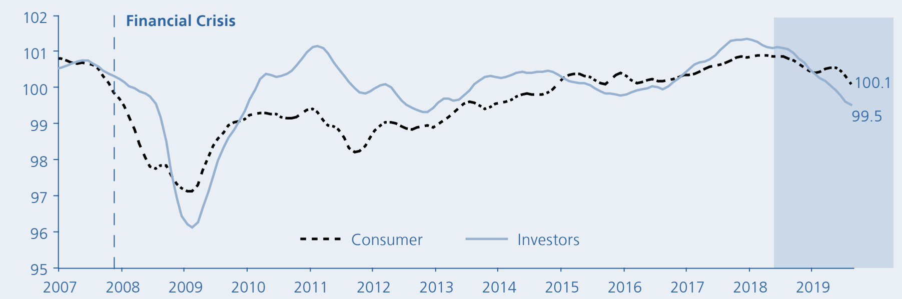


Source: WTO and World Trade Monitor.

Graph 3
ECONOMIC POLICY UNCERTAINTY INDEX

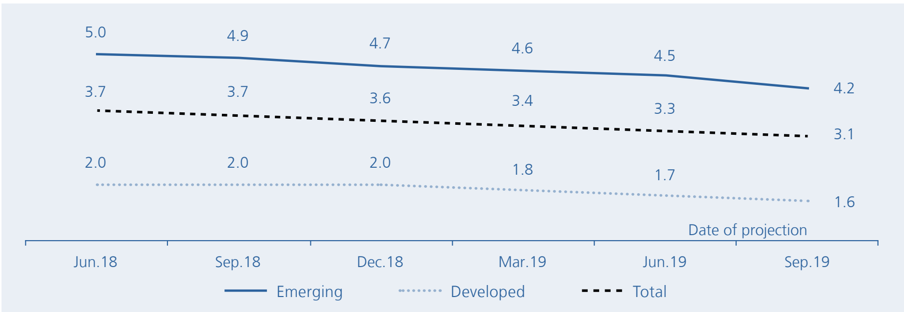
Source: www.policyuncertainty.com and Baker, Bloom, and Davis (2016).

Graph 4
CONSUMERS AND INVESTORS' CONFIDENCE INDEX
(Total OECD countries)



3. In comparison with the previous Inflation Report, the growth projection for the world economy has been corrected downwards, from 3.3 to 3.1 percent in 2019 and from 3.4 to 3.3 percent in 2020. The growth rate foreseen for 2019 is the lowest rate estimated in the last ten years.

Graph 5
GROWTH PROJECTION FOR THE WORLD ECONOMY: 2019
(%)



Most economies show a slower pace of economic growth. In the developed economies, the slowdown of growth is particularly noteworthy in Germany, Italy, and the United Kingdom. The latter has been particularly affected by increased uncertainty associated with its withdrawing from the European Union. As for the emerging economies, a moderate slowdown is expected in China and low growth rates are foreseen in Latin American countries.

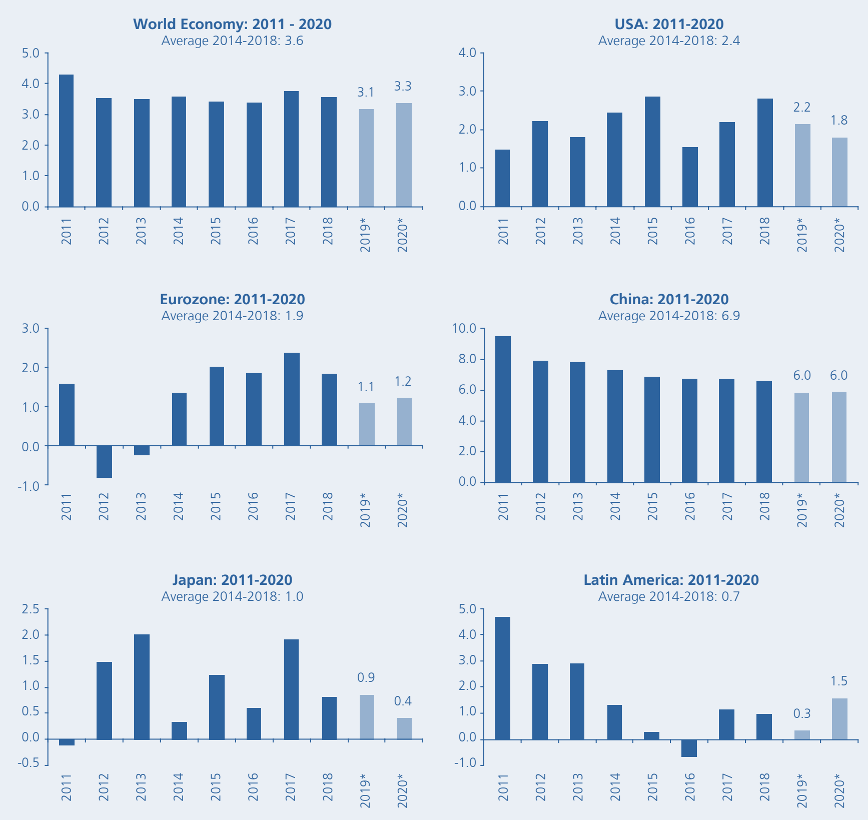
Table 1
GLOBAL GDP GROWTH
(Annual % change)

	PPP %1/	Trading Peru %1/	2018	2019*		2020*	
				IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
Developed economies	**40.8**	**44.1**	**2.2**	**1.7**	**1.6**	**1.6**	**1.5**
Of which:							
1. USA	15.2	21.3	2.9	2.1	2.2	1.8	1.8
2. Eurozone	11.4	10.8	1.9	1.2	1.1	1.3	1.2
Germany	3.2	2.8	1.5	0.8	0.6	1.3	1.2
France	2.2	0.7	1.5	1.2	1.2	1.3	1.2
Italy	1.8	1.7	0.9	0.1	0.1	0.7	0.5
Spain	1.4	3.5	2.5	2.2	2.2	1.9	1.8
3. Japan	4.1	4.1	0.8	0.7	0.9	0.4	0.4
4. United Kingdom	2.2	1.2	1.4	1.2	1.2	1.4	1.2
5. Canada	1.4	2.0	1.8	1.6	1.4	1.8	1.7
Developing economies	**59.2**	**55.9**	**4.6**	**4.5**	**4.2**	**4.8**	**4.6**
Of which:							
1. Emerging and developing Asia	33.3	31.4	6.4	6.2	6.0	6.3	6.1
China	18.7	29.4	6.6	6.1	6.0	6.1	6.0
India	7.8	4.3	7.1	7.3	6.9	7.6	7.2
2. Commonwealth of Independent States	4.4	0.7	2.8	2.0	1.8	2.0	2.0
Russia	3.1	0.6	2.3	1.3	1.1	1.3	1.3
3. Latin America and the Caribbean	7.7	21.6	1.0	0.8	0.3	2.4	1.5
Brazil	2.5	5.1	1.1	1.0	0.9	2.3	2.0
Chile	0.4	3.4	4.0	2.9	2.5	3.2	3.1
Colombia	0.6	3.0	2.7	3.0	3.1	3.2	3.1
Mexico	1.9	3.0	2.0	1.2	0.5	1.7	1.3
Argentina	0.7	1.5	-2.5	-1.4	-2.7	2.0	-1.2
Peru	0.3	-	4.0	3.4	2.7	4.0	3.8
World Economy	**100.0**	**100.0**	**3.6**	**3.3**	**3.1**	**3.4**	**3.3**
Memo:							
Peru's trading partners 1/ 2/	65.9		3.7	3.3	3.1	3.3	3.2

1/ 2018.
2/ Basket of Peru's 20 main trading partners.
* Forecast.
Source: IMF, Consensus Forecast.

In this context of lower growth with no significant inflationary pressures, several developed economies and emerging economies have adopted more expansionary monetary policy positions and, in addition, as in the case of Germany and China, have announced fiscal stimulus measures. This response may partially offset the expected deceleration in economic activity.

Graph 6
GDP GROWTH
(Real % change)



* Forecast.
Source: IMF and Consensus Forecast.

4. Economic activity in the **United States** grew 2.0 percent in the second quarter of 2019, which reflected a slowdown compared to the pace of growth observed in the previous quarter.

   By components, consumption maintains a significant contribution, supported by low unemployment and favorable financial conditions. Recent indicators of retail sales and the corporate results of companies linked to the retail sector suggest that this dynamism remains so far in the third quarter, but that it could slow down, in line with the recent decline observed in consumer confidence.

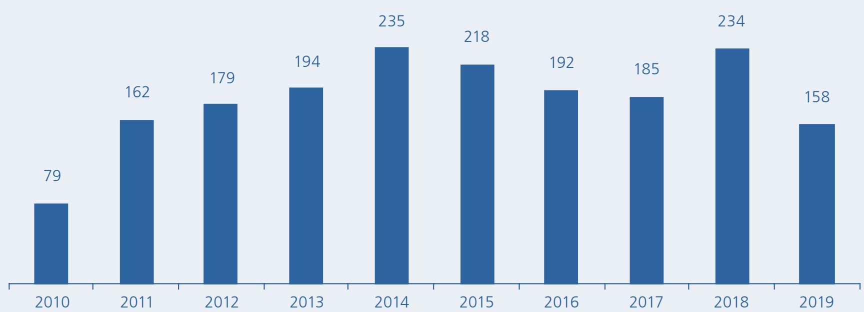
Table 2
USA: GDP
(Annualized seasonally adjusted % change)

	Q1.17	Q2.17	Q3.17	Q4.17	Q1.18	Q2.18	Q3.18	Q4.18	Q1.19	Q2.19
GDP	**2.3**	**2.2**	**3.2**	**3.5**	**2.5**	**3.5**	**2.9**	**1.1**	**3.1**	**2.0**
Personal consumption	2.4	2.4	2.4	4.6	1.7	4.0	3.5	1.4	1.1	4.6
Durable	3.4	7.7	7.8	12.2	2.3	8.0	3.6	1.3	0.3	13.0
Non-durable	3.1	4.3	2.2	5.1	0.7	4.1	3.6	1.7	2.2	6.5
Services	2.0	1.0	1.6	3.4	1.9	3.4	3.4	1.4	1.0	2.8
Gross investment	3.4	3.6	7.4	4.7	6.2	-1.8	13.7	3.0	6.2	-6.3
Fixed investment	7.7	2.8	1.4	8.7	5.5	5.2	0.7	2.7	3.2	-1.4
Non-residencial	6.6	4.4	2.4	8.4	8.8	7.9	2.1	4.8	4.4	-1.0
Residencial	11.9	-2.2	-2.0	9.9	-5.3	-3.7	-4.0	-4.7	-1.0	-3.0
Exports	6.1	1.6	4.4	10.1	0.8	5.8	-6.2	1.5	4.1	-5.7
Imports	4.1	3.5	1.3	14.0	0.6	0.3	8.6	3.5	-1.5	0.0
Government expenditure	-0.2	1.4	-0.1	2.4	1.9	2.6	2.1	-0.4	2.9	4.8
Memo										
Contribution on inventories	-0.7	0.1	1.0	-0.6	0.1	-1.2	2.1	0.1	0.5	-0.9

Source: BEA.

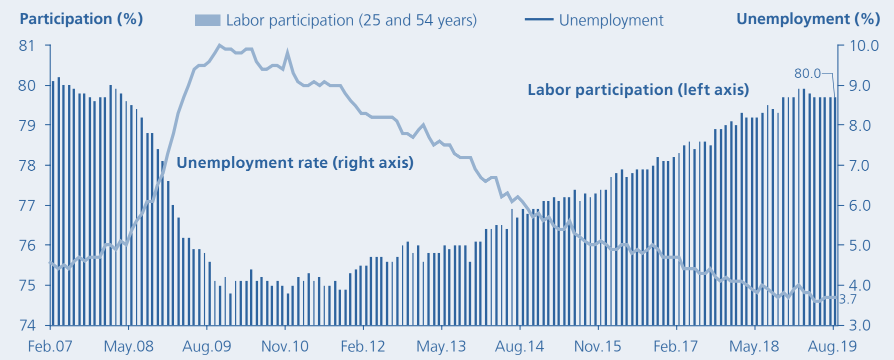
Unemployment remained at 3.7 percent and the job creation figure not only has been lower than expected, but also lower than in previous years. In fact, in line with a labor market with minimum unemployment rates, the average monthly figure of job creation in the January-August period (158 thousand) has been the lowest registered since 2010. Moreover, an important part of higher consumption is explained by the consumption of durable goods –which grew 13 percent in the second quarter–, which could reflect an anticipated expense in anticipation of higher import tariffs on such goods.

Graph 7
USA: JOB CREATION
(Thousand jobs, monthly average January-August period)



Source: Bureau of Labor Statistics (BLS).

Graph 8
USA: LABOR PARTICIPATION AND UNEMPLOYMENT RATE



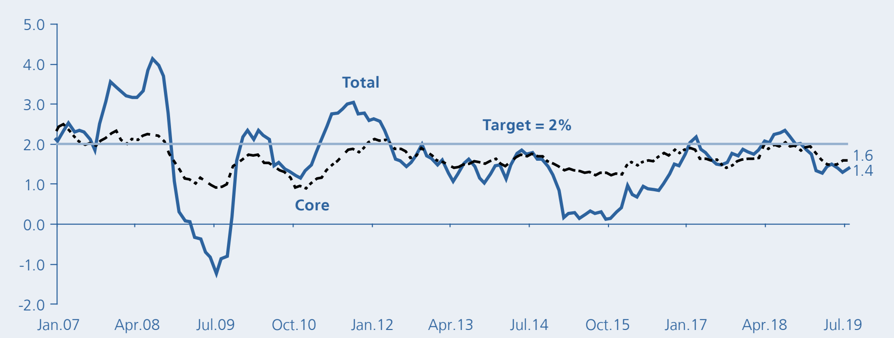
Source: Bureau of Labor Statistics (BLS).

On the other hand, the contribution of net exports in the second quarter was negative, which would reflect the impact of trade tensions. In line with this, manufacturing continued to slow down: the PMI index registered its lowest levels in almost a decade, showing an unfavorable evolution in the category of "new orders". Similarly, investment in construction maintains negative growth rates despite the recovery seen in home sales (associated with the reduction of mortgage rates).

In line with these developments, the pace of growth of the US economy is estimated to slow down in both 2019 (to 2.2 percent) and in 2020 (to 1.8 percent).

Inflation, on the other hand, has remained at low rates. Total inflation and core inflation register rates of 1.7 and 2.4 percent, respectively, while inflation associated with personal consumption expenditure (PCE) registers 1.4 percent for the total index and 1.6 percent for core inflation, the latter variable being the one according to which the Fed sets its inflation target of 2 percent.

Graph 9
USA: PCE PRICE INDEX
(12-month % change)



Source: Fed.

At its last meeting in September, the Fed lowered its benchmark interest rate by 25 bps (to a range between 1.75 and 2.00 percent), this reduction being the second rate cut since the international financial crisis. In addition, the Fed raised its projections of economic growth and unemployment for 2019, but reduced the ones for interest rates. In subsequent statements, Fed Chairman Jerome Powell showed no concern about the sudden tightness of liquidity in the money market because the Fed has the necessary tools and does not see a negative rate outlook, but did not rule out a "next" balance increase if it is necessary. At the moment of concluding this Report, the market expects the Fed to maintain its rates at the October meeting and to lower them again by 25 bps in December.

Table 3
FED: FORECASTS*

	2019		2020		2021		2022	Long-term	
	Jun.19	Sep.19	Jun.19	Sep.19	Jun.19	Sep.19	Sep.19	Jun.19	Sep.19
GDP growth	2.1	2.2	2.0	2.0	1.8	1.9	1.8	1.9	1.9
Unemployment rate	3.6	3.7	3.7	3.7	3.8	3.8	3.9	4.2	4.2
PCE price index	1.5	1.5	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Core Inflation (Core PCE)	1.8	1.8	1.9	1.9	2.0	2.0	2.0	-	-
Memo: Core PCE excluding food and energy.									
Interest rate (%)	2.4	1.9	2.1	1.9	2.4	2.1	2.4	2.5	2.5

* Adds data from 17 individual projections of the FOMC Board members at the end of period.
Source: Fed.

This situation of low liquidity in the system was attributed, to a large extent, to the coincidence of the payment dates of corporate taxes, the payment of Treasury bond auctions, and the requirement of high levels of liquidity coverage ratio (LCR) for systemic banks. To face the liquidity shortage in the US money market, the Fed injected funds amounting to about US$ 278 billion in the repo market between September 17 and September 20, and announced market interventions between September 23 and October 10 to maintain the interbank interest rate (Fed fund rate) within the monetary policy range (1.75-2.00 percent). These interventions include daily auctions of overnight repos of at least US$ 75 billion and three 14-day repo contracts of at least US$ 30 billion.

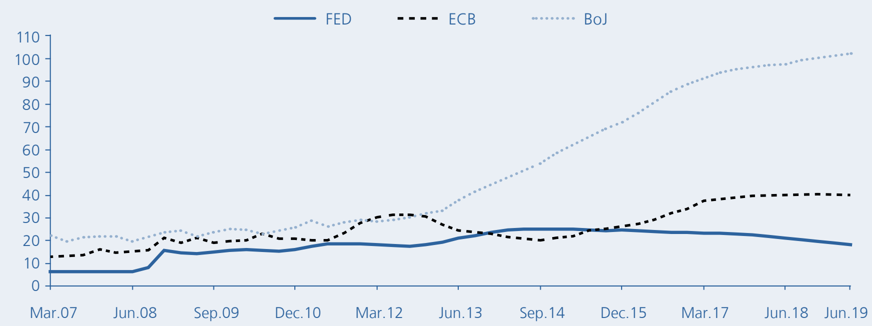
5. In the **Eurozone**, GDP grew at a lower rate than in the first quarter (0.2 percent vs.0.4 percent). Consumption and investment showed a positive evolution, driven by higher employment and the improvement of salaries and financial conditions. However, this positive trend was offset by the effect of trade tensions on the external demand, this negative impact being particularly noteworthy in the case of Germany which registered a contraction of economic activity in this period.

It should be pointed out that this adverse international environment, together with the uncertainty associated with the Brexit, has not only affected agents' confidence, but can lead them to postpone their consumption and investment decisions. However, the favorable labor market situation would offset the negative impact of these factors.

Therefore, the growth projection for the region has been revised slightly downwards to 1.1 percent in 2019 and to 1.2 percent in 2020. At the country level, the downward revision of Germany's projected growth rate (from 0.8 to 0.6 percent) for 2019 stands out, although this economy could benefit afterwards from the increased infrastructure spending announced by the government for 2020.

Another factor that would offset the slowdown in the Eurozone is the likelihood that the European Central Bank (ECB) will maintain an expansionary monetary policy, in a context of low inflation rates. At its September meeting, the ECB announced the reduction of one of its rates –the deposit rate was lowered from -0.4 to -0.5 percent– and a new asset purchase program.

Graph 10
BALANCES OF FED, ECB AND BOJ
(Total assets in % GDP)



Source: Central banks of USA, Eurozone, and Japan.

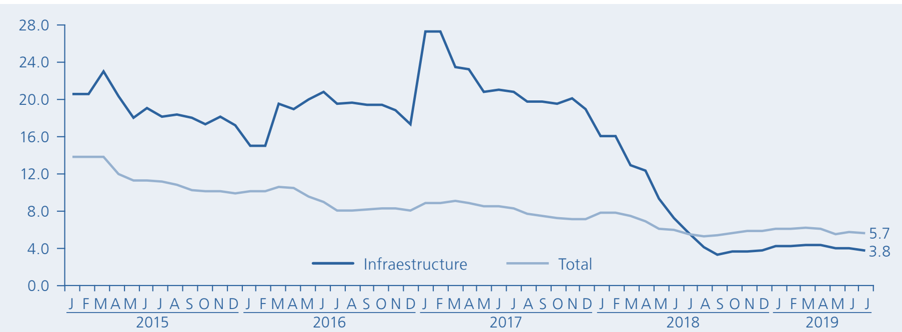
6. On the other hand, the economy of the **United Kingdom** was affected by the political noise associated with the terms of the UK's withdrawal from the European Union (Brexit). The output of the UK contracted in the second quarter for the first time since 2012 (0.2 percent quarterly). Other recent indicators also show an unfavorable evolution: the manufacturing and the construction PMI indices showed levels in the contraction zone while consumer confidence and investor confidence continued the showing the downward trend of previous months. In line with these developments, the growth projection of the UK for 2020 has been revised from 1.4 to 1.2 percent.

7. In addition, the growth projection of the **emerging economies** has also been revised down, from 4.5 to 4.2 percent in 2019 and from 4.8 to 4.6 percent in 2020.

China's GDP growth projection has also been revised down from 6.1 to 6.0 percent for both 2019 and 2020. Due to the impact of commercial tensions with the US, during the second quarter of the year, China's GDP growth rate declined to 6.2 percent per year, the lowest quarterly rate recorded since 1992. At the sector level, the greatest slowdown was observed in the manufacturing sector, where the PMI index registered 49.5 in August, thus accumulating four consecutive months in the contraction zone. On the other hand, the pace of growth in the services sector has remained relatively stable and has become the main driver of growth of the Chinese economy. Investment maintains a low rate of expansion, associated with a relative stagnation of expenditure in infrastructure, while the pace of growth of public investment accelerated in July and reached a rate of 5.7 percent during the first seven months of the year.

In such a context, the government announced additional countercyclical policies to counteract the negative effects of the trade war. The Central Bank of China cut the reserve rate by 50 basis points and announced additional cuts of 100 basis points for a subset of banks (after the government authorized this action) in October and November. On the other hand, the Central Bank allowed the yuan to be slightly above the threshold of 7 yuans per dollar. On the fiscal arena, the government injected around US$ 250 billion in the first part of the year (through tax rate cuts and the reduction of the labor cost burden for companies).

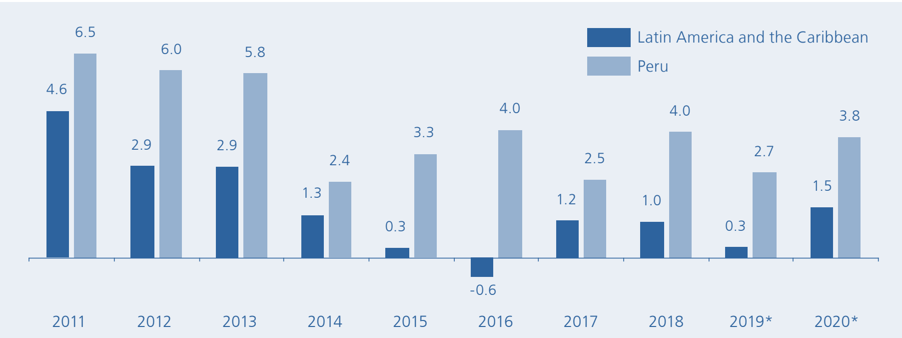
Graph 11
CHINA: INVESTMENT IN FIXED ASSETS
(Interannual % change)



Source: National Bureau of Statistics of China.

8. The growth projection for **Latin America** has been revised down from 0.8 to 0.3 percent in 2019 and from 2.4 to 1.5 percent in 2020. The international environment has affected the region through the lower dynamism of global trade, the fall in commodity prices (particularly basic metals and crude oil), and volatility in financial markets which intensified in August. With the exception of Colombia, there is also a slowdown in domestic demand, particularly in investment, in most Latin American economies.

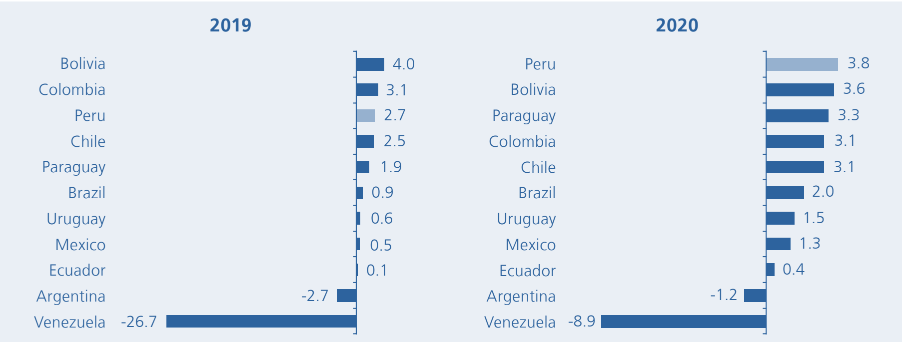
Graph 12
ANNUAL GROWTH LATAM AND PERU: 2011-2020



* Forecast.
Source: IMF, Consensus forecast (September 2019), and BCRP.

At the country level, the downward revision of growth in Argentina and Mexico stands out. In the first case, the political cycle has caused a depreciation of the peso and a rate increase that reinforce recessionary pressures in 2019 and, therefore, reduce the growth projection for 2019. On the other hand, the Mexican economy contracted in the first quarter of the year and registered zero growth in the second quarter. A slower-than-expected economic recovery is foreseen due to uncertainty associated with the escalation of the commercial war, as well as with President López Obrador's future political decisions, and the ratification of the trade agreement between Canada, the United States and Mexico (USMCA).

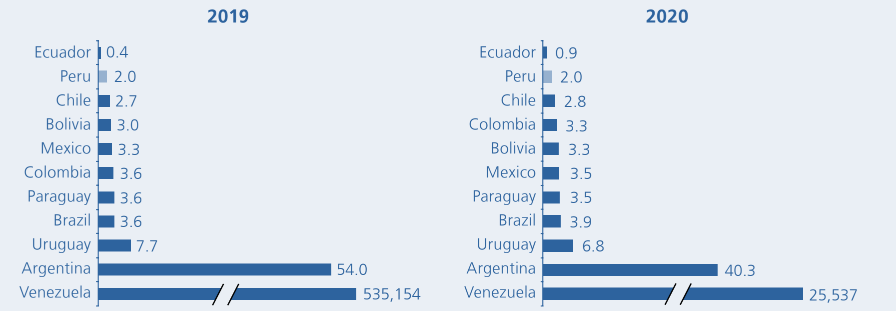
Graph 13
GDP GROWTH
(% change)



Fuente: Latin American Consensus Forecast (September 2019) and BCRP (Peru).

This slowdown is observed in a context of low inflation rates. In the countries of the region with inflation targeting, inflation has remained within the target range as a result of the lower dynamism of domestic demand, some stability in the exchange rate, and some idiosyncratic shocks. In such a context, several economies in the region reduced their interest rate in the months of July, August, and September.

Graph 14
INFLATION
(% change, Dec./Dec.)



Fuente: Latin American Consensus Forecast (September 2019) and BCRP (Peru).

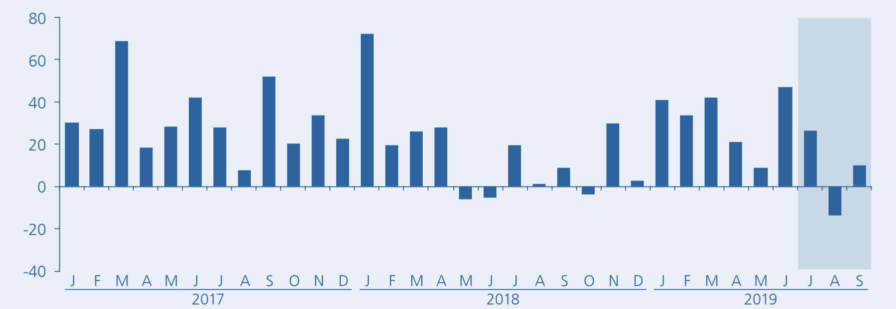
International Financial Markets

9. In the months of July and August, financial markets were influenced by high volatility generated by the trade negotiations between the United States and China. Markets were also influenced by concerns about the global economic slowdown as well as by political and geopolitical tensions. In this context, commodity prices, the currencies of the emerging economies, as well as stock markets and yields declined.

   Capital inflows to the emerging economies also decreased in July and a net outflow of capital was observed in August due to the escalation of commercial tensions.

   However, this trend declined after the United States and China stated their willingness to resume talks as from October. In addition, markets were also favored by expectations about the likelihood that the major central banks would ease their monetary policy and adopt fiscal stimuli, which was reflected in a slight inflow of capital to some emerging economies during September.

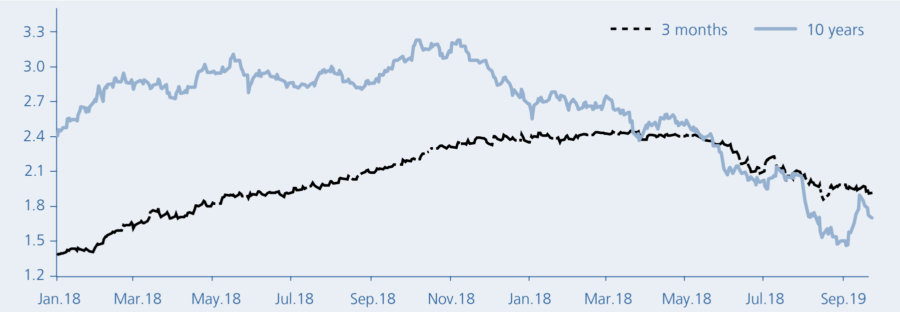
Graph 15
FIXED AND VARIABLE INCOME FLOW FROM NON-RESIDENTS TO EMERGING MARKETS
(2017-2019, in billion US$)



* Estimated data corresponds until 23 September.
Source: The Institute of International Finance (IIF).

10. In **fixed-income markets**, the yield of the 10-year US bond fell due to uncertainty about the global trade policy, the global economic slowdown, and the rate cut in the Fed interest rate. As a result, the yield spread of the 10-year and 3-month bonds continued to be negative and dropped to -51 basis points on August 27 (its lowest level since March 2007). The yield curve remains inverted since May 23 (with the sole exception of July 23).

Graph 16
YIELDS ON US TREASURY BONDS
(In %)



Source: Reuters.

In the Eurozone, the yields decreased due to the signs indicating an economic slowdown, to expectations of stimulus from the ECB, to Brexit-related developments, and to the political situation in Italy. These factors were in part offset by Germany's announcement of fiscal stimulus measures. Most yields fell, influenced by a context marked by economic slowdown and by the reduction of monetary policy interest rates.

Table 4
YIELDS ON 10-YEAR SOVEREIGN BONDS

	Dec.18	Jun.19	Sep.19	Accumulated change 2019 (bps.)	Change Sep.2019/ Jun.2019 (bps.)
USA	2.69	2.01	1.78	-91	-23
Germany	0.24	-0.33	-0.51	-75	-18
France	0.71	-0.01	-0.22	-92	-21
Italy	2.74	2.10	0.88	-186	-122
Spain	1.41	0.39	0.25	-117	-15
Greece	4.35	2.43	1.36	-299	-107
United Kingdom	1.28	0.83	0.63	-64	-20
Japan	-0.01	-0.16	-0.22	-21	-6
Brazil	9.24	7.45	7.17	-207	-29
Colombia	6.75	6.14	6.00	-75	-14
Chile	4.24	3.10	2.56	-167	-54
Mexico	8.64	7.57	7.05	-159	-52
Peru	5.35	4.72	4.20	-115	-52
South Africa	9.28	8.74	8.85	-43	11
India	7.37	6.88	6.64	-73	-24
Turkey	15.80	16.08	14.60	-120	-148
Russia	8.70	7.42	7.04	-166	-38
China	3.31	3.24	3.11	-21	-13
South Korea	1.96	1.60	1.47	-49	-13
Indonesia	7.98	7.34	7.21	-77	-13
Thailand	2.48	2.12	1.52	-96	-59
Malaysia	4.08	3.64	3.43	-66	-21
Philippines	7.01	5.04	4.74	-227	-30

Made on September 19.
Source: Reuters.

Table 5 PUBLIC FINANCES IN DEVELOPED ECONOMIES						
	Fiscal deficit (in % GDP)			Gross public debt (In % GDP)		
	2018	2019	2020	2018	2019	2020
USA	-4.3	-4.6	-4.4	106	107	108
Japan	-3.2	-2.8	-2.1	237	238	237
United Kingdom	-1.4	-1.3	-1.2	87	86	84
Eurozone	-0.6	-1.0	-0.9	85	84	82
Germany	1.7	1.1	1.1	60	57	54
France	-2.6	-3.3	-2.4	99	99	99
Italy	-2.1	-2.7	-3.4	132	133	134
Spain	-2.7	-2.3	-2.3	97	96	95
Canada	-0.4	-0.6	-0.6	91	88	85

Source: IMF.

11. In the **variable-income markets**, trade tensions and concerns of a global economic slowdown affected most stock exchange markets, although this impact was offset by better corporate results in the second quarter (particularly in the US), by the stimulus measures of the Fed and the ECB, and by the fiscal measures announced in Germany and China.

    In the emerging countries, most of the stock exchange markets fell, affected by increased risk aversion and by the lower prices of commodities. In addition to this, economic slowdown and some idiosyncratic shocks –e.g. the results of the elections in Argentina–, also affected the indices of these stock markets.

Table 6 STOCK EXCHANGE						
		Dec.18	Jun.19	Sep.19	Accumulated change 2019 (%)	Change Sep.2019/ Jun.2019 (bps.)
VIX*	S&P 500	25.42	15.08	14.05	-9.8	0.5
USA	Dow Jones	23,327	26,600	27,095	16.1	1.9
Germany	DAX	10,559	12,399	12,458	18.0	0.5
France	CAC 40	4,731	5,539	5,659	19.6	2.2
Italy	FTSE MIB	18,324	21,235	22,128	20.8	4.2
Spain	IBEX 35	8,540	9,199	9,129	6.9	-0.8
Greece	ASE	613	868	874	42.5	0.6
United Kingdom	FTSE 100	6,728	7,426	7,356	9.3	-0.9
Japan	Nikkei 225	20,015	21,276	22,044	10.1	3.6
Brazil	Ibovespa	87,887	100,967	104,339	18.7	3.3
Colombia	IGBC	11,144	12,606	12,965	16.3	2.8
Chile	IGPA	25,950	25,782	25,480	-1.8	-1.2
Mexico	IPC	41,640	43,161	43,017	3.3	-0.3
Argentina	Merval	30,293	41,796	30,414	0.4	-27.2
Peru	Ind. Gral.	19,350	20,623	19,491	0.7	-5.5
South Africa	JSE	52,737	58,204	56,124	6.4	-3.6
India	Nifty,50	10,863	11,789	10,705	-1.5	-9.2
Turkey	XU100	91,270	96,485	100,339	9.9	4.0
Russia	RTS	1,066	1,381	1,378	29.3	-0.2
China	Shangai C.	2,494	2,979	2,999	20.3	0.7
South Korea	KOSPI	2,041	2,131	2,080	1.9	-2.4
Indonesia	JCI	6,194	6,359	6,244	0.8	-1.8
Thailand	SET	1,564	1,730	1,641	4.9	-5.2
Malaysia	FTSE KLCI	1,691	1,672	1,596	-5.6	-4.5
Philippines	Psei	7,466	8,000	7,911	6.0	-1.1

* Variation in basis points.
Made on September 19.
Source: Reuters.

12. As for the **foreign exchange markets**, since the end of June the dollar appreciated 2.2 percent against the basket of currencies, the appreciation of the dollar against the euro standing out (due to the economic slowdown in the Eurozone) together with the appreciation of the US currency against the sterling pound (due to volatility associated with the Brexit negotiations).

    The currencies of most emerging markets weakened against the dollar, affected by the trade war, the lower prices of commodities, and the slowdown of local economic activity.

Table 7
EXCHANGE RATES

		Dec.18	Jun.19	Sep.19	Accumulated change 2019 (%)*	Change Sep.2019/ Jun.2019 (%)*
Dollar Index **	US Dollar Index	96.17	96.13	98.27	2.2	2.2
Euro	Euro	1.144	1.137	1.104	-3.5	-2.9
United Kingdom	Pound sterling	1.281	1.269	1.252	-2.2	-1.3
Japan	Yen	109.93	107.88	108.00	-1.8	0.1
Brazil	Real	3.880	3.852	4.167	7.4	8.2
Colombia	Peso	3,245	3,211	3,382	4.2	5.3
Chile	Peso	693	677	716	3.3	5.7
Mexico	Peso	19.65	19.22	19.45	-1.0	1.2
Argentina	Peso	37.65	42.47	56.40	49.8	32.8
Peru	Sol	3.372	3.294	3.354	-0.5	1.8
South Africa	Rand	14.38	14.07	14.81	3.0	5.2
India	Ruppe	69.77	68.94	71.37	2.3	3.5
Turkey	Lira	5.29	5.79	5.71	8.0	-1.3
Russia	Ruble	69.68	63.25	63.97	-8.2	1.1
China	Yuan (onshore)	6.876	6.865	7.096	3.2	3.4
South Korea	Won	1,114	1,155	1,194	7.2	3.4
Indonesia	Rupee	14,375	14,125	14,055	-2.2	-0.5
Thailand	Bath	32.33	30.68	30.52	-5.6	-0.5
Malaysia	Ringgit	4.130	4.130	4.190	1.5	1.5
Philippines	Peso	52.49	51.22	52.27	-0.4	2.0

* An increase (fall) in the index means an appreciation (depreciation) of the US dollar, except in the euro and pound.
** An increase (fall) in the index means an appreciation (depreciation) of the US dollar against currency basket (euro, yen, pound, canadian dollar, Sweeden krone, Switzerland franc).
Made on September 19.
Source: Reuters.

13. **Commodity prices** have been showing a downward trend, in line with the escalation of trade tensions and the lower global growth prospects.

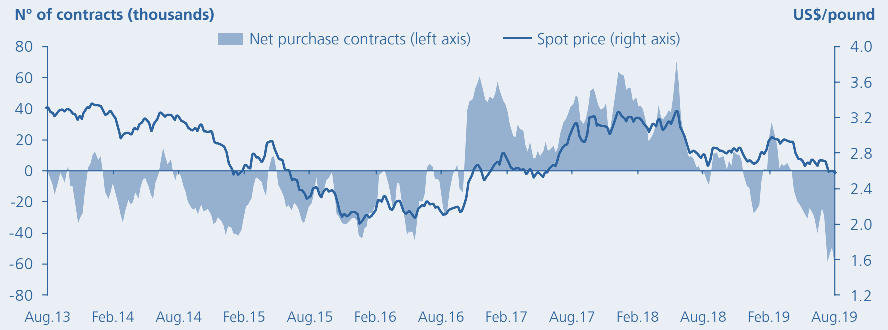
    a. Copper

    In August, the price of **copper** showed a monthly average of US$ 2.59 a pound, a price level 3 percent lower than that registered in June 2019. As a result, the price of copper has fallen 6 percent compared to December 2018.

    The price of copper was affected by the escalation of trade tensions between China and the United States and by lower industrial production at the global level.

Non-commercial copper positions decreased significantly and went from showing net long positions at the end of April to showing net short positions with minimum historical levels in August of this year.

Graph 17
COPPER: NON-COMMERCIAL CONTRACTS



Note: The Copper Speculative Net Positions of the Commodities Futures Trading Commission are reported weekly and reflect the difference between the total volume of the long position (or purchase) and short position (or sale) in the market and opened by non-commercial operators (speculative). This report only includes the future markets in the USA (Chicago and New York Stock Exchanges).
Source: Reuters and US Commodity Futures Trading Commission.

However, according to the International Copper Studies Group (ICSG), the global supply deficit has worsened in the first five months of 2019. This reflects the contraction of the production of refined copper due to the closure of some smelters (as a result of environmental measures) and a lower supply of copper concentrates (mainly as a result of lower grades of mineral in Chile and of lower production in Indonesia). These factors have offset the reduction observed in the demand for refined copper associated with the global economic slowdown.

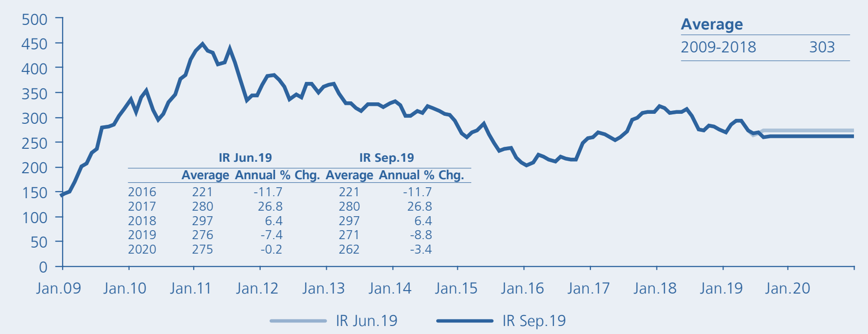
Table 8
SUPPLY AND DEMAND FOR REFINED COPPER
(Thousand metric ton)

	2016	2017	2018[2/]	Jan.18 May.18	Jan.19 May.19	% chg.
Global Mining Production	20,386	20,096	20,561	8,347	8,281	-0.8%
Global Refining Production (Primary + Secondary)	23,357	23,548	24,111	9,870	9,774	-1.0%
Global Use of Refined Copper	23,512	23,732	24,510	10,001	9,964	-0.4%
Refined Balance [1/]	-156	-184	-399	-131	-190	

1/ Balance calculated using the total production of refined products minus the use of refining.
2/ Estimated on May and August 2019.
Source: The International Copper Study Group (ICSG).

In line with these developments, the average price of copper estimated for 2019 and 2020 has been revised down from the levels estimated in the June report due to the outlook of lower global growth. The supply-related factors pointed above would provide some support to the price of copper.

Graph 18
COPPER: JANUARY 2009 - DECEMBER 2020
(US$ cents/pd.)



Source: Reuters and BCRP.

b. Zinc

The international price of **zinc** dropped 13 percent between June and August 2019 to an average monthly level of US$ 1.03 the pound. With this decline, the price of zinc has accumulated a fall of 13 percent so far this year.

The price of zinc fell due to the lower demand outlook associated with the escalation of trade tensions. The effect of this negative macroeconomic environment for the demand of zinc has been intensified by expectations of a higher mine production and by new refining capacity in China. Moreover, reflecting the higher production of Chinese smelters, zinc inventories have begun to increase.

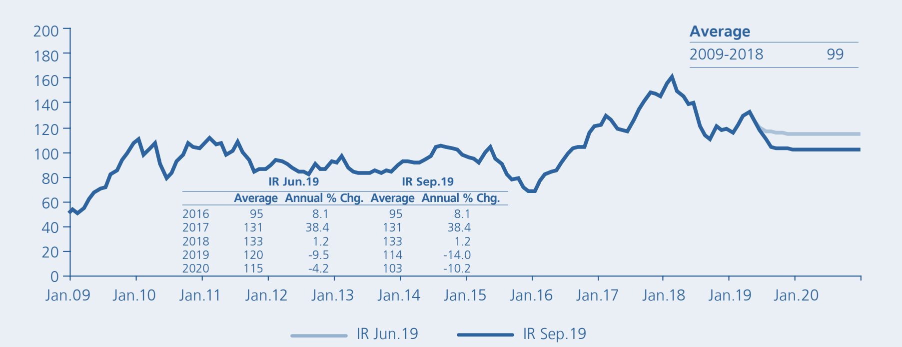
Table 9
SUPPLY AND DEMAND FOR REFINED ZINC
(Thousand metric tons)

	2016	2017	2018	Jan.-Jun. 2018	Jan.-Jun. 2019	% chg.
Global Mining Production	12.60	12.53	12.76	6.24	6.36	1.9%
Global Refining Production (Primary + Secondary)	13.58	13.22	13.18	6.54	6.51	-0.4%
Global Use of Refined Zinc	13.71	13.68	13.68	6.63	6.65	0.2%
Refined Balance (in thousands)	-128	-461	-502	-90	-134	

Source: ILZSG. Reports on May and August 2019.

In line with these developments, the projected price of zinc is revised down compared to the projections of the previous Inflation Report. However, the persistence of constraints in the production of Chinese foundries would provide some support to the price of zinc.

Graph 19
ZINC: JANUARY 2009 - DECEMBER 2020
(US$ cents/pd.)



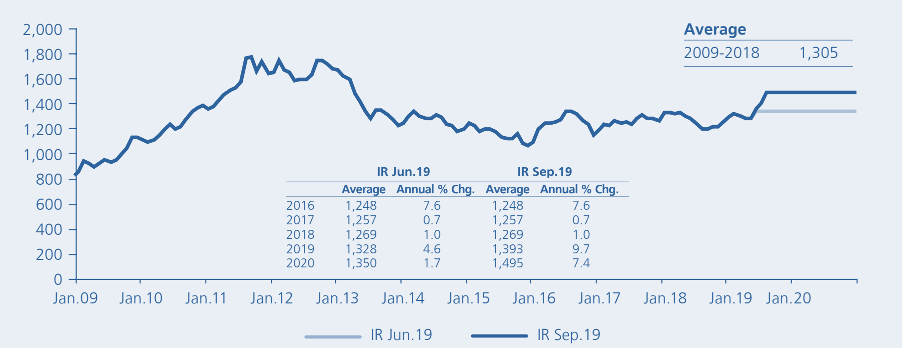
Source: Reuters and BCRP.

c. Gold

In August, the price of **gold** registered an average value of US$ 1,499 the troy ounce, which represents an increase of 10 percent compared to June. Thus, the price of gold accumulates an increase of 20 percent compared to December 2018.

The price of gold registered a strong increase in recent months in response to the rate cut implemented by the Fed as well as due to expectations that this monetary policy easing will continue in 2019-2020. Furthermore, fears of a global economic slowdown have increased the demand for safe assets (gold, among them). However, the physical demand for gold for the jewelry market has been affected by the economic slowdown experienced by economies such as China, India, and Turkey, as well as by the high prices of this metal. Because of these factors, the projected price of gold has been revised on the upside from the one estimated in the June report.

Graph 20
GOLD: JANUARY 2009 - DECEMBER 2020
(US$/tr. ounce)



Source: Reuters and BCRP.

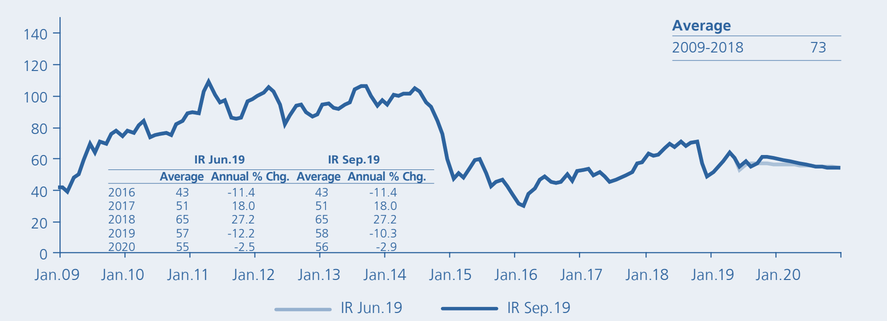
d. Crude Oil

In August 2019, the average price of **WTI oil** remained at US$ 55 a barrel, a similar price than the one recorded in June, but 13 percent higher than in December 2018, it should be pointed out, however, that the price of crude showed an important increase at the time of completing this report due to the attacks to Saudi Arabia's refineries which led to a significant increase in prices.

Until August, the price of crude remained relatively stable, with low demand prospects offsetting the OPEC production cuts. In recent months, the outlook of oil demand has been affected by the intensification of trade tensions between China and the United States. On the supply side, the continued growth of US oil production –which has reached new high levels at the end of August– has been offset by production cuts from OPEC member countries and their allies, as well as by other supply shocks that have affected the production of Iran and Venezuela.

This relative price stability has been slightly affected by recent events. On September 16, the price of crude rose 15 percent as a result of attacks on Saudi Arabia oil facilities, this country accounting for approximately 10 percent of the global supply of crude. Although an important part of this shock has been reversed, the price projected for the forecast horizon has been modified slightly up (assuming a partial reversal of this shock). In addition, the shock introduces a greater degree of uncertainty to the projection increasing the difficulty of anticipating the evolution of the supply in the coming months.

Graph 21
WTI OIL: JANUARY 2009 - DECEMBER 2020
(US$/bl.)



	IR Jun.19		IR Sep.19	
	Average	Annual % Chg.	Average	Annual % Chg.
2016	43	-11.4	43	-11.4
2017	51	18.0	51	18.0
2018	65	27.2	65	27.2
2019	57	-12.2	58	-10.3
2020	55	-2.5	56	-2.9

Source: Reuters and BCRP.

e. Imported Food

The price of **maize** dropped 12 percent in the last three months, reaching an average monthly price of US$ 147 per MT in August. As a result, the international price of maize has accumulated an increase of 7 percent compared to December 2018.

The price of this crop decreased significantly in recent months due to the escalation of the trade war, as well as due to uncertainty about the potential size of US crops in the 2019/2020 farming year. In line with the trend observed so far, the average price of maize estimated for 2019 is revised downwards.

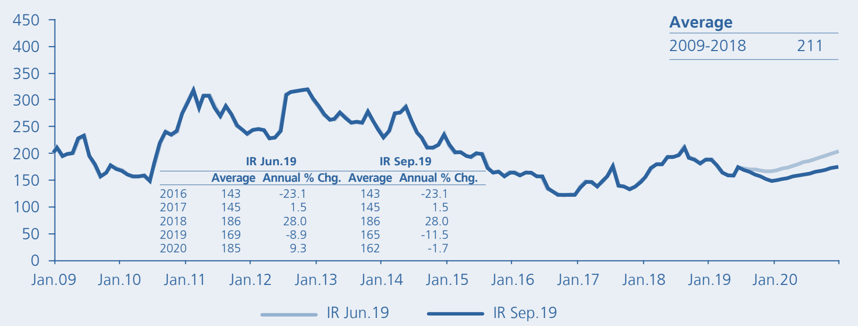
Graph 22
MAIZE: JANUARY 2009 - DECEMBER 2020
(US$/ton)

	IR Jun.19		IR Sep.19	
	Average	Annual % Chg.	Average	Annual % Chg.
2016	135	-4.4	135	-4.4
2017	131	-2.3	131	-2.3
2018	132	0.7	132	0.7
2019	153	15.6	146	10.3
2020	169	10.7	146	0.4

Source: Reuters and BCRP.

Since our last Inflation Report –published in June 2019–, the price of **wheat** has declined 14 percent, recording a monthly average price of US$ 149 per MT in August. With this price drop, the price of wheat has accumulated a reduction of 21 percent compared to December 2018.

Graph 23
WHEAT: JANUARY 2009 - DECEMBER 2020
(US$/ton)



	IR Jun.19		IR Sep.19	
	Average	Annual % Chg.	Average	Annual % Chg.
2016	143	-23.1	143	-23.1
2017	145	1.5	145	1.5
2018	186	28.0	186	28.0
2019	169	-8.9	165	-11.5
2020	185	9.3	162	-1.7

Source: Reuters and BCRP.

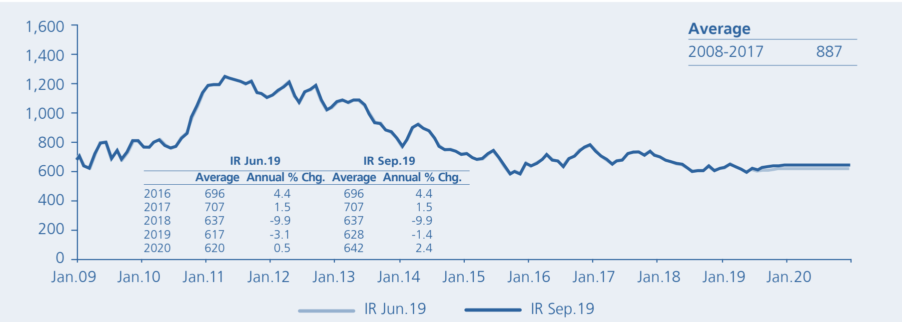
The price of wheat fell in line with a well-supplied market due to the increased seasonal availability of the new harvest in the European Union, Russia, and the United States. The US Department of Agriculture estimates that US wheat production will grow 5 percent in the 2019/2020 season, in a context of difficulties for exporting surpluses given the wide global supply and the appreciation of the dollar. It is estimated that the price of wheat will register levels below those considered in the previous Inflation Report due to the higher production expected.

In August, the average monthly price of **soybean oil** was US$ 626 per ton, 1 percent higher than in both June 2019 and December 2018.

The price of soybean oil increased slightly, supported by prospects of a strong growth in the US demand, by a drop in soybean oil inventories in the 2019/20 season, and by China and India's higher purchases of this commodity. However, the tariffs imposed by China on imports of soybean and soybean oil offset the upward pressures.

Considering these recent developments and the prospects of growth of the demand for soybean oil in the 2019/20 crop year, soybean prices are estimated to show higher levels than those estimated in the previous Inflation Report.

Graph 24
SOYBEAN OIL: JANUARY 2009 - DECEMBER 2020
(US$/ton)



	IR Jun.19		IR Sep.19	
	Average	Annual % Chg.	Average	Annual % Chg.
2016	696	4.4	696	4.4
2017	707	1.5	707	1.5
2018	637	-9.9	637	-9.9
2019	617	-3.1	628	-1.4
2020	620	0.5	642	2.4

Source: Reuters and BCRP.

Box 1
RECENT CENTRAL BANK'S INTEREST RATE DECISIONS

This box discusses the recent interest rate decisions of a broad set of central banks and the rationale behind these decisions. The world has seen a greater escalation of the global trade war between the United States and China in recent months and, consequently, there has also been a slowdown in economic activity worldwide. In this context, central banks have reacted primarily with lower monetary policy interest rates.

CENTRAL BANKS THAT REDUCED THEIR INTEREST RATES: JULY AND SEPTEMBER 2019
(In %)

Countries	Inflation target	12-month inflation as of August	Policy rate		Expost real interest rate
			June	Current	
Ukraine	4.0-6.0	8.8	17.50	16.50	7.1
Mexico	2.0-4.0	3.2	8.25	7.75	4.4
Turkey	3.0-7.0	15.0	24.00	16.50	1.3
Russia	4.0	4.3	7.50	7.00	2.6
Philippines	2.0-4.0	1.7	4.50	4.00	2.3
Brazil	3.0-6.0	3.4	6.50	5.50	2.0
South Africa	3.0-6.0	4.3	6.75	6.50	2.1
India	2.0-6.0	3.2	5.75	5.40	2.1
Indonesia	2.5-4.5	3.5	6.00	5.25	1.7
South Korea	2.0	0.0	1.75	1.50	1.5
Thailand	1.0-4.0	0.5	1.75	1.50	1.0
Serbia	1.5-4.5	1.3	3.00	2.50	1.2
Peru	**1.0-3.0**	**2.0**	**2.75**	**2.50**	**0.5**
USA	2.0	1.7	2.50	2.00	0.3
Iceland	2.5	3.2	3.75	3.50	0.3
Chile	2.0-4.0	2.3	2.50	2.00	-0.3
Australia 1/	2.0-3.0	1.6	1.25	1.00	-0.6
New Zealand 1/	1.0-3.0	1.7	1.50	1.00	-0.7

1/ Inflation as of June 2019.
Source: Central banks.

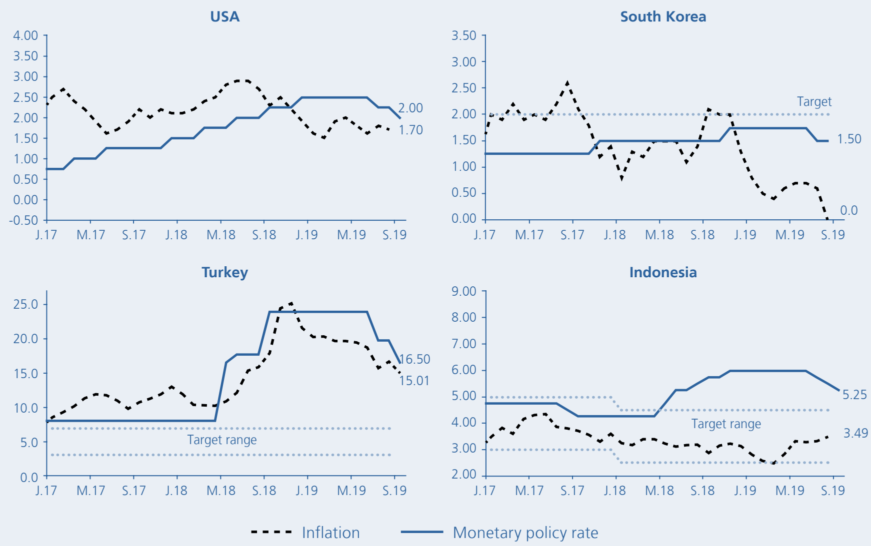
Thus, although there have been cuts in the monetary policy interest rates of various countries in the last year, the intensity and speed of this response depends on the initial monetary policy position that each country had. In other words, while some central banks had a neutral position at the time when the shock occurred, others had already adopted an expansionary monetary policy stance since the previous year. This is the case of Peru, which maintains one of the lowest real interest rates in the emerging economies. This initial point is closely related to the phase of the economic cycle and the expected level of inflation in each country.

In the main countries of the region with inflation targeting schemes, different monetary policy responses have been observed in the last 12 months. Chile and Mexico raised their policy rates towards the fourth quarter of 2018, reducing them thereafter between June and September of this year to initiate a monetary stimulus cycle. Brazil and Peru maintained their interest rates until August, after which they reduced them by 50 and 25 basis points, respectively, while Colombia, on the other hand, has maintained its monetary policy interest rate at 4.25 percent since April 2018.

Peru's Central Bank began its cycle of reducing the benchmark interest rate early in May 2017, lowering it in this period from 4.25 percent to 2.75 percent in May 2018, after which this stimulus was enhanced by reducing the policy rate to 2.50 percent in August 2019. In this way, Peru maintains one of the lowest real interest rates in this group of economies, reflecting a clearly expansionary monetary policy position. In addition to this, the inflation rate and inflation expectations are within the target range, which has allowed BCRP to maintain and expand the monetary impulse during this period.

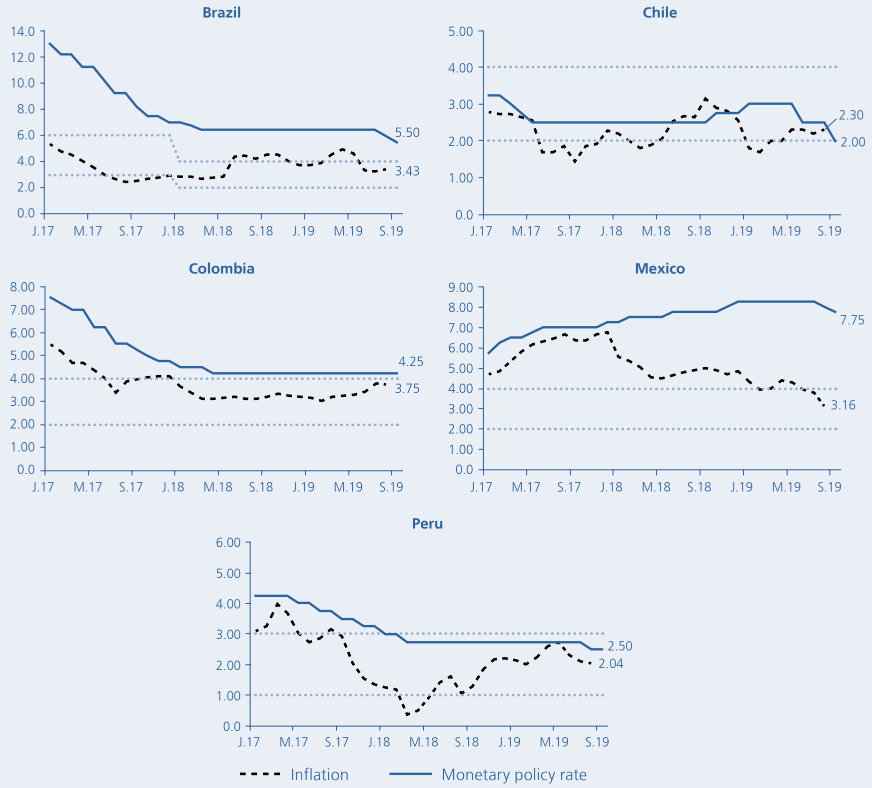
The pace of evolution of the benchmark rates reflects the macroeconomic conditions of each country, which is mainly observed in the evolution of inflation, as shown in the graph below.

DEVELOPED AND EMERGING COUNTRIES: MONETARY POLICY RATE AND INFLATION (12-MONTHS) 2017-2019
(%)



Several factors have to be taken into account to assess the timeliness of adjusting the monetary policy benchmark rate, including not only if it was lowered in the most recent period, but also what is the level of the real interest rate with respect to its neutral level, because this difference provides more information about the monetary policy position. The analysis of the monetary policy position should consider the consistency of the gap between the real monetary policy rate and its neutral rate with the evolution of inflation and its determinants. The adjustments in the reference rate do not indicate *per se* whether the adjustment has been timely or not. A reduction in the monetary policy interest rate, for example, may reflect changes in macroeconomic conditions or corrections of premature rises previously made.

LATAM COUNTRIES: MONETARY POLICY RATE AND INFLATION (12-MONTHS) 2017-2019
(%)



II. Balance of Payments

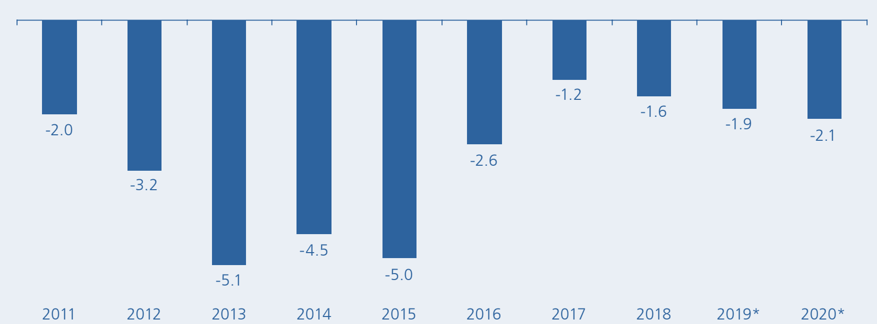
Current Account

14. In the first half of 2019, the current account deficit of the balance of payments amounted to US$ 2.75 billion (2.5 percent of GDP), this deficit being US$ 701 million higher than the one registered in the same period of 2018 (1.8 percent of GDP). This balance reflected mainly the lower surplus of the trade balance (US$ 2.44 billion) resulting from lower mining and hydrocarbon exports since the latter were affected by the lower international prices of basic metals and by a lower primary production (especially of gold, zinc, and oil derivatives).

    The scenario foreseen in the forecast horizon considers a moderate fall in the terms of trade, a normalization of primary economic activity in 2020, and a lower dynamism of global economic activity. In this context, the trade balance is expected to show a lower surplus than that estimated in the June Report and a higher deficit in the current account of the balance of payments, which would continue to be more than offset by the inflow of long-term capital.

    In this scenario, the **current account deficits** projected for 2019 and 2020 are estimated at 1.9 and 2.1 percent of GDP, respectively, both of which are sustainable levels lower than the average deficit level observed over the past 10 years (2.8 percent of GDP).

Graph 25
CURRENT ACCOUNT: 2011-2020
(% GDP)



* Forecast.

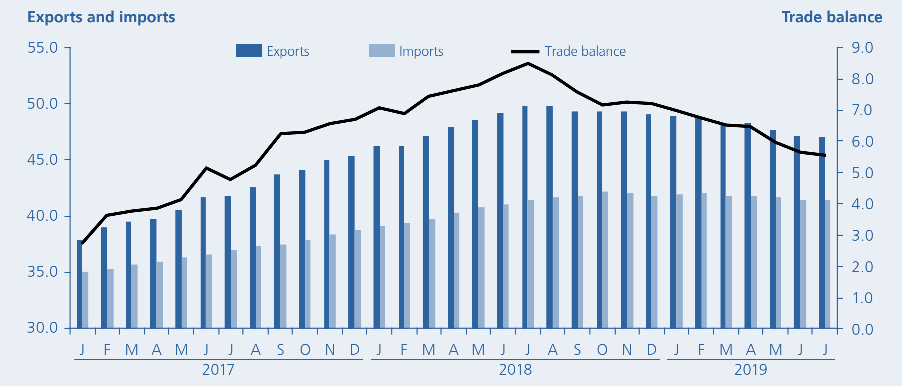
Table 10
BALANCE OF PAYMENTS
(Million US$)

	2018	2019*			2020*	
		I Sem.	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
I. CURRENT ACCOUNT BALANCE	**-3,594**	**-2,748**	**-3,782**	**-4,347**	**-4,608**	**-4,960**
% GDP	*-1.6*	*-2.5*	*-1.6*	*-1.9*	*-1.9*	*-2.1*
1. Trade Balance	7,197	2,444	6,271	5,722	6,284	5,784
a. Exports	49,066	22,616	48,195	47,450	51,224	50,148
i) Traditional	35,638	16,074	34,023	33,473	35,611	34,731
ii) Non traditional	13,240	6,457	14,001	13,813	15,457	15,258
b. Imports	-41,870	-20,172	-41,924	-41,728	-44,940	-44,364
2. Services	-2,532	-1,205	-2,514	-2,521	-2,885	-2,935
3. Investment income	-11,814	-5,885	-11,303	-11,322	-11,883	-11,685
4. Current transfers	3,556	1,899	3,763	3,774	3,876	3,876
Of which: Remittances	3,225	1,645	3,382	3,382	3,551	3,551
II. FINANCIAL ACCOUNT	**94**	**9,139**	**9,818**	**12,882**	**6,292**	**6,644**
1. Private sector	-2,028	3,298	3,235	6,916	3,213	3,655
a. Long-term	917	2,168	4,109	6,612	3,427	3,633
b. Short-term [1/]	-2,946	1,131	-873	304	-214	22
2. Public sector [2/]	2,122	5,840	6,582	5,966	3,080	2,989
III. CHANGE ON NIRs	**-3,500**	**6,391**	**6,035**	**8,535**	**1,684**	**1,684**

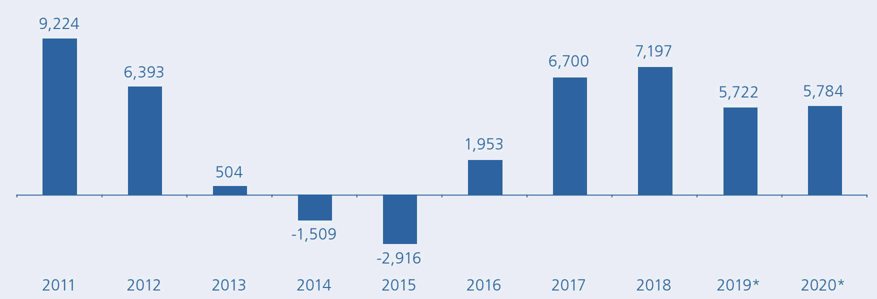
1/ Includes net errors and omissions, and NIR's effect valuation.
3/ Includes portfolio investment in sovereign bonds by non-residents.
* Forecast.
IR: Inflation Report.

15. In the first half of the year, the **trade balance** showed a surplus of US$ 2.44 billion, US$ 1.56 billion lower than the balance obtained in the same period of 2018. As of July 2019, the cumulative twelve month-balance was US$ 5.54 billion, which reflects the downward trend observed since July 2018. Therefore, reflecting mainly the reduction in the value of the exports, the projection for the trade balance this year is revised down from US$ 6.27 billion to US$ 5.72 billion. Similarly, the projection for 2020 has also been revised down.

Graph 26
TRADE BALANCE, EXPORTS, AND IMPORTS
(Accumulated last 12 months - Billion US$)



Graph 27
TRADE BALANCE: 2011-2020
(Million US$)



* Forecast.

16. **Exports** totaled US$ 22.62 billion in the first half of the year, which represents a decline of 7.9 percent compared to the same period in the previous year, mainly as a result of the lower prices of copper and zinc exports and the lower volumes of shipments of oil and oil derivatives. This year, the value of our exports is expected to decline due to the impact of the lower export prices of traditional products. However, the lower growth of the volume of traditional exports associated with the downward adjustment in mining production would be offset by higher exports of non-traditional agricultural and fishing goods. On the other hand, a greater recovery of the volume of traditional exports is expected in 2020, in line with the anticipated normalization of production in the primary sectors.

Table 11
TRADE BALANCE
(% change)

	2018	2019*			2020*	
		I Sem.	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
1. Value:						
Exports	8.0	-7.9	-1.8	-3.3	6.3	5.7
Traditional products	6.2	-11.1	-4.5	-6.1	4.7	3.8
Non-traditional products	12.9	1.2	5.7	4.3	10.4	10.5
Imports	8.1	-1.8	0.1	-0.3	7.2	6.3
2. Volume:						
Exports	1.6	-0.7	2.4	0.3	5.5	5.9
Traditional products	-1.5	-3.3	0.6	-2.1	4.8	5.4
Non-traditional products	11.0	6.0	6.9	6.9	7.2	7.2
Imports	1.6	-0.8	1.4	0.8	5.6	5.4
3. Price:						
Exports	6.3	-7.2	-4.0	-3.6	0.7	-0.2
Traditional products	7.8	-8.1	-5.1	-4.1	-0.1	-1.6
Non-traditional products	1.8	-4.6	-1.1	-2.4	3.0	3.0
Imports	6.5	-1.0	-1.3	-1.1	1.5	0.9

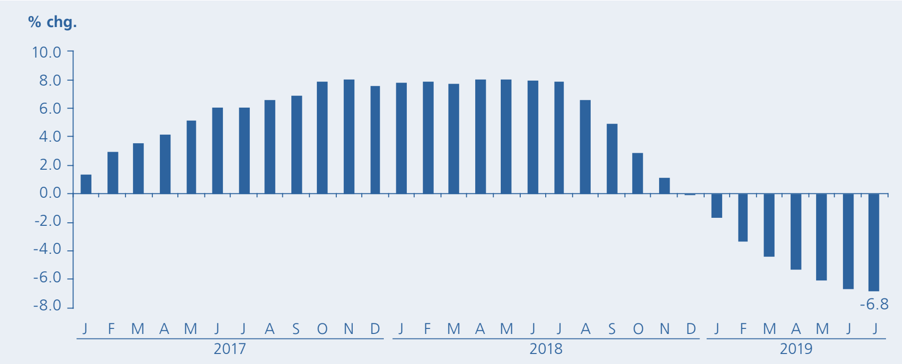
* Forecast.

Similarly, **imports** declined in the first half of 2019 in a context marked by a low growth of domestic demand and lower prices of oil and oil derivatives. A slight increase is expected in the volume of imports of capital goods in the remainder of this year, in line with the upward revision of private investment. In 2020, imports are foreseen to continue recovering, in line with the expected evolution of investment and local activity.

Terms of Trade

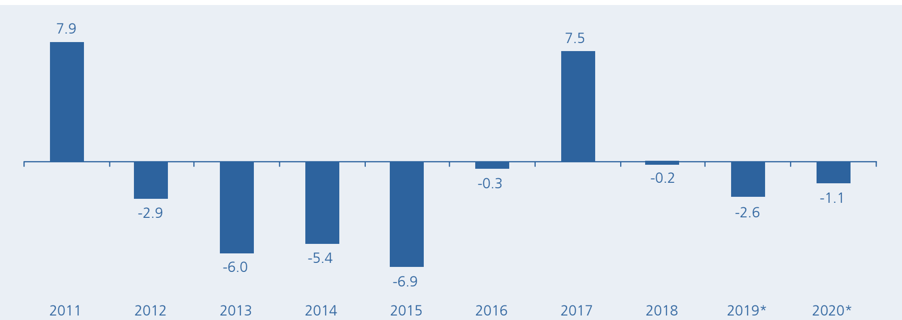
17. Trade tensions between the United States and China as well as expectations of lower world growth have been affecting the prices of the main commodities, including our export metals. In the last twelve months, as of July 2019, the **terms of trade** have fallen 6.8 percent.

Graph 28
TERMS OF TRADE
(Accumulated 12 month % change)



18. In 2019, the terms of trade are estimated to show a reduction of 2.6 percent, reflecting the trend observed. The (annual average) prices of exports would fall by 3.6 percent, while the prices of imports would fall 1.1 percent. In 2020, the terms of trade would show a decline of 1.1 percent.

Graph 29
TERMS OF TRADE: 2011-2020
(Annual average % change)



* Forecast.

Table 12
TERMS OF TRADE: 2018-2020

	2018	2019*			2020*	
		I Sem	IR Jun.	IR Sep.	IR Jun.	IR Sep.
Terms of Trade						
(Annual average % chg.)	**-0.2**	**-6.2**	**-2.8**	**-2.6**	**-0.7**	**-1.1**
Price of exports						
(Annual average % chg.)	**6.3**	**-7.2**	**-4.0**	**-3.6**	**0.7**	**-0.2**
Copper (US$ cents per pound)	297	280	276	271	275	262
Zinc (US$ cents per pound)	133	124	120	114	115	103
Lead (US$ cents per pound)	102	89	86	91	84	94
Gold (US$ per troy ounce)	1,269	1,307	1,328	1,393	1,350	1,495
Price of imports						
(Annual average % chg.)	**6.5**	**-1.0**	**-1.3**	**-1.1**	**1.5**	**0.9**
Oil (US$ per barrel)	65	57	57	58	55	56
Wheat (US$ per ton)	186	171	169	165	185	162
Maize (US$ per ton)	132	142	153	146	169	146
Soybean oil (US$ per ton)	637	623	617	628	620	642
Soybean grain (US$ per ton)	379	341	354	337	373	333

* Forecast.

External Financing

19. The Report forecast considers a scenario with monetary policy easing measures in the central banks of both the developed economies and the emerging economies, in response to the slowdown registered in the pace of global growth. In addition to this, no escalation of trade tensions are foreseen. Therefore, long-term capital inflows to the private sector and the public sector are expected not only to continue showing a regular pace, but also to continue exceeding the greater financing requirement of the current account.

    Long-term capital is expected to continue to be the main source of financing the balance of payments in the forecast horizon. In the private sector, **foreign direct investment** will continue to be the main source of financing due to profit reinvestment and to the greater capital contributions observed (e.g. the sale of the Chaglla power plant to the Chinese consortium Three Gorges in the second quarter of the year), as well as to the upward revision of private investment. The main investment projects that stand out as projects expected to be implemented in the forecast horizon are mining projects, which represent an investment of nearly US$ 10 billion in 2019-2020. Megaprojects expected to continue being implemented include the projects of Quellaveco, Mina Justa, and the expansion of Toromocho, and at a smaller scale, projects such as Quecher Main and Relaves B2 San Rafael.

    In addition to this, the **investment portfolio** has also been revised up mainly due to the trend observed so far this year. This result reflects the higher bond issuances (in dollars and soles) as well as non-residents' greater preference for the securities issued by Peruvian companies, in a context of better external and internal financing conditions.

Table 13
FINANCIAL ACCOUNT OF THE PRIVATE SECTOR
(Million US$)

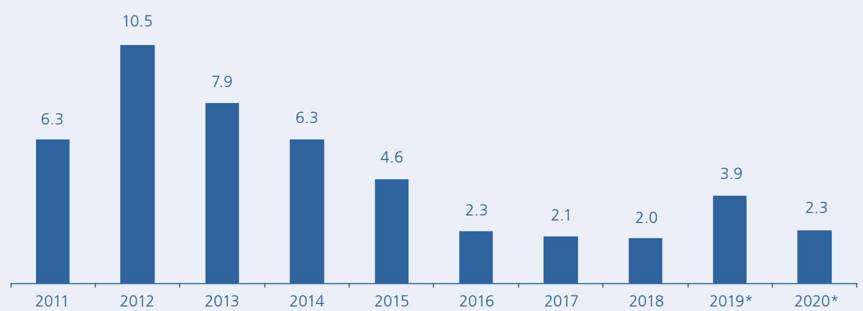
	2018	2019*			2020*	
		I Sem.	IR Jun	IR Sep	IR Jun	IR Sep
PRIVATE SECTOR (A + B)	**-2,028**	**3,298**	**3,235**	**6,916**	**3,213**	**3,655**
% GDP	*-0.9*	*3.0*	*1.4*	*3.0*	*1.3*	*1.5*
A. LONG-TERM	**917**	**2,168**	**4,109**	**6,612**	**3,427**	**3,633**
1. ASSETS	**-3,558**	**-3,086**	**-3,023**	**-2,314**	**-2,321**	**-2,021**
2. LIABILITIES	**4,476**	**5,253**	**7,131**	**8,926**	**5,748**	**5,654**
Foreign direct investment in the country	6,488	5,504	6,608	8,164	5,642	5,255
Long-term loans	-1,601	-761	179	-1,197	-493	-238
Portfolio investment	-411	510	344	1,959	600	637
B. SHORT-TERM[1/]	**-2,946**	**1,131**	**-873**	**304**	**-214**	**22**

1/ Includes net erros and omissions.
* Forecast.

On the other hand, portfolio investments in external assets in 2019 and 2020 are revised down based on the recent trends observed (especially in the case of the AFPs in July and August), in line with the current context of lower international returns. In contrast, the inflow of short-term capital is revised on the upside, basically due to the trend observed during the second quarter of this year, in which banks and non-financial companies' deposits abroad declined.

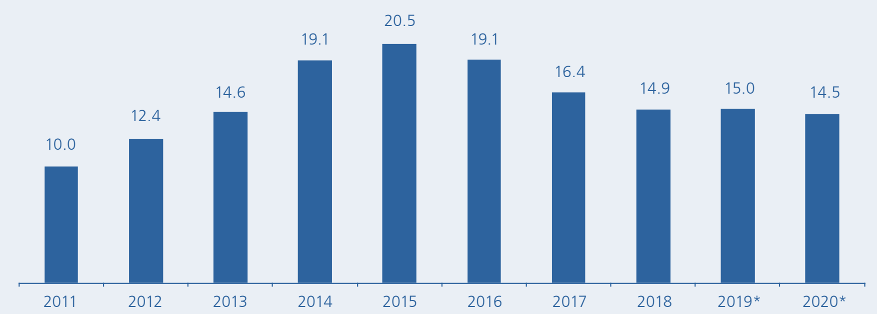
The greater preference for local financing has been reflected in the early repayment of loans, so external indebtedness shows a decreasing trend during the forecast horizon. In 2020, it would show a level around 14.5 percent of GDP.

Graph 30
LIABILITIES OF LONG-TERM PRIVATE FINANCIAL ACCOUNT: 2011-2020
(% GDP)



* Forecast.

Graph 31
BALANCE OF MEDIUM- AND LONG-TERM PRIVATE EXTERNAL DEBT: 2011-2020
(% GDP)



* Forecast.

20. The **public financial account** has been revised to the downside due mainly to non-residents' lower demand for our sovereign bonds compared to the projection in our previous report (particularly when the US-China trade war intensified in recent months), even though the flow this year would be US$ 3.51 billion higher than the one observed in 2018.

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

	2018	2019*			2020*	
		I Sem.	IR Jun.	IR Sep.	IR Jun.	IR Sep.
I. Disbursements[1/]	**1,800**	**1,335**	**2,178**	**2,025**	**1,851**	**1,851**
II. Amortization	**-1,614**	**-1,061**	**-1,958**	**-1,963**	**-335**	**-335**
III. Net external assets	**-201**	**447**	**249**	**308**	**-240**	**-240**
IV. Other transactions with Treasury bonds (IV=a-b)	**2,137**	**5,119**	**6,114**	**5,597**	**1,804**	**1,714**
a. Sovereign Bonds held by non-residentes	1,822	4,767	6,035	5,327	1,804	1,714
b. Global Bonds held by residentes	-315	-353	-79	-270	0	0
V. TOTAL (V = I+II+III+IV)	**2,122**	**5,840**	**6,582**	**5,966**	**3,080**	**2,989**

1/ Includes bonds.
* Forecast.

21. The soundness of the balance of payments to face negative external events is reflected in the position of Peru's international reserves relative to the balance of its short term external liabilities or comparing the total of these liabilities with the country's current account deficit. The Peruvian economy shows high-levels in these indicators in comparison with other emerging economies, thanks to the preventive accumulation of international reserves.

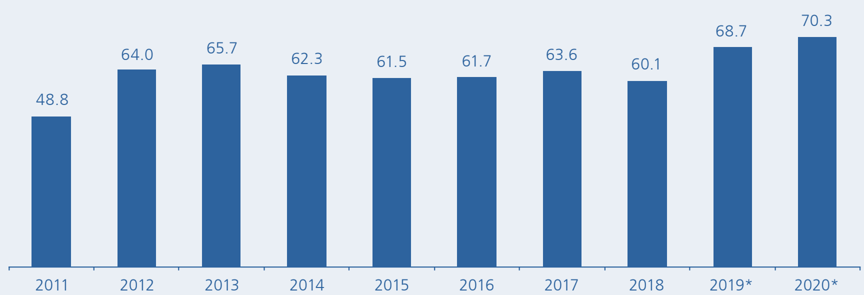
Table 15
NIR INDICATORS

	2017	2018	2019*	2020*
NIR as a % of:				
a. GDP	29.7	26.7	29.7	29.2
b. Short-term external debt [1/]	405	395	552	559
c. Short-term external debt plus current account deficit	346	320	409	401

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

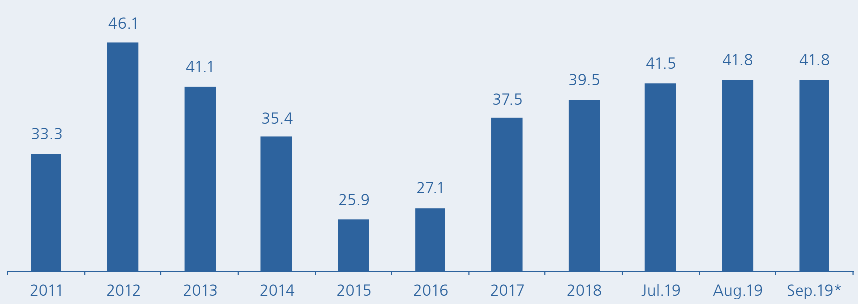
22. As of September 25, net international reserves have increased by US$ 8.23 billion compared to the end of 2018. Banks' deposits in foreign currency at BCRP have increased US$ 5.70 billion, the foreign exchange position of BCRP has increased by US$ 2.21 billion, and public sector deposits have increased US$ 405 million.

Graph 32
NET INTERNATIONAL RESERVES: 2011-2020
(Billion US$)



* Forecast.

Graph 33
FOREIGN POSITION OF BCRP: 2011-2020
(Billion US$)



* As of September 25.

III. Economic Activity

Sector GDP

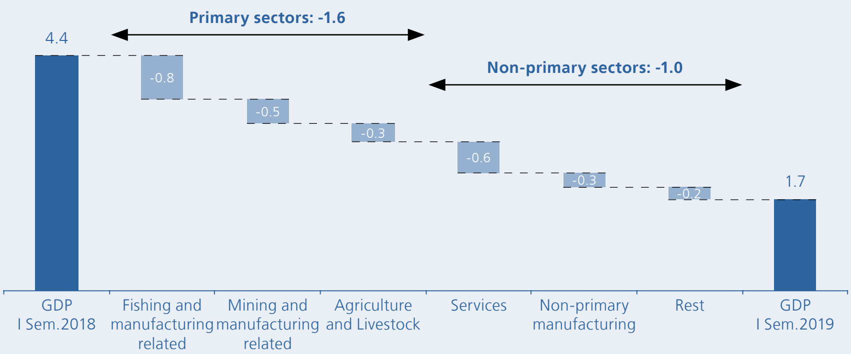
23. In the second quarter of 2019, GDP grew 1.2 percent –the lowest growth rate since the fourth quarter of 2014–, and thus accumulated an expansion of 1.7 percent in the first half of the year (vs. 4.4 percent in the first half of 2018). This economic slowdown in the first six months of the year is explained by a 2.9 percent contraction in primary activity due to transitory events that affected activity in sectors such as fishing and mining. In addition, a slower pace was observed in non-primary industries, where the growth rate declined from 4.5 percent in the first half of 2018 to 3.1 percent.

Table 16
PRIMARY AND NON-PRIMARY GDP: FIRST SEMESTER
(Real % change)

	2016	2017	2018	2019
GDP	**4.1**	**2.5**	**4.4**	**1.7**
Primary GDP	8.2	5.5	4.2	-2.9
Non-Primary GDP	3.0	1.6	4.5	3.1

The shocks that affected primary activity during the first half included (i) the late start of the first fishing season and the lower fishing quota established, both of which affected anchovy catch, (ii) a lower output of gold, zinc, and iron due to the low mineral grades obtained, and (iii) a lower primary manufacturing output due to lower fishmeal production and lower refining of non-ferrous metals. On the other hand, the moderation of activity in the non-primary industries reflected a weaker domestic demand given the weaker dynamism of the labor market, the reduction of public spending, the deterioration of expectations, and less favorable domestic and international contexts.

Graph 34
GDP GROWTH BY SECTOR IN THE FIRST SEMESTER OF 2018 AND 2019
(% change and contribution to the growth)



Because of this slowdown, GDP is projected to grow 2.7 percent in 2019, less than estimated in the previous report (3.4 percent). This downward revision is explained by the longer-than-expected impact of the supply shocks on primary production and by a more moderate pace of growth in private consumption, which would have a negative effect on the expansion of non-primary activity. The Peruvian economy reached near-zero growth rates in April and May, recovering thereafter in June (2.6 percent) and July (3.3 percent) when it showed the first signs of reversal of the supply shocks. In the rest of the year, mining production is expected to recover due to the expansions of mines Toquepala (copper) and Marcona (iron), which would have a positive impact on the primary manufacturing sector. Moreover, in 2020, the GDP growth rate would recover to 3.8 percent, after the effect of the supply shocks subside and business confidence improves.

Table 17
GDP BY PRODUCTION SECTOR
(Real % change)

	2018	2019*			2020*	
		I Sem	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
Primary GDP	**3.2**	**-2.9**	**1.3**	**-0.2**	**3.6**	**3.6**
Agriculture and livestock	7.8	3.3	4.5	4.1	4.0	4.1
Fishing	39.7	-26.9	-14.6	-13.6	9.0	9.6
Metallic mining	-1.7	-1.7	2.1	-0.8	4.0	3.9
Hydrocarbons	0.0	0.3	2.6	3.4	0.3	0.3
Based on raw materials	13.2	-15.8	-5.9	-5.7	2.1	2.2
Non-Primary GDP	**4.2**	**3.1**	**4.0**	**3.5**	**4.1**	**3.8**
Non-primary industries	3.7	0.8	3.2	2.2	3.8	3.8
Electricity and water	4.4	4.9	4.3	4.3	4.0	4.0
Construction	5.3	5.0	5.4	5.4	6.9	5.8
Commerce	2.6	2.6	3.2	3.0	3.5	3.5
Services	4.4	3.6	4.1	3.7	4.0	3.6
GDP	**4.0**	**1.7**	**3.4**	**2.7**	**4.0**	**3.8**

* Forecast.
IR: Inflation Report.

a) **Agricultural output** grew by 3.3 percent in the first half of 2019. Agricultural activity increased by 2.7 percent due to the larger areas cultivated with crops, such as blueberries, cocoa, avocados, olives, and grapes, among other crops. Notwithstanding, the yields in crops such as rice were affected by weather anomalies during the first half of the year. In addition to this, lack of rainfall in the Sierra region since the end of the previous year and frosts during the first quarter of 2019 discouraged the cultivation of Andean crops, such as potatoes and amylaceous maize, affecting their production.

   Livestock activity grew by 4.4 percent as a result of increased poultry and egg production. This growth rate is expected to moderate in the second half of the year due to a slower pace of growth in poultry activity.

   Based on this evolution, the growth rate projected for agriculture in 2019 is revised from 4.5 to 4.1 percent, and a growth rate of 4.1 percent is projected for 2020 considering a scenario with normal weather conditions.

b) Activity in the **fishing sector** showed a reduction of 26.9 percent in the first half of this year. This reduction is mainly associated with the late start of the first fishing season in April, given that the exploratory phase began only on April 26 (in 2018, this exploratory phase, whose purpose is to have up-to-date information on the size and location of anchovy, began on April 6). Another factor that contributed to this reduction was the low daily catch of anchovy in May due to the reduction of the quota established (2.1 million MT vs. 3.3 million MT in 2018). On the other hand, this sector grew 14.2 percent in June given that in 2018 the catch of anchovy was concentrated between the months of April and May.

   In addition to this, the first fishing season in the South Zone ended in June, the anchovy catch totaling 32.9 percent of the quota (177 thousand MT), according to the Peruvian Sea Institute (IMARPE). This area is characterized by the irregular quantity of fish caught every year. On the other hand, the first fishing season in the North-Central Zone ended in July, with a total catch equivalent to 95 percent of the quota, according to IMARPE.

   In 2019, output in this sector is expected to drop by 13.6 percent, despite showing a faster pace of growth in anchovy catch in the second half of the year. In 2020, the output would grow 9.6 percent, a projection consistent with normal weather conditions. Moreover, a total anchovy catch of 4.2 million metric tons is projected in 2019, while this figure in 2020 would reach 5.0 million tons (6.0 million in 2018).

c) GDP in the **metal mining** sector fell 1.3 percent in the second quarter of 2019, accumulating a 1.7 percent drop in the first half of the year. Factors explaining this result include (i) a lower gold production in Barrick and Buenaventura; (ii) the lower mineral grades of zinc in Antamina; (iii) a lower molybdenum production in Toromocho and Antamina due to atypical results; and (iv) a lower production of iron in Shougang due to the low grade of the ore extracted. Moreover, the lower production of some silver mines and the partial halt of production at Las Bambas in April contributed to this result as well.

The metal-mining sector is expected to show a drop of 0.8 percent in 2019, which implies a modest recovery of activity in the second half of the year (0.1 percent). On the other hand, the higher growth rate projected for 2020 is explained by the normalization of mining production and by the greater production foreseen in Toquepala and Marcona.

On the other hand, the **hydrocarbons sector** is expected to grow 3.4 percent in 2019. This sector grew 0.3 percent during the first half of the year and it is expected to show a recovery with a growth rate of 6.3 percent in the second half of this year. Oil production in the first quarter of the year was affected by the disruption of crude oil transport through the Norperuano pipeline since December 2018, the affected lots being Lot 8 and, especially, Lot 192. In addition, the production of gas and natural gas liquids also decreased in the second quarter of the year, especially in lots 88, 56, and 57, reflecting lower domestic demand from thermoelectric generation plants as well as lower external demand. Both oil production and the production of natural gas and natural gas liquids are foreseen to return to normal levels in the second half of the year. In 2020, this sector is expected to grow 0.3 percent (as estimated in the June Report).

d) Activity in the **primary manufacturing** subsector dropped 15.8 percent in the first half of 2019 due to the lower refining of non-ferrous metals associated with Southern's maintenance, as well as due to the lower fishmeal production resulting from the lower fishing quota set in the first season of anchovy fishing. Lower outputs in the production of husked rice and oil refining contributed also to this drop.

   This subsector is expected to register a drop of 5.7 percent in 2019 –less than in the first half of the year– due to increased fishmeal production after the normalization of fishing activity and the refining of non-ferrous metals in the second half of the year.

   In 2020, primary manufacturing is expected to grow 2.2 percent due to the recovery of fishery production and the refining of non-ferrous metals. The latter would be offset by Petroperú's lower refining of crude oil because the company has announced that in 2020 it will stop production at the current Talara refinery in order to interconnect it with the new production units that are part of the new refinery project.

e) **Non-primary manufacturing** production fell to 0.8 percent in the first half of 2019 due to a lower production of mass-consumer goods (shoes, paper and cardboard items, vanity products, and miscellaneous manufactured goods), inputs (printing activities, pesticides, and glass) and export-oriented goods (yarn, fabrics, and finishes). Since these factors would revert in the remainder of the year, this sector is expected to grow 2.2 percent in 2019 and 3.8 percent in 2020, driven mainly by a higher pace of growth in investment-oriented goods and inputs, in line with the higher growth foreseen in domestic demand.

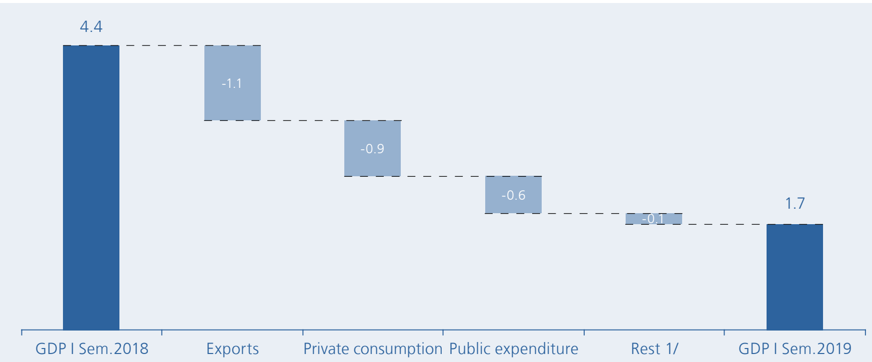
e) GDP in the **construction** sector grew 5.0 percent in the first half of 2019 due to increased private investment. In 2019 and 2020, the sector is expected to grow 5.4 percent and 5.8 percent, respectively, driven by a recovery in public investment and by the growth of private investment.

Expenditure-side GDP

24. On the side of expenditure components, the lower growth rate observed between the first half of 2018 (4.4 percent) and the first half of 2019 (1.7 percent) is mainly explained by a lower contribution of exports (down by 1.1 percentage points of GDP) and by the evolution of both private consumption and public spending, which contributed to the difference with -0.9 and -0.6 percentage points, respectively.

    The supply shocks that affected primary activity led to a reduction in exports in the first half of 2019 and there was also a reduction in public expenditure, explained in part by the change of subnational authorities in early 2019. In addition to this, the moderation of global growth reduced the terms of trade and a less favorable domestic political climate affected spending decisions in the private sector. As for private spending, consumption showed a more moderate pace of growth, following the evolution of the labor market. In contrast, private investment maintained a growth rate of 4.1 percent with the recovery of non-mining investment.

Graph 35
GDP GROWTH BY EXPENDITURE IN THE FIRST SEMESTER OF 2018 AND 2019
(% change and contribution to the growth)

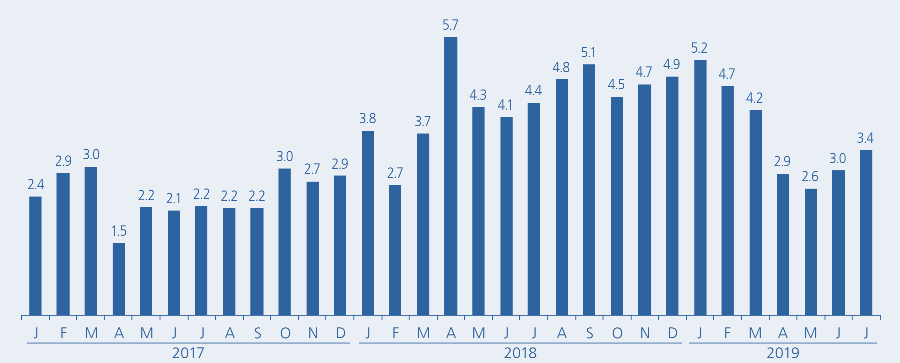


1/ Includes the effect of private investment, imports, and change on inventories over GDP growth.

25. The indicators of the labor market –the main determinant of **private consumption**– show a slowdown in comparison with the pace of growth observed in 2018. However, consumer confidence and terms of trade have shown a recovery in August, while credit maintains growth rates above 10 percent:

    a) The labor market has shown a slower pace of growth since February this year. According to Sunat's electronic payroll data, formal jobs in the private sector, grew 3.4 percent per annum in July, showing a lower rate than in July 2018 (4.4 percent), albeit higher than in previous months, thus indicating some recovery.

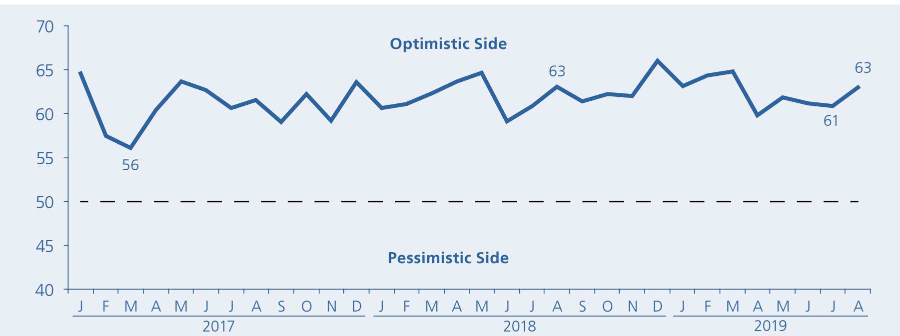
Graph 36
FORMAL JOBS IN THE PRIVATE SECTOR
(12 month % change)



Source: SUNAT-Electronic payroll.

    b) Consumer confidence, measured as expectations about the future economic situation of families, reversed the slowdown observed since May this year and reached a level of 63 points in August.

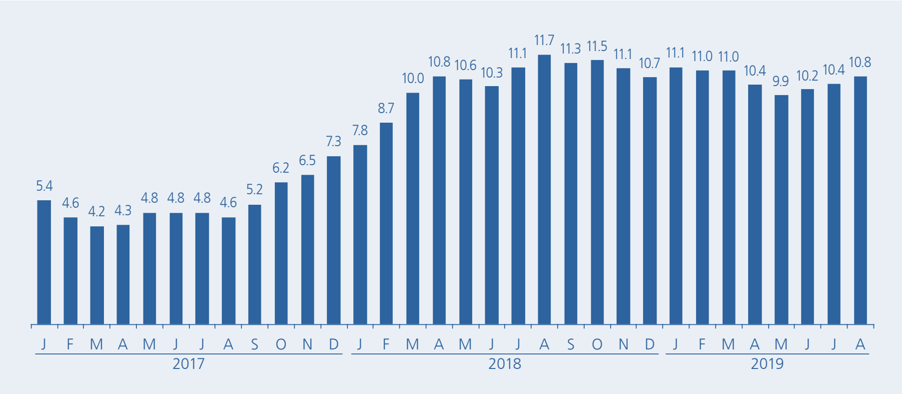
Graph 37
EXPECTATION ABOUT ECONOMIC SITUATION OF THE HOUSEHOLD IN 12 MONTHS
(INDICCA, Lima Metropolitana)



Source: Apoyo.

c) Consumer credit continued to show high growth rates (10.8 percent in August).

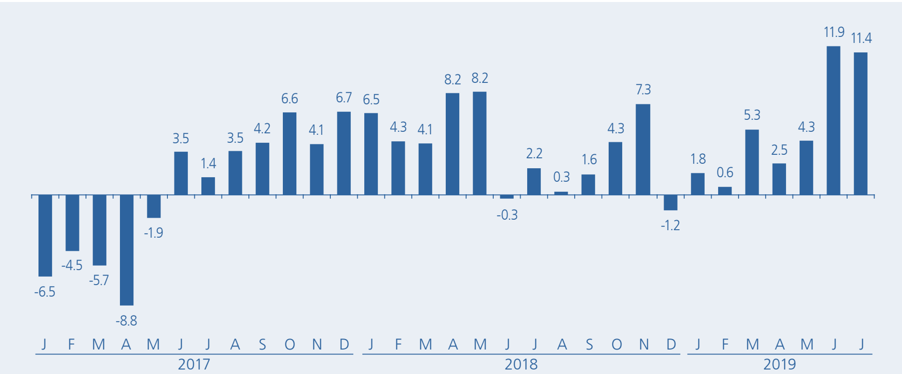
Graph 38
REAL CONSUMER LOANS
(12 month % change)



26. Moreover, current and projected indicators show a recovery in **private investment** until August.

a) Showing a higher rate than in the first half of the year, the domestic consumption of cement –indicator related to investment in construction– increased by 11.4 percent in July (vs. 4.4 percent in January-June).

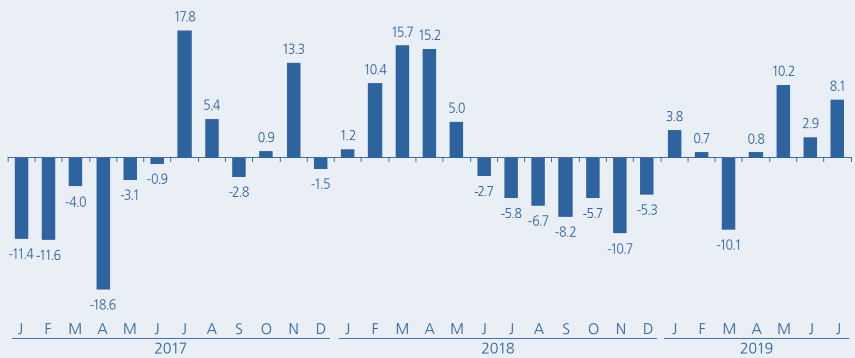
Graph 39
DOMESTIC CEMENT CONSUMPTION
(12 month % change)



Source: INEI.

b) The volume of imports of capital goods (excluding construction material) increased 8.1 percent in July.

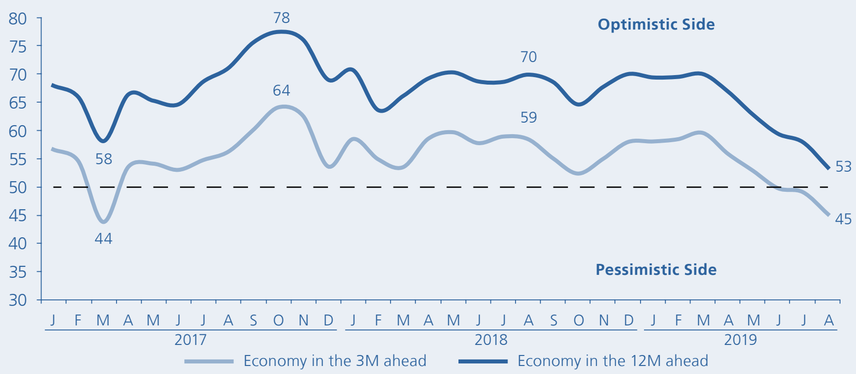
Graph 40
VOLUME OF IMPORTS OF CAPITAL GOODS*
(12 month % change)



* Excluding materials of construction.
Source: SUNAT.

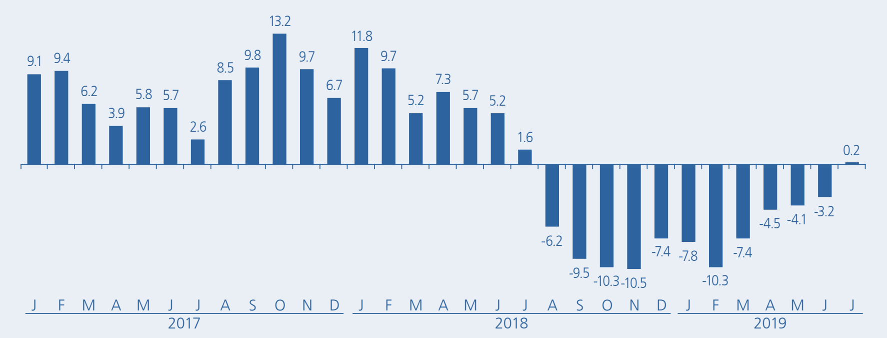
c) In August, business expectations on the situation of the economy within 3 months and 12 months fell to 45 and 53 points, respectively, after reaching an average level of 56 and 66 points in the first quarter.

Graph 41
EXPECTATIONS ABOUT THE ECONOMY IN 3 AND 12 MONTHS AHEAD



d) Terms of trade stabilized in July after falling for 11 consecutive months (since August 2018).

Graph 42
TERMS OF TRADE
(12 month % change)



27. The evolution of activity in the first half of the year was reflected in a correction of private sector expectations for GDP growth. According to the most recent BCRP Survey on Macroeconomic Expectations, agents estimate growth rates of between 2.5 and 3.0 percent for this year and rates of between 3.3 and 3.5 percent for 2020.

Table 18
MACROECONOMIC EXPECTATIONS SURVEY: GDP GROWTH
(% change)

	IR Mar.19	IR Jun.19	IR Sep.19*
Financial entities			
2019	3.9	3.3	2.8
2020	4.0	3.6	3.3
Economic analysts			
2019	3.9	3.2	2.5
2020	4.0	3.7	3.3
Non-financial firms			
2019	3.9	3.5	3.0
2020	4.0	3.8	3.5

* Survey conducted on August 31.
Source: BCRP.

28. In line with this, the GDP growth rate projected for 2019 has been revised downwards from 3.4 to 2.7 percent and the rate projected for 2020, from 4.0 to 3.8 percent, while the growth rate projected for domestic demand has been revised down from 3.3 to 3.0 percent in 2019 and from 4.0 to 3.7 percent in 2020. These downward revisions are based on the projections of the following variables:

a) The expansion of **private consumption** in 2019 has been revised from 3.5 to 3.0 percent due to the low dynamism of the labor market observed during the first half of the year. Moreover, as in our previous report, in 2020 consumption is expected to grow in line with the gradual recovery foreseen in domestic demand.

b) The growth rate of **private investment** is revised up from 3.8 to 4.4 percent due to the higher-than-expected evolution observed in the first two quarters of the year, as well as due to the projected indicators mentioned above, all of which is based on the assumption that business expectations about the economy in the forecast horizon will show a gradual recovery. Therefore, investment is expected to register a more moderate pace of growth in 2020 (4.5 percent vs 5.5 percent projected in the previous Report).

c) **Public investment** would increase 0.5 percent in 2019, less than the 1.0 percent rate projected in the previous Report, due to the lower-than-expected progress observed in the implementation of public projects. The effect of the new authorities that have taken office in subnational governments is expected to fade in 2020, as a result of which public investment would grow by 5.0 percent that year.

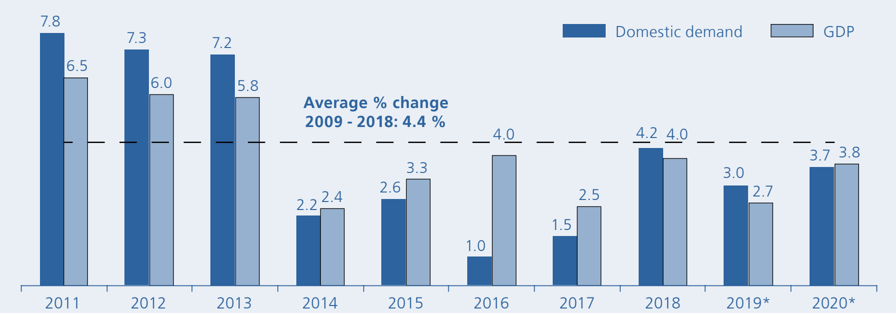
d) In 2019 the volume of **exports** would grow by 0.9 percent (2.6 percent projected in the June Report) since the impact of the supply shock on primary activity would be longer than previously anticipated. In 2020, once the production of the primary sectors is normalized, exports are estimated to grow 5.6 percent.

Table 19
DOMESTIC DEMAND AND GDP
(Real % change)

	2018	2019*			2020*	
		I Sem.	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
Domestic demand	**4.2**	**1.7**	**3.3**	**3.0**	**4.0**	**3.7**
Private consumption	3.8	2.8	3.5	3.0	3.7	3.7
Public consumption	0.8	-0.4	2.0	2.0	2.5	2.5
Private investment	4.2	4.1	3.8	4.4	5.5	4.5
Public investment	6.8	-0.7	1.0	0.5	5.0	5.0
Change on inventories (contribution)	0.4	-0.8	0.0	0.0	0.0	0.0
Exports	**2.7**	**0.1**	**2.6**	**0.9**	**5.4**	**5.6**
Imports	**3.4**	**0.0**	**2.1**	**1.8**	**5.5**	**5.6**
Gross Domestic Product	**4.0**	**1.7**	**3.4**	**2.7**	**4.0**	**3.8**

* Forecast.
IR: Inflation Report.

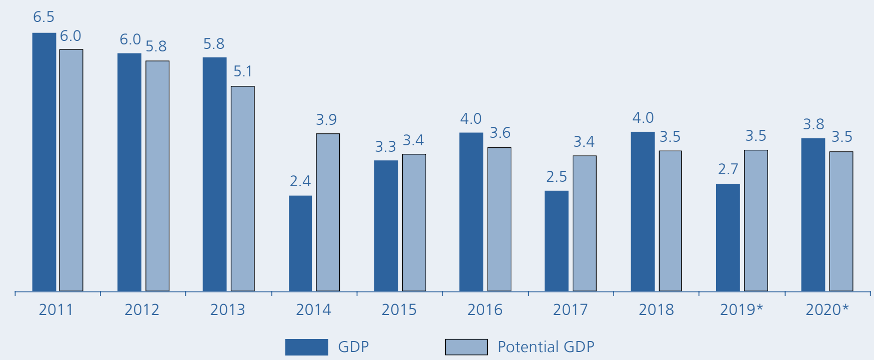
Graph 43
DOMESTIC DEMAND AND GDP: 2011-2020
(Real % change)



* Forecast.

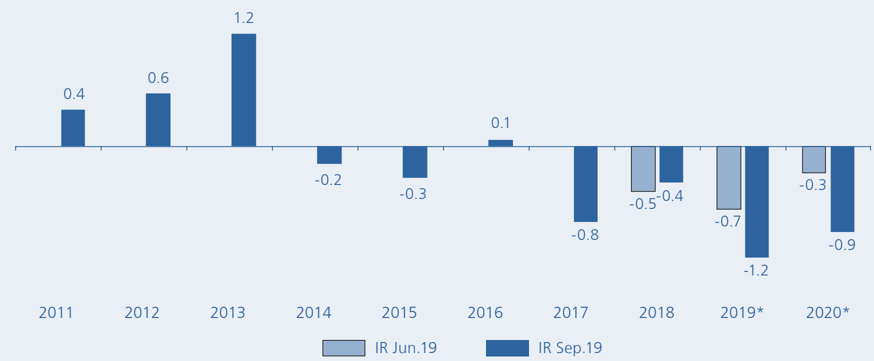
29. Considering the downward revision in GDP growth, the output gap (the percentage margin between the level of GDP and its potential) is expected to show a more gradual reduction in the forecast horizon than the one projected in the previous Report. This estimation considers a potential GDP growth rate of 3.5 percent for 2019 and 2020.

Graph 44
GDP AND POTENTIAL GDP
(% change)



* Forecast.

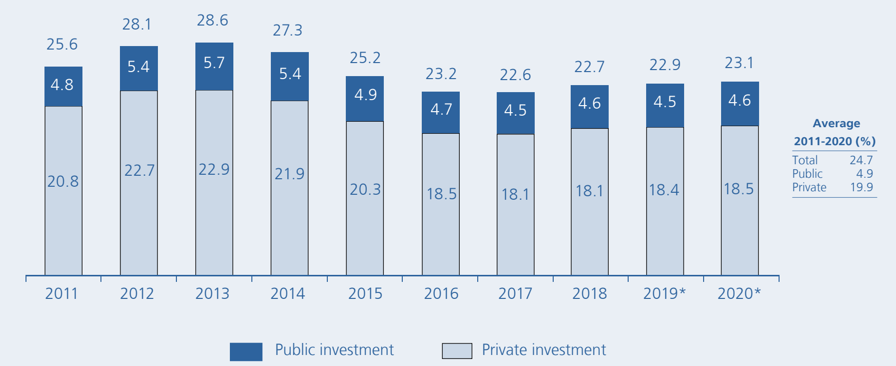
Graph 45
OUTPUT GAP
(% Potential GDP)



* Forecast.

30. Moreover, fixed gross investment, as a percentage of real GDP, will reach 22.9 percent of the output in 2019 –a similar ratio to that recorded in 2018– and then amount to 23.1 percent in 2020, in line with the recovery of the public and private investment in comparison to the previous year.

Graph 46
GROSS FIXED INVESTMENT: PRIVATE AND PUBLIC SECTORS 2011-2020
(% of real GDP)



* Forecast.

31. In 2019, domestic gross investment will increase by 0.1 percentage point of the output due to the faster pace of private investment and despite the reduction in the ratio of public investment to GDP. This will increase the funding requirement observed in 2018 by 0.3 percentage points to 1.9 percent of GDP. The gradual recovery projected for private investment in 2020 will require an additional increase in external financing in that year (0.2 percentage points of GDP).

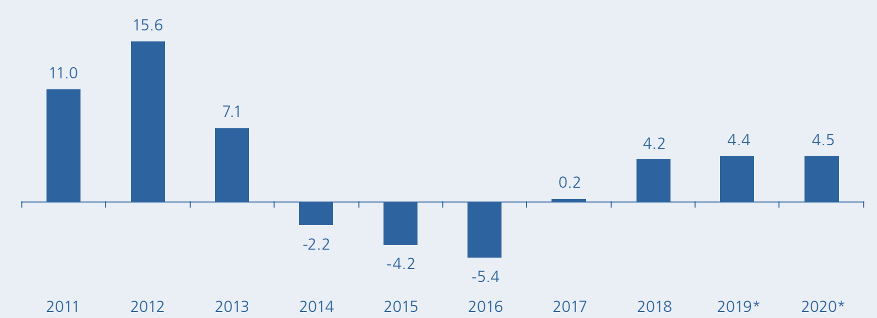
Table 20
SAVING-INVESTMENT GAP
(% of nominal GDP)

	2018	2019*			2020*	
		I Sem.	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
1 Gross Domestic Investment 1/	21.5	20.7	21.4	21.6	21.7	21.8
2 Domestic Saving	19.9	18.2	19.8	19.7	19.8	19.7
External Gap (=2-1)	-1.6	-2.5	-1.6	-1.9	-1.9	-2.1
1.1 Private Gross Domestic Investment 1/	16.6	17.2	16.7	16.9	17.0	17.1
1.2 Private Saving	17.3	11.8	17.1	17.0	17.2	17.0
Private Gap (=1.2-1.1)	0.7	-5.3	0.5	0.1	0.2	-0.1
2.1 Public investment	4.8	3.5	4.7	4.7	4.7	4.7
2.2 Public Saving	2.5	6.4	2.6	2.7	2.6	2.7
Public Gap (=2.2-2.1)	-2.3	2.9	-2.1	-2.0	-2.1	-2.0

1/ Includes change on inventories.
* Forecast.
Source: BCRP.

32. The upward revision from 3.8 to 4.4 percent considered in the growth of private investment for 2019 is based on the fact that non-mining investment registered a higher-than-expected result in the previous Report. This projection also considers a gradual recovery of business confidence over the forecast horizon, assuming an environment with political and social stability, which would bring investment to 4.5 percent in 2020.

Graph 47
PRIVATE INVESTMENT: 2011-2020
(Real annual % change)



* Forecast.

33. The 149 main **private investment projects announced** to be carried out in 2019-2020 amount approximately to US$ 18.6 billion, with mining and infrastructure being the main sectors attracting private investment.

Table 21
PRIVATE INVESTMENT PROJECTS ANNOUNCED: 2019-2020
(Billion US$)

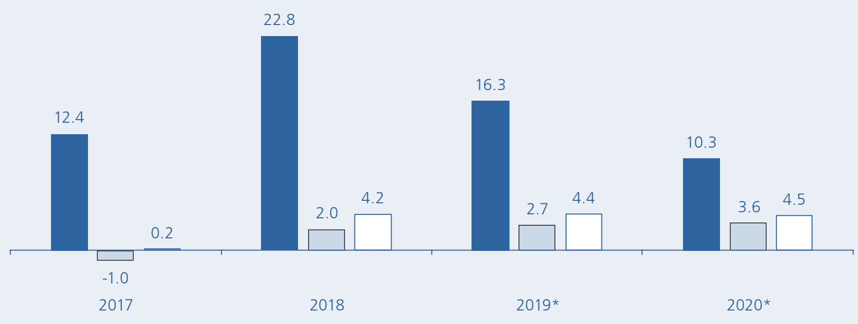
	Total investment		Number of projects	
	IR Jun.19	**IR Sep.19**	**IR Jun.19**	**IR Sep.19**
Mining	9.7	9.6	33	32
Hydrocarbons	1.3	1.3	16	15
Energy	1.0	0.8	10	10
Industry	0.4	0.5	8	10
Infraestructure	3.8	3.0	23	22
Other sectors	3.4	3.5	58	60
Total	**19.5**	**18.6**	**148**	**149**

Source: Media and information of companies.

34. Mining investment is foreseen to continue growing in the forecast horizon. Growth in this sector would be fueled by investment in construction projects such as Quellaveco (US$ 5.3 billion), Mina Justa (US$ 1.6 billion), and the expansion of Toromocho (US$ 1.3 billion) and, to a lesser extent, by other projects currently under construction, such as Quecher Main (US$ 0.3 billion) and Relaves B2 San Rafael (US$ 0.2 billion). It is worth mentioning that the latter two projects will start their production stage this year.

According to the Ministry of Energy and Mining, mining investment reached US$ 3.0 billion in the January-July period, which represents a growth rate of 24.5 percent in year-on-year terms.

Graph 48
PRIVATE INVESTMENT
(Real % change)



* Forecast.

35. In **infrastructure**, a greater boost is expected in 2020, the implementation of works on Lima Metro's Line 2 project standing out given that the properties delivered to the project would allow completing the stage 1A of the project and start the implementation of stage 1B, which already shows some progress in the stations of Circunvalación and San Juan de Dios. On the other hand, the expansion of International Airport Jorge Chávez should begin earthworks in the fourth quarter of 2019 as part of the project execution timetable.

Investment in other sectors worth pointing out include investments in the sectors of real estate and services where new housing and office buildings as well as hotels and school facilities are being constructed.

Table 22
MAIN ANNOUNCEMENTS OF PRIVATE INVESTMENT PROJECTS: 2019-2020

SECTOR	INVESTOR	PROJECTS
MINING	Angloamerican	Quellaveco
	Grupo Breca	Justa Mine
	Aluminium Corp. of China (Chinalco)	Expansion of Toromocho Mine
	Minera Yanacocha	Quecher Main
	Bear Creek Mining Corp	Corani
	Minsur	Relaves B2 San Rafael
HYDROCARBONS	Consorcio Promigas Surtigas	Massive use of gas
	Karoon Gas	Exploration Lote Z-38
	Pluspetrol Perú Corp.	Expansion of transportation capacity
ENERGY	Interconexión Eléctrica	Mantaro-Nueva Yanango-Carapongo Connection and Substations
	Hydro Global Investment	San Gabán III
INDUSTRY	Arca Continental	Improvements in infrastructure and equipment
	Corporación Aceros Arequipa	Expansion of Pisco Plant
	Cementos Inka	Milling Pisco Plant
INFRASTRUCTURE	Grupo Volcan	Chancay Port Terminal Stage I
	Consorcio Nuevo Metro de Lima	Line 2 of the Metro network of Lima and Callao
	Lima Airport Partners	Expansion of International Airport (Jorge Chavez)
	Grupo Romero	Salaverry Port Terminal
	APM Terminals	Modernization Muelle Norte
	Consorcio Paracas	San Martin Port Terminal
OTHER SECTORS	Entel	Development of services 4G
	Grupo Ripley	Expansion of new shopping centers
	Edifica	Real Estate investments
	Armas Domo	Real Estate investments
	Grupo Intercorp	Expansion of new shopping centers
	Grupo Breca	Expansion of new shopping centers
	InterContinental	Hotels Group

Source: Information on companies, newspaper and specialized media.

36. Proinversión reports a portfolio of US$ 7.1 billion for the period 2019-2020, estimating to award contracts amounting to US$ 2.1 billion for the implementation of projects in 2019. In April, the Peruvian-Mexican consortium Fypasa Construcciones S.A. de C.V and Operadora de Ecosistemas S.A. de C.V. was awarded the concession contract for the implementation of the Wastewater Treatment System in the Lake Titicaca Basin. The works should start in 2020 and be completed in 2022 and 2023.

Table 23
MAIN PROJECTS TO BE IMPLEMENTED THROUGH CONCESSION ARRANGEMENTS IN 2018-2020
(Million US$)

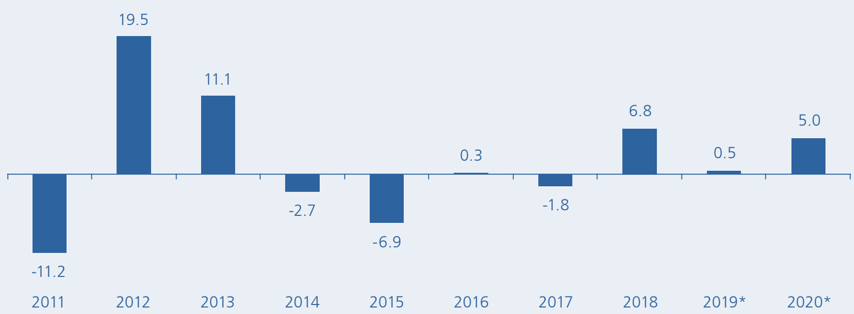
	Estimated investment
A. Awarded	**3,559**
Michiquillay Mining Project (2018)	2,500
Broadband for Comprehensive Connectivity and Social Development for Ancash, Arequipa, La Libertad, Huánuco, Pasco and San Martin regions (2018)	560
Treatment system for wastewater from the basin of Lake Titicaca (2019)	270
Salaverry Port Terminal (2018)	229
B. To be called	**7,082**
Peripheral Ring Road	2,049
Headworks and Conduction for the Drinking Water Supply in Lima	720
New San Juan de Marcona Port Terminal	540
Ancon Industrial Park	500
Longitudinal of the Sierra road project, Section 4	464
Algarrobo Mining Project	350
Two hospitals of high complexity	254
Huancayo - Huancavelica Railway	227
Improvement of tourism services in Choquequirao Archaeological Park, Apurimac and Cusco regions	221
Wide-Scale Use of Natural Gas in Central ad South Region	200
Cayetano Heredia Hospital	186
La Niña - Piura 500 kV Connection; Pariñas - Nueva Tumbes 220 kV Connection; and Tingo María - Aguaytía 220 kV Connection, Substations, Lines, and Associated Expansion	144
Wastewater Treatment for effluent dumping or reuse, Trujillo	130
New Military Hospital	116
Línea de Transmisión 500 kV Subestación Piura Nueva - Frontera	112
Modernization of regional electriciy company Electronoroeste	105
Schools in risk: Ate and San Juan de Lurigancho districts	85
Schools in risk: Metropolitan Lima	80
Other	600

Source: Proinversión.

37. The projected growth of **public investment** is revised from 1.0 to 0.5 percent in 2019 due to the lower-than-estimated progress made in project works. The modest growth rate of 2019 is mostly explained by the expenses incurred in the Talara refinery and in the projects related to the reconstruction program in the north of the country, in a context of lower execution of public investment associated with

the change of authorities in subnational governments. In 2020, public investment is expected to recover with a growth rate of 5.0 percent.

Graph 49
PUBLIC INVESTMENT: 2011-2020
(Real % change)



* Forecast.

Box 2

THE LAW FOR THE PROMOTION OF AGRICULTURE AND ITS RELATION WITH WORKERS' INCOME

The Law for the Promotion of the Agriculture Sector (LPA) enacted in October 2000[1] (Law No. 27360) is aimed at promoting and developing the agricultural activities –crop or livestock farming–, with the exception of forestry, carried out by natural or legal persons, as well as the agribusiness activity carried out by natural or legal persons, provided that they use local agricultural products. Agro-industrial activities related to wheat, tobacco, oilseeds, oils, and beer were excluded. The law also establishes a fixed-term labor regime. The main benefits of the economic units under this regulatory framework included the third-category income tax of 15 percent, an accelerated depreciation of 20 percent, the early recovery of the VAT, and a social security contribution of 4 percent.

On September 19, 2019, the Congress of the Republic extended the validity of the Law for the Promotion of the Agricultural Sector from December 31, 2021 to December 31, 2031 and modified the conditions of its labor regime[2]. The main changes introduced include the following:

a) The minimum daily remuneration (which includes bonuses and compensation for service time) from S/ 36.29 to S/ 39.19;
b) The number of vacation days was increased from 15 to 30 days per year;
c) The company's contribution to social security was increased from 4 percent to 6 percent of each worker's monthly remuneration;
d) The validity of the benefits was extended to the sectors of aquaculture and forest plantations.

Data of the National Household Surveys –Encuesta Nacional de Hogares (ENAHO)– conducted between 1998 and 2017 have been used to estimate the effects of the LPA on labor income. The sample includes the workers who are potential beneficiaries of the LPA, who are identified within the industrial classification and the classes indicated above. According to the ENAHO survey, the number of workers covered by the LPA between 1998 and 2017 totals 2.6 million on average each year. The largest proportion of these workers is represented by class 0130 of the International Standard Industrial Classification of all Economic Activities (ISIC); that is, by workers engaged in the activity of mixed crop-livestock farming. The industrial class following in terms of importance in the sample is class 0113, which corresponds to the cultivation of fruits, nuts, and plants whose leaves or fruits are used to prepare drinks and spices.

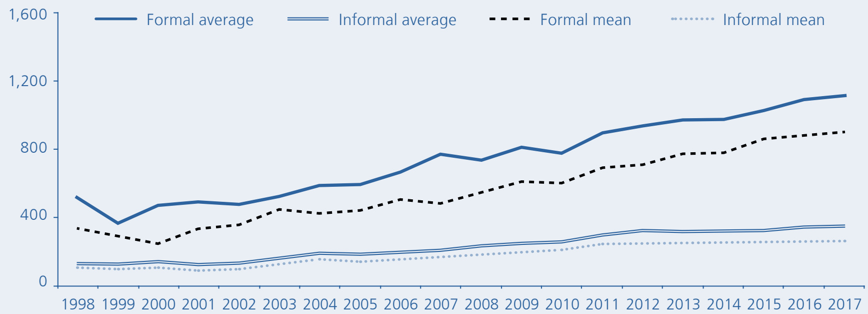
A first analysis of the data suggests that the average income of workers within the scope of the LPA has followed an increasing trend between 1998 and 2017 and that the income gap between formal and informal workers has widened persistently in recent years compared to the gap observed at the beginning of 2000. In other words, formal workers have reported

1 This law was initially established in November 1996 and was then significantly reinforced in 2000.

2 A la fecha este proyecto de ley aprobado por el Congreso está pendiente de promulgación.

increasing incomes compared to similar informal workers[3]. More specifically, between 1998 and 2017, the income of formal workers under the scope of the LPA grew at an annual average rate of 4.1 percent, above the average annual GDP growth rate per capita of 3.5 percent.

THE AVERAGE INCOME OF WORKERS WITHIN THE SCOPE OF THE LAW FOR THE PROMOTION OF THE AGRICULTURE SECTOR (LPA) (In soles)



Note: Informality by income corresponds to workers with income less than RMV.
Source: ENAHO,1998-2017.

The effect of the LPA on the income of workers was then measured considering a double difference estimator (DDE), which corresponds to the difference in income between the workers who are directly exposed to the LPA and those who are not. The treatment group is made up of formal workers who work in the sectors that are under the scope of the LPA, whereas the control group is made up of informal workers from the same sectors. Because the LPA was significantly modified in October 2000, it was expected that changes in the income of the treatment group after this date could be related to the effects of the LPA. The income indicator used was the real (monetary and in kind) income per monthly main job estimated by ENAHO. The measurement also distinguished between short-term effects, which occur after 5 years of the modification of the LPA (2000 - 2005), and medium-term effects, which correspond to the LPA effects on the average income between 2000 and 2017.

The comparison showed that that the workers who work in formal activities for income under the scope of the LPA have, in the medium term, an average income that is 19.5 percent higher than the one obtained by workers who work in the informal sector. This effect rises to 37.8 percent if informality in terms of social contributions is considered as a criterion for participation in the LPA. It is worth highlighting that this effect refers to the medium term; that is, it includes the increase in average income between 2000 and 2017 compared to the average income between 1998 and 1999.

Moreover, this effect is slightly greater when we consider the median income rather than the average income. In absolute terms, the 20 percent gain associated with the LPA is equal to

3 According to the electronic payroll data of agro-export companies, the average monthly wage of their workers was S/ 1, 068 in 2017. The growing trend of such wages is in line with the one reported as monthly income in the ENAHO survey.

S/ 142 per month. It is also worth mentioning that the effect of the LPA on the average income is robust for the different sizes of subsample obtained from the original sample. In other words, the standard error of the effect of the LPA on average income is small.

ESTIMATION OF EFFECTS IN THE MEDIUM TERM OF LAW FOR THE PROMOTION OF THE AGRICULTURE SECTOR (LPA) (2000-2017)

	With income (average)		With income (median)	
	Formal	Informal	Formal	Informal
Informality by income				
Income 1998-1999	730	212	516	169
Income 2000-2017	959	300	724	235
Double difference estimator in S/	142		143	
Double difference estimator in % of initial formal income	**19.5**		**27.7**	
Informality by Social contribution				
Income 1998-1999	668	347	537	320
Income 2000-2017	1,058	486	881	456
Double difference estimator in S/	252		208	
Double difference estimator in % of initial formal income	**37.8**		**38.6**	

Note: Income in S/ of 2017.

In the short term, the LPA has lower effects on income than in the medium term. If we consider only the short-term effects –that is, the effects for the period 2000-2005–, the average income of the LPA beneficiaries is 4.9 percent higher compared to the income prior to the changes introduced by the LPA (1998-1999). This result suggests that the effect of the LPA on the average income of workers is increasing over time and that it becomes more evident in the medium term, which is consistent with the graphs of average income that show that the gap between the average income of the formal and informal sectors has increased between 2000 and 2017. The conclusion that the effect of the LPA is lower in the short term than in the medium term remains when we consider the median income and the definition of informality in terms of social contributions.

On the other hand, it is worth mentioning that the average income in the formal sector has not only been favored by the enactment of the LPA, but also by the greater access of agricultural products to international markets through free trade agreements, by the greater diversification of exports, by the management of and compliance with phytosanitary protocols, as well as by improvements in irrigation infrastructure and the expansion of the agricultural frontier, among other factors.

Finally, it is important to highlight the effect of the LPA on the greater formalization of the workforce, especially of female workforce. Between 2000 and 2017, the average annual labor informality rate of male workers under the scope of the LPA decreased by 5.5 percentage points compared to the average rate observed in the stage prior to the enactment of the Law (1998-1999), whereas in the case of female workers, the average annual rate of labor informality fell by 12.2 percentage points in the same time intervals.

Box 3

OPINION SURVEY ON THE NON-TRADITIONAL AGRO-EXPORT SECTOR

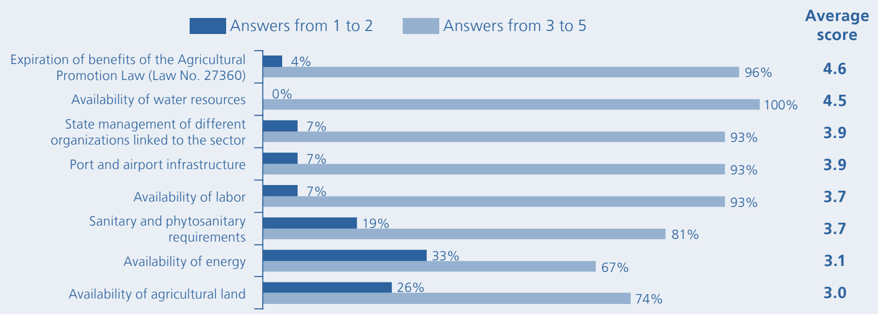
Peru's non-traditional agro-export sector has grown significantly in recent years. From 2000 to 2018, exports from this sector grew at an average annual rate of 16 percent and, as a result, the value of Peruvian exports increased from a total of US$ 394 million in 2000 to a total of US$ 5.91 billion in 2018. This amount currently represents 45 percent of our non-traditional exports (19 percent in 2000). Because of this significant growth, Peru has positioned itself among the first exporters of agricultural products of the world, ranking second in exports of blueberries and asparagus, third in exports of avocados, fifth in exports of fresh mangoes, and sixth in exports of grapes, for example.

Some factors that had an important role in the growth of the sector in recent years are the expansion of agricultural areas due to irrigation projects, the expansion of public infrastructure (roads and ports), the establishment of trade agreements, the role of Servicio Nacional de Sanidad Agraria (SENASA) in contributing to the access of Peruvian exports to new markets, and the country's comparative advantages in terms of climates which have a positive impact on agricultural productivity. These conditions were complemented by the Law of Agrarian Promotion that introduced, among other elements, provisions for labor flexibility that have contributed to grant an important dynamism to private investment in the sector.

Because of the importance of this sector, BCRP conducted a survey with representatives of this sector to obtain information about the constraints that the agro-export sector may eventually face to continue growing in the following years, as well as to identify which products would have a greater growth perspective in the coming years. The survey respondents were executives of agro-export companies as well as representatives of associations and unions linked to the sector.

The results of the survey, carried out in August 2019, showed that respondents consider that the main limitation for the growth of the agro-export sector is the expiration of the Agricultural Promotion Law in 2021. Respondents conveyed that extending the validity of the Law of Agrarian Promotion is an urgent action. Other limitations for the growth of the sector pointed out were the availability of water resources, the State management, and the lack of adequate infrastructure.

MAIN LIMITATIONS FOR THE GROWTH OF THE AGRO-EXPORT SECTOR FROM 1 (THERE IS NO PROBLEM) TO 5 (SERIOUS PROBLEM)

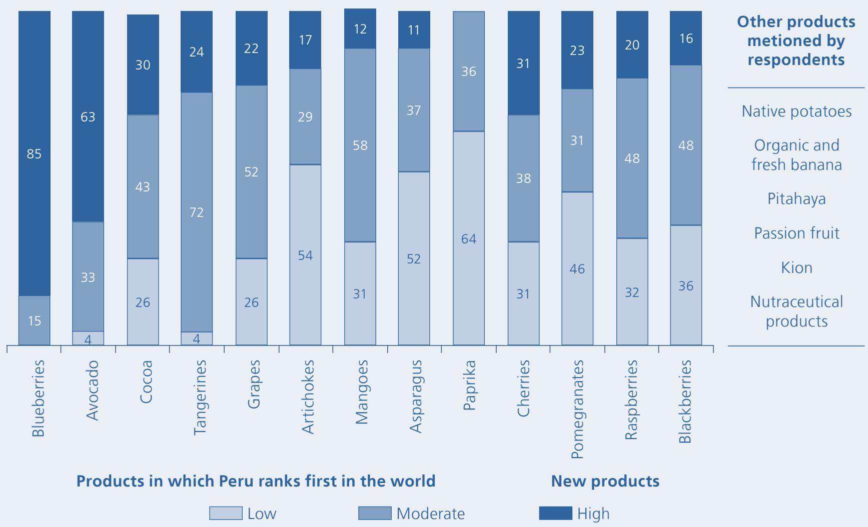


The survey also collected respondents' general perception of different organizations linked to the sector, whose management represents the third largest limitation pointed out. The National Agricultural Health Service (SENASA) and the National Water Authority (ANA) –and its local counterparty, the Local Water Authority– were the organizations that got the best ratings, while the lowest rated agencies were Centros de Innovación Productiva y Transferencia Tecnológica (CITE) and Instituto Nacional de Innovación Agraria (INIA).

Although SENASA is the best rated agency by respondents, some opportunities for the improvement of this institution were also mentioned: 85 percent of respondents think that the entity should be given more budget to increase the number of inspectors, working days, and missions abroad. In addition, about 80 percent of the sample believes that SENASA should be established as an autonomous entity and there was a coincidence in recommending that the supervision of crops should be extended to crops oriented to the domestic market.

As for the opinions and perspectives collected, most respondents perceive that there is either a moderate or high margin of growth for almost all the products that Peru currently exports, especially in the case of blueberries and avocados, and other new products (cherries, pomegranates, raspberries, and blackberries).

PERSPECTIVES ABOUT THE GROWTH FOR PRODUCTS
(%)



Respondents also said that the most attractive regions in the country to expand operations are Arequipa, La Libertad, and Piura, mainly because of their climate. On the other hand, the main reasons for investing abroad are the possibility of expanding the commercial window and the better institutional legal framework outside Peru.

The survey also collected respondents' opinion on the infrastructure works that should currently be prioritized due to their greatest impact on production. The projects Chavimochic

III and Majes-Siguas II, which are currently paralyzed, stood out, while other relevant projects pointed out included the consolidation of water availability in the valleys of Ica and Huancavelica, the Pisco-Ica and Ica-Arequipa roads, the Arequipa-La Joya highway, and the Salaverry port, among other projects.

It is foreseen that the project Chavimochic III, in La Libertad, will benefit 63 thousand new hectares with an estimated investment of US$ 715 million, while Majes-Siguas II in Arequipa will benefit 38.5 thousand hectares, with an estimated investment of US$ 1.52 billion. These projects, which were granted in concession by the respective regional governments, are currently halted. Today, they are part of the list of priority projects in the National Infrastructure Plan for Competitiveness published by the Ministry of Economy and Finance in July 2019.

The entry of Majes Siguas II and Chavimochic III into operation would have an extremely important impact on the country's economy in terms of exports, an increased demand for related services, formal employment, and tax revenue, to mention a few examples. If we consider a 75 percent level of utilization of the new hectares that would benefit from these two projects, the agricultural frontier earmarked for the cultivation of non-traditional export products could increase by 76 thousand new hectares of crops, expanding the current agricultural frontier (estimated at 457 thousand hectares) by about 17 percent. The impact of this greater availability of land would result in higher exports. In a scenario in which this expansion is aimed at crops such as grapes, avocados, and blueberries, exports would increase by around US$ 3.3 billion annually –considering the current prices of these exports–, which is approximately 60 percent of Peru's current non-traditional agricultural exports.

PROJECT CHAVIMOCHIC III

Main components of the project*	Description	Date	Investment (Million US$) 1/	Condition
I. Palo Redondo Dam	Height of 97 m. and useful volume of 366 million cubic feet.	4 years	347	Paralyzed
II. Third Line of Sifón	Located at the crossing of the Virú River. Length of 3 501 m.	16 months	24	Not started
III. Canals Moche - Chicama - Pampas de Urricape	Length of 128 km. Includes 3 tunnels and 4 bridges in crossing with the Pan-American Highway. On Otuzco road, 146 water points for delivery with measurement and control for the three stages of the project plus 13 km of driving to the Pampas of Urricape, province of Pacasmayo.	28 months	259	Not started
IV. Control, measurement and automation system. Stages I, II and III	Project information center (flows, pressures, levels, water quality, between others). System focused on the adequate control of the water resource from the main canal to the level of the users' points.	18 months	37	Not started

* Licensed: Río Santa - Chavimochic Consortium (Composed by Odebrecht and GyM).
1/ Not includes additional supervision expenses, financial structure, interests, FONCEPRI, and other reimbursable expenses for a total amount of US $ 48 million.
Source: Proyecto Especial Chavimochic.

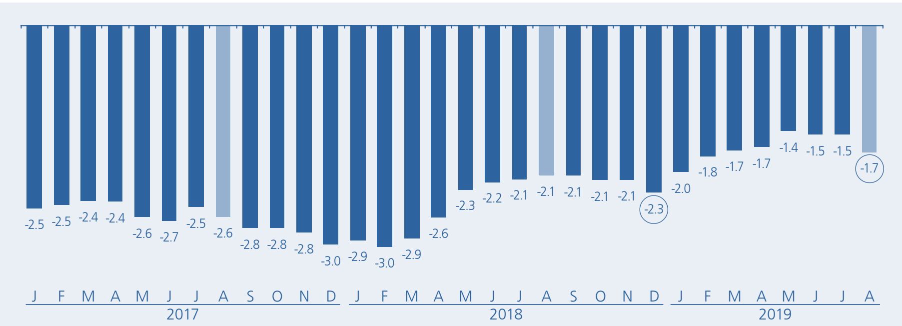
PROJECT MAJES-SIGUAS II				
Main components of the project	**Description**	**Date**	**Investment (Million US$)**	**Condition**
I. Angostura – Colca hydraulic system *	Main works: Angostura Dam (1,140 million cubic meters), Pucará - Colca bypass tunnel (7 km), a Transandino Tunnel (11 km), and power supply substation Cllalli (23 kV).	Construction: 3 years Operation and maintenance: 16 years, after the start-up.	282	Paralized
II. Llulclla - Siguas hydraulic system and distribution in Pampa de Siguas*	Main works: Bocatoma de Lluclla - Desarenador (23 cubic meters per second), tunnel driving - canal Pampa Siguas (16 km), main canal (14 km), between others.	Construction: 3 years Operation and maintenance: 16 years, after the start-up.	268	Awaiting decision on the technological component and financial closure
III. Hydropower component **	Two power generation plants: Lluclla (power of 269 MW) and Lluta (power of 157 MW).	Construction: 3 years Operation and maintenance: 30 years	970	Not started

* Licensed: Angostura Siguas S.A., originally formed by Cobra S.A. and Cosapi S.A, which then sold its share to Cobra.
** Licensed: Luz del Sur S.A. (Contract signed in 2018).

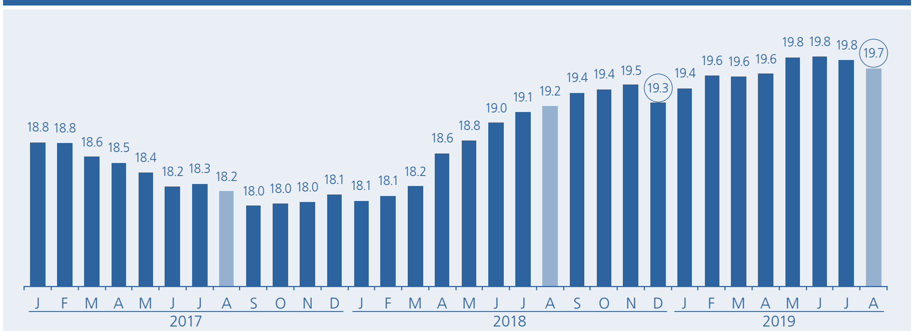
IV. Public Finances

39. In August 2019, the fiscal deficit accumulated in the last twelve months was 1.7 percent of GDP, after having reached 2.3 percent of GDP at the end of 2018. This deficit reduction resulted from both the increase in the current revenues of the general government (from 19.3 to 19.7 percent of GDP) and from the reduction in the non-financial expenditure of the general government (0.1 percentage point), thus representing 20.1 of GDP.

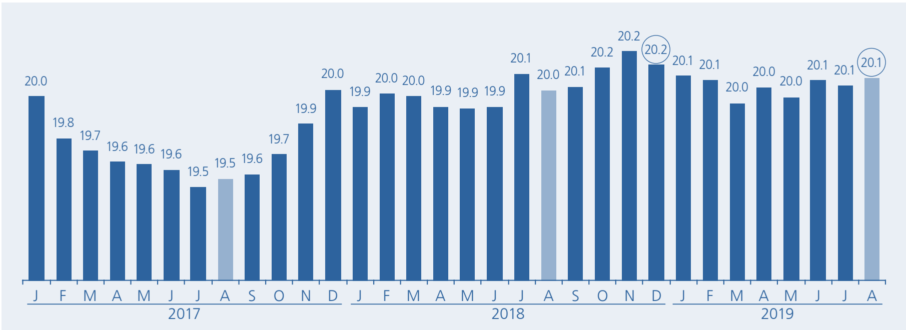
Graph 50
ECONOMIC BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR: 2017 - 2019
(Accumulated last 12 months - % GDP)



Graph 51
CURRENT REVENUES OF THE GENERAL GOVERNMENT: 2017 - 2019
(Accumulated last 12 months - % GDP)



Graph 52
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT: 2017 - 2019
(Accumulated last 12 months - % GDP)



40. In the period of January-August of 2019, the economic balance of the non-financial public sector increased by S/ 3.74 billion, compared to the same period of the previous year, due to higher current revenues (6.6 percent) offset in part by higher non-financial expenditure (3.2 percent). The increase in current revenues is explained by higher tax and non-tax revenues, with the increase in revenues from the value added tax (particularly the domestic VAT) and revenues from the excise tax standing out (22.5 percent) as a result of the higher rates in force since May 2018 and since June 2019. On the other hand, the increase in non-financial expenditure is explained by higher levels of current expenditure (4.0 percent), offset by lower spending in gross capital formation (1.3 percent).

Table 24
ECONOMIC BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR
(Million S/)

	January-August		
	2018	**2019**	**Var. %**
1. General government current revenues	**96,595**	**103,011**	**6.6**
a. Income tax	29,800	31,073	4.3
b. Value Added Tax	39,838	41,724	4.7
c. Excise tax	4,380	5,364	22.5
d. Other	22,578	24,851	10.1
2. General government non-financial expenditure	**-88,685**	**-91,549**	**3.2**
a. Current expenditure	-70,331	-73,152	4.0
b. Gross capital formation	-16,085	-15,879	-1.3
c. Other capital expenditure	-2,269	-2,518	11.0
3. Other	**-263**	**940**	
4. Primary balance (=1+2+3)	**7,648**	**12,402**	
5. Interests	**-8,194**	**-9,207**	**12.4**
6. Overall Balance (=4+5)	**-547**	**3,195**	

41. In January-August 2019, expenditure associated with the Reconstruction with Changes Program amounted to S/ 2.17 billion, which represented an execution

of 30 percent of the annual budget framework. As for expenditure on projects, S/ 1.36 billion was accrued, which represented an implementation rate of 24 percent, the projects carried out by local governments (S/ 905 million) standing out.

Moreover, spending on the main sports infrastructure projects for the **PanAmerican Games** in the same period amounted to S/ 637 million, a figure S/ 287 million higher than that recorded in the same period of 2018, which means that 71 percent of the Modified Institutional Budget (PIM) has been spent as of August of this year. By projects, it is worth highlighting the expenditure made in improving the facilities of the National Sports Village (VIDENA) and Parque Zonal Yahuar Huaca.

Forecasts

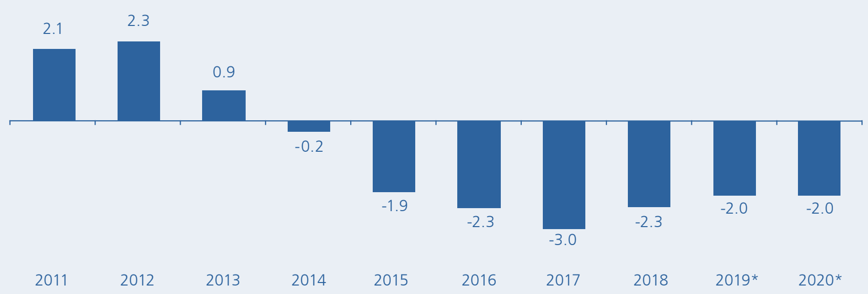
42. The fiscal deficit projected for 2019 has been revised slightly down, from 2.1 percent of GDP in the previous Report to 2.0 percent of GDP in this report, due to the higher revenues observed so far this year. This deficit level is projected to remain in 2020, in line with the anticipated recovery of economic activity and public investment.

Table 25
NON-FINANCIAL PUBLIC SECTOR
(% GDP)

	2018	2019*			2020*	
		S1	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
1. General government current revenues	**19.3**	**21.8**	**19.6**	**19.7**	**19.5**	**19.7**
Real % change	*11.2%*	*5.8%*	*4.6%*	*4.4%*	*3.3%*	*3.6%*
2. General government non-financial expenditure	**20.2**	**17.6**	**20.2**	**20.2**	**20.0**	**20.1**
Real % change	*5.3%*	*-0.2%*	*2.9%*	*2.6%*	*3.0%*	*3.1%*
Of which:						
Current expenditure	*15.3*	*14.2*	*15.5*	*15.6*	*15.4*	*15.4*
Real % change	*4.5%*	*0.6%*	*4.6%*	*4.2%*	*2.7%*	*2.5%*
Gross capital formation	*4.3*	*3.0*	*4.1*	*4.1*	*4.1*	*4.2*
Real % change	*10.6%*	*-1.0%*	*-1.0%*	*-1.6%*	*3.9%*	*4.9%*
3. Other	**0.0**	**0.1**	**-0.1**	**0.0**	**-0.1**	**-0.1**
4. Primary balance (1-2+3)	**-0.9**	**4.3**	**-0.7**	**-0.6**	**-0.6**	**-0.5**
5. Interests	**1.4**	**1.5**	**1.4**	**1.4**	**1.5**	**1.5**
6. Overall Balance	**-2.3**	**2.9**	**-2.1**	**-2.0**	**-2.1**	**-2.0**
Flow of gross debt	*2.3*	*0.7*	*2.0*	*1.8*	*1.9*	*2.1*
Flow of public deposits	*0.0*	*-2.6*	*0.4*	*0.4*	*0.2*	*0.0*
Other	*0.0*	*-1.0*	*-0.3*	*-0.2*	*0.0*	*-0.1*

Note: The sum of the partials may not exactly match the totals due to rounding.
* Forecast.
IR: Inflation Report.

Graph 53
ECONOMIC BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR: 2011 - 2020
(% GDP)



* Forecast.

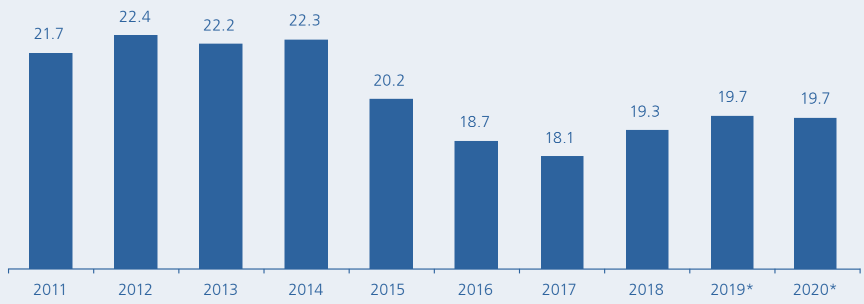
43. The upward revision of current revenues (from 19.6 to 19.7 percent of GDP) in 2019 is explained by higher non-tax revenues, with increased transfers of state enterprises' profits standing out. In 2020 it is estimated that current revenues would increase from 19.5 to 19.7 percent of GDP due to higher tax revenues (especially due to higher revenues from the VAT, which would increase from 8.3 to 8.4 percent of GDP).

Table 26
CURRENT REVENUES OF THE GENERAL GOVERNMENT
(% GDP)

	2018	2019*			2020*	
		S1	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
TAX REVENUES	**14.5**	**16.1**	**14.7**	**14.6**	**14.7**	**14.8**
Income tax[1/]	5.6	6.9	5.6	5.6	5.5	5.5
Value Added Tax	8.2	8.5	8.3	8.3	8.3	8.4
Excise tax	0.9	1.1	1.1	1.1	1.1	1.1
Import duties	0.2	0.2	0.2	0.2	0.2	0.2
Other tax revenues	1.8	1.9	1.8	1.8	1.8	1.8
Tax returns	-2.2	-2.4	-2.2	-2.3	-2.2	-2.2
NON-TAX REVENUES	**4.8**	**5.7**	**4.9**	**5.0**	**4.8**	**4.8**
Contributions to social security	2.2	2.3	2.2	2.2	2.2	2.2
Own resources and transfers	1.5	2.2	1.7	1.8	1.6	1.7
Royalties and likely	0.7	0.6	0.6	0.6	0.5	0.6
Other	0.3	0.5	0.4	0.4	0.4	0.4
TOTAL	**19.3**	**21.8**	**19.6**	**19.7**	**19.5**	**19.7**

Note: The sum of the partials may not exactly match the totals due to rounding.
1/ Includes revenues by repatriation of capital.
* Forecast.
IR: Inflation Report.

Graph 54
CURRENT REVENUES OF THE GENERAL GOVERNMENT: 2011 - 2020
(% GDP)



* Forecast.

44. In line with the evolution observed so far this year, the projection of non-financial expenditure in 2019 remains at 20.2 percent of GDP (as projected in the June report). In 2020, non-financial expenditure is expected to increase from 20.0 to 20.1 percent of GDP, primarily due to higher levels of public investment in projects associated with the Reconstrucción con Cambios program, the construction of Line 2 and the Av. Faucett-Gambetta section of the Basic Network of Metro de Lima and Callao. Moreover, on the side of the state enterprises, a higher investment is also expected in the Modernization of the Talara Refinery project.

Table 27
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT
(% GDP)

	2018	2019*			2020*	
		S1	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
CURRENT EXPENDITURE	**15.3**	**14.2**	**15.5**	**15.6**	**15.4**	**15.4**
National Government	10.3	9.6	10.5	10.5	10.4	10.4
Regional Governments	3.4	3.2	3.4	3.5	3.3	3.3
Local Governments	1.6	1.4	1.6	1.6	1.7	1.7
CAPITAL EXPENDITURE	**4.9**	**3.4**	**4.6**	**4.6**	**4.7**	**4.7**
Gross capital formation	**4.3**	**3.0**	**4.1**	**4.1**	**4.1**	**4.2**
National Government	1.5	1.2	1.5	1.5	1.5	1.6
Regional Governments	0.9	0.6	0.8	0.8	0.8	0.8
Local Governments	1.9	1.3	1.8	1.8	1.9	1.8
Other	**0.6**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**
TOTAL	**20.2**	**17.6**	**20.2**	**20.2**	**20.0**	**20.1**
National Government	12.3	11.2	12.5	12.5	12.4	12.5
Regional Governments	4.2	3.7	4.2	4.3	4.1	4.1
Local Governments	3.6	2.6	3.5	3.5	3.6	3.5

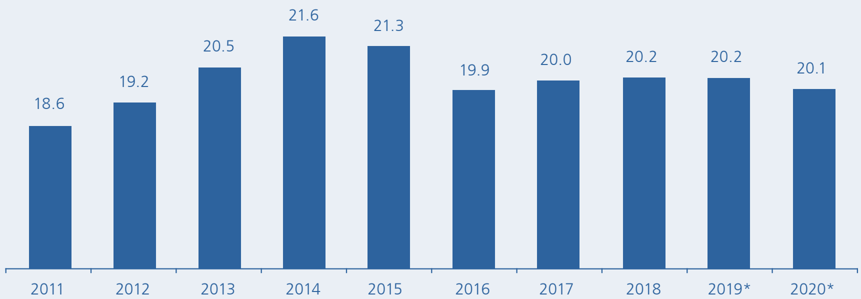
Note: The sum of the partials may not exactly match the totals due to rounding.
* Forecast.
IR: Inflation Report.

Table 28
PUBLIC INVESTMENT
(Million S/)

Main items	2018	2019*	2020*
Reconstruction with Changes [1/]	862	2,600	4,000
PanAmerican Games [2/]	920	900	-.-
Lima Metro's Line 2	370	400	950
Talara Refinery	1,900	2,330	2,430

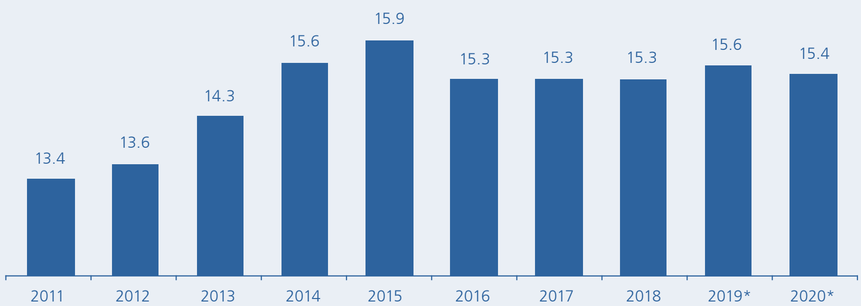
1/ Only includes investment expenses.
2/ Only considers the investment expenditure of the national government in 9 main sport infraestructure projects.
* Forecast.

Graph 55
NON-FINANCIAL EXPENDITURE OF THE GENERAL GOVERNMENT: 2011 - 2020
(% GDP)



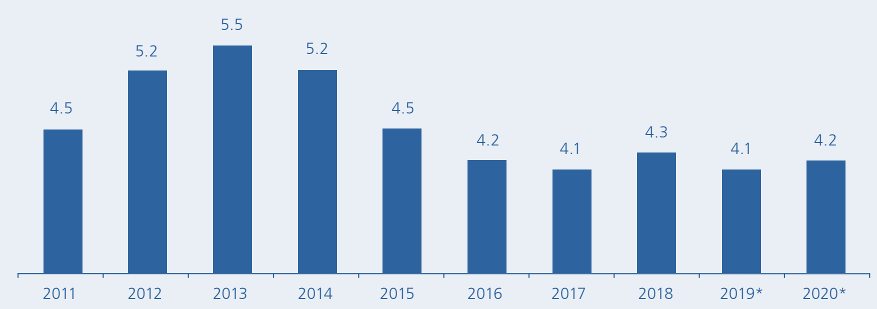
* Forecast.

Graph 56
CURRENT EXPENDITURE OF THE GENERAL GOVERNMENT: 2011 - 2020
(% GDP)



* Forecast.

Graph 57
GROSS CAPITAL FORMATION OF THE GENERAL GOVERNMENT: 2011 - 2020
(% GDP)



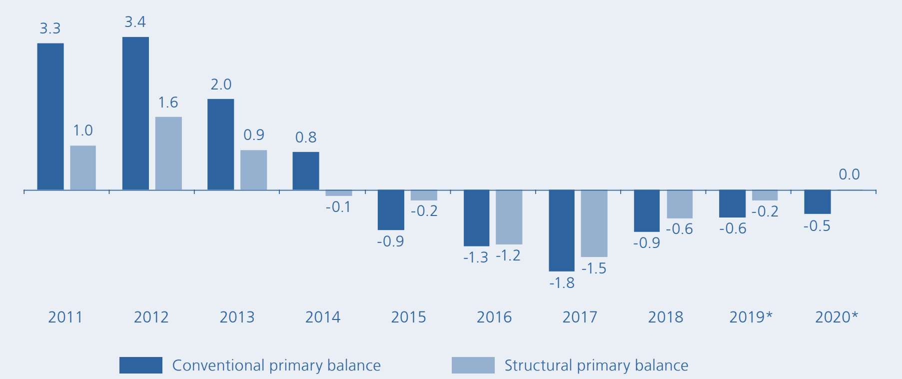
* Forecast.

45. The Ministry of Economy and Finance (MEF) has submitted to Congress the bill for the 2020 Budget Law, with total resources amounting to S/ 177.37 billion (21.5 percent of GDP), which represents a nominal increase of 5.5 percent compared to the initial budget for 2019. The non-financial expenditure considered in the Budget bill amounts to S/ 163.20 billion, a figure 6.7 percent higher than the one considered in the initial budget of 2019. Because of the amount involved, the most important public investment project considered in the 2020 budget is the construction of Lima Metro's Line 2 and the construction of Av. Faucett-Gambetta branch line.

46. The **structural primary balance** seeks to identify the effects of fiscal policy decisions beyond the effects of factors that are not within government control, such as the effects of export prices and their impact on revenues from the income tax or the stage of the business cycle and its effect on tax revenue. This indicator would be -0.2 percent of the potential output in 2019 and would be zero in 2020.

47. The **weighted fiscal impulse** considers the multiplier effects of changes in the structural components of fiscal revenues, current expenditures, and capital expenditures to obtain a measurement that takes into account the relative difference of the impacts of changes in these three variables on production. A contractionary fiscal position would be observed in 2019 in terms of the weighted fiscal impulse (-0.3 percent of GDP) due to the impact of the increase in the revenues of the general government (by -0.2 percent of GDP) as well as due to the lower projected growth of public investment (-0.3 percent of GDP), offset in part by higher current expenditure. On the other hand, a neutral weighted fiscal impulse is estimated for 2020.

Graph 58
CONVENTIONAL AND STRUCTUTRAL PRIMARY BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR: 2011 - 2020
(% GDP and % Potential GDP)



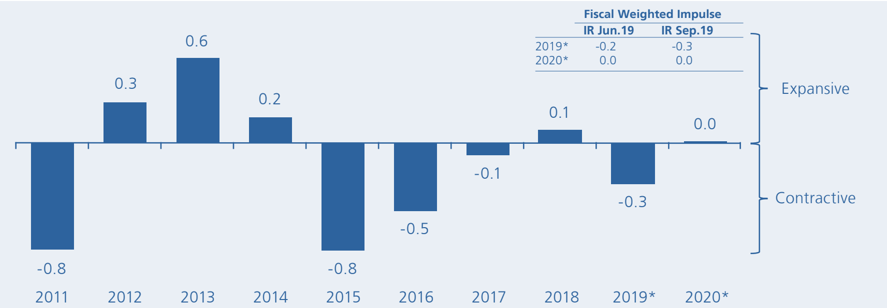
* Forecast.

Table 29
STRUCTURAL BALANCE AND FISCAL IMPULSE
(% Potential GDP)

		2018	2019*	2020*
I.	**Conventional fiscal balance**			
	1. Current revenues	19.1	19.4	19.5
	2. Non-financial expenditures	-20.0	-20.0	-20.0
	i. Current	-15.2	-15.4	-15.3
	ii. Capital	-4.9	-4.6	-4.7
	3. Other	0.0	0.0	-0.1
	4. Conventional primary balance	-0.9	-0.6	-0.5
II.	**Resultado Fiscal Estructural**			
	1. Current revenues	19.3	19.7	19.9
	2. Non-financial expenditures	-19.9	-19.9	-19.9
	i. Current	-15.1	-15.3	-15.2
	ii. Capital	-4.9	-4.6	-4.7
	3. Other	0.0	0.0	-0.1
	4. Structural primary balance	-0.6	-0.2	0.0
III.	**Fiscal impulse** 1/	**-0.7**	**-0.6**	**0.0**
	5. Net effect of multipliers 2/	0.9	0.3	0.0
IV.	**Weighted fiscal impulse (IV = III + 5)**	**0.1**	**-0.3**	**0.0**

1/ In 2017, 2018, and 2019 includes the impact of temporary revenues as the repatriation of assets, payment of taxes, fines, and other concepts, excluding structural revenues.
2 / Multipliers: (i) if the Output gap is negative: Revenues -0.25, current expenditure 0.93, capital expenditure 1.42. (ii) if the Output gap is positive: Revenues 0, current expenditure 0.28, capital 0.73.
* Forecast.

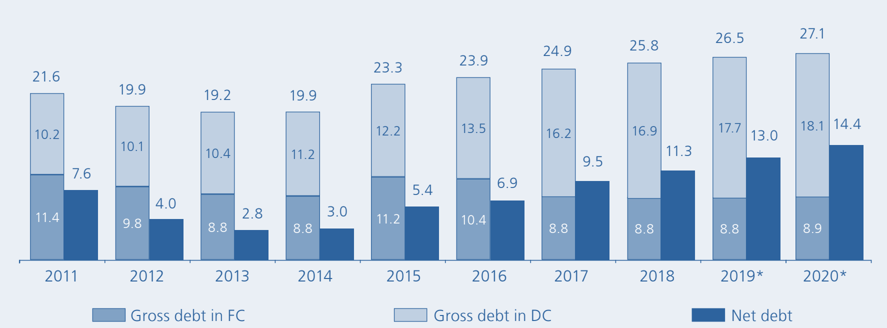
Graph 59
FISCAL WEIGHTED IMPULSE[1/]
(% Potential GDP)



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

48. The **net public debt** would increase from 11.3 percent of GDP in 2018 to 14.4 percent of GDP at the end of the forecast horizon. In gross terms, the debt would increase by 1.3 percentage points of GDP to 27.1 percent in 2020 compared to the debt level in 2018. The higher ratio of debt in domestic currency observed in recent years is worth pointing out in terms of the debt composition.

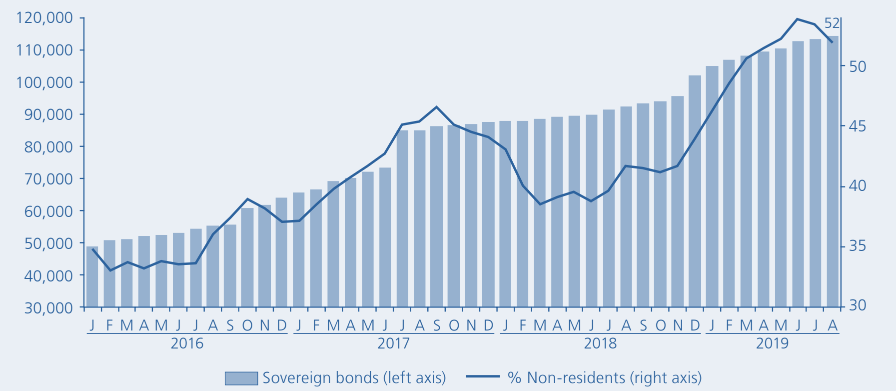
Graph 60
NON-FINANCIAL PUBLIC SECTOR DEBT: 2011 - 2020
(% GDP)



* Forecast.

The balance of **sovereign bonds** as of August 2019 was S/ 114.21 billion, S/ 1.67 billion higher than the balance recorded at the end of the second quarter of 2019. On the demand side, the share of non-resident investors was 52 percent of the balance of bonds, non-residents' holdings having increased from S/ 57.68 billion in May 2019 to S/ 59.39 billion in August.

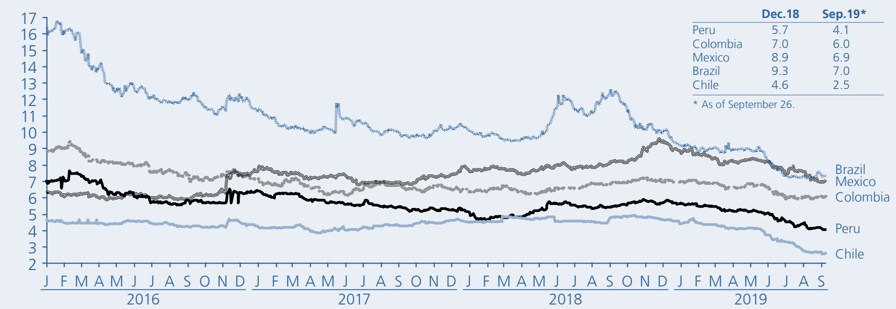
Graph 61
BALANCE OF SOVEREIGN BONDS AND SHARE OF NON-RESIDENT INVESTORS
(Amounts in million S/ and shares in %)



Source: MEF.

In the fixed income market of government bonds, the interest rates on 10-year bonds in domestic currency decreased on average by 45 basis points in Brazil, Chile, Colombia, Mexico, and Peru, between June and September 2019. Together with the easing of monetary conditions in the United States, the cuts in the monetary policy interest rates in Chile, Mexico, and Peru have encouraged the demand for government bonds in Latin America. In Peru, the interest rate on government bonds has decreased from 4.73 to 4.06 percent.

Graph 62
YIELDS ON 10-YEARS SOVEREIGN BONDS IN LOCAL CURRENCY
(%)



	Dec.18	Sep.19*
Peru	5.7	4.1
Colombia	7.0	6.0
Mexico	8.9	6.9
Brazil	9.3	7.0
Chile	4.6	2.5

* As of September 26.

Source: MEF and Reuters.

The gross financing requirement (GFR) projected for 2019 has been increased in comparison to the projection considered in our June Report due to the higher payments of amortizations made, offset by the lower fiscal deficit projected. These higher amortizations are mostly associated with the debt management operations carried out in July whereby sovereign bonds for a total of S/ 365 million were exchanged and/or bought back and credit for a total of S/ 355 million was refinanced with Banco de la Nación.

A reduction in financial requirements is foreseen for 2020 (S/ 19.35 billion) due to the lower level of fiscal deficit and to lower payments for amortizations. Moreover, the lower payment of amortizations in 2020 reflects the effect of the debt management operations carried out in July 2019.

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

	2018	2019*			2020*	
		S1	IR Jun.19	IR Sep.19	IR Jun.19	IR Sep.19
I. USES	**28,425**	**235**	**28,887**	**28,971**	**20,470**	**19,345**
1. Amortization	11,488	10,882	12,821	13,548	3,134	2,949
a. External	4,222	2,425	3,684	3,707	991	1,010
b. Domestic	7,266	8,457	9,137	9,841	2,144	1,939
Of which: Recognition bonds	*1,171*	*556*	*856*	*806*	*550*	*550*
2. Overall Balance	16,938	-10,647	16,065	15,423	17,336	16,396
(Negative sign indicates surplus)						
II. SOURCES	**28,425**	**235**	**28,887**	**28,971**	**20,470**	**19,345**
1. Disbursements and other	25,630	20,083	31,914	29,378	18,352	18,456
a. External	5,896	1,936	4,627	4,256	6,067	6,171
b. Bonds	19,734	18,147	27,287	25,122	12,285	12,285
2. Change on deposits and other[1/]	2,795	-19,848	-3,027	-407	2,118	889

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

V. Monetary Policy and Financial Conditions

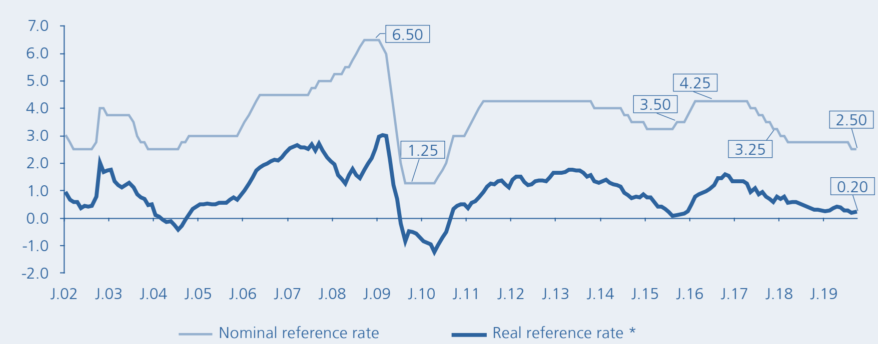
Monetary Policy Actions

49. Between July and September 2019, the **monetary policy** actions of BCRP continued to be aimed at maintaining an expansionary monetary stance to ensure that inflation and inflation expectations remain within the target range (1-3 percent), in a context in which economic activity continued to be below its potential level, and increased volatility and uncertainty were observed in international financial markets.

    In this context, the Board of BCRP decided to lower the **benchmark interest rate** from 2.75 to 2.50 percent in August, emphasizing in its policy statement that "This decision does not necessarily imply additional interest rate cuts". The Board also reiterated that it "pays close attention to new information on inflation and its determinants in assessing future changes in the monetary policy stance".

    As a result of these monetary policy actions, the real benchmark interest rate stood around 0.2 percent in this period, below its neutral level which is estimated at 1.50 percent. This expansionary monetary policy stance is consistent with an inflation rate of around 2.0 percent in the forecast horizon, with a downward bias due to the possibility of a lower-than- expected increase in domestic demand.

Graph 63
NOMINAL AND REAL* REFERENCE INTEREST RATE
(%)



* Exante real rate with expectation of inflation. The reference rate from January 2002 and August 2003 is the midpoint rounded in 25 basis ponts from interest rate band.

50. The Board decided to maintain an expansionary monetary policy stance in light of the following factors:

    i. Between June and August 2019, the **year-on-year inflation rate and trend inflation indicators** were within the target range. The inflation rate fell from 2.29 percent in June to 2.04 percent in August, the main decline in prices being observed in food and energy prices (from 2.28 to 1.85 percent) due to the lower variation observed in the prices of electricity rates and in the prices of some foodstuffs, such as tomatoes and chicken meat, as a result of greater supply.

    ii. **Inflation expectations** remained within the target range.

    iii. **Indicators of economic activity** in the non-primary industries show a weak performance as a result of transitory supply shocks, while non-primary industries show some a moderate growth momentum. The slow pace of public investment observed in January-August is expected to revert in the remainder of the year.

    iv. **Global growth** risks persist and higher volatility has been observed in international financial markets in recent months due to trade tensions.

Monetary Operations

51. The **monetary operations of the Central Bank** were oriented to maintaining appropriate levels of liquidity. To do so, in view of the expansion of the monetary base due to the decline of public sector's deposits at the Central Bank reflecting the payment of BTP coupons in August, between June and August BCRP sterilized this liquidity mainly through the placement of CDBCRP and through the maturity

of currency repos operations. As a result of these operations, the balance of repos decreased from S/ 20.03 billion in June to S/ 16.60 billion at the end of August 2019.

Table 31
BALANCE OF BCRP MONETARY OPERATIONS

	Balance (Mill. S/)			Average interest rate (%)		
	Dec.18	**Jun.19**	**Aug.19**	**Dec.18**	**Jun.19**	**Aug.19**
Monetary Sterlization						
1. CDBCRP	27,061	27,265	28,272	2.70	2.74	2.64
2. Overnight deposits	1,802	2,835	2,212	1.50	1.50	1.25
Monetary Injection						
3. Currency repos	7,358	11,450	11,750	3.80	3.93	3.91
4. Security repos	5,950	8,575	4,850	3.95	3.80	3.93
5. Auctions of Treasury funds	4,000	4,100	4,100	4.22	4.31	4.31

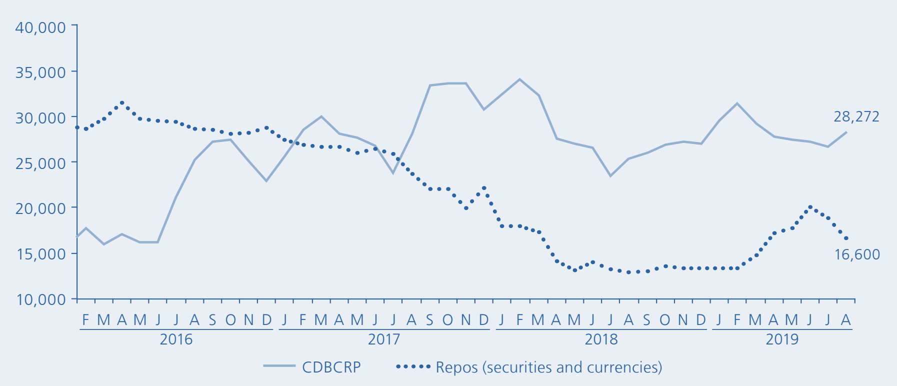
As a result, the balance of repos operations fell to 6.7 percent of the BCRP net assets, from 8.4 percent in June, while the balance of BCRP sterilization instruments fell to 12.3 percent at the end of August 2019, from 12.7 percent in June. On the other hand, the ratio of public sector deposits at the central bank in terms of the BCRP net liabilities decreased to 30.6 percent, from 33.8 percent in June, remaining as the most important liability of BCRP.

Table 32
SIMPLIFIED BALANCE SHEET OF THE BCRP*
(As % of Net Assets)

	Dec.18	**Jun.19**	**Aug.19**
I. Net assets	**100%**	**100%**	**100%**
Net International Reserves	**93.8%**	**91.6%**	**93.3%**
	(US$ 60,121 mills.)	**(US$ 66,513 mills.)**	**(US$ 68,269 mills.)**
Repos	**6.2%**	**8.4%**	**6.7%**
II. Net liabilities	**100%**	**100%**	**100%**
1. Total public sector deposits	**31.3%**	**33.8%**	**30.6%**
In domestic currency	18.5%	21.7%	18.8%
In foreign currency	12.8%	12.1%	11.9%
2. Total financial system deposits	**25.6%**	**28.4%**	**30.1%**
In domestic currency	5.3%	4.8%	4.7%
In foreign currency	20.3%	23.6%	25.3%
3. BCRP instruments	**13.4%**	**12.7%**	**12.3%**
CDBCRP	12.6%	11.5%	11.4%
Overnight and Term deposits	0.8%	1.2%	0.9%
4. Currency	**22.9%**	**19.3%**	**19.3%**
5. Other*	**6.8%**	**5.9%**	**7.7%**

* Includes assets and other accounts.

Graph 64
REPO OPERATIONS AND PLACEMENT OF CDBCRP
(Balance in mill. S/)



Interest Rates

52. Looser monetary conditions allowed interest rates in domestic currency to decrease, in line with the reduction of the benchmark rate on August 8. Thus, while the interbank rate converged quickly to its benchmark level of 2.50 percent, the prime lending and deposit rates for overnight to 12-month operations decreased by 52 and 55 basis points, respectively, on average. Moreover, in September the differential between the 3-month corporate prime rates for lending and the benchmark rate was 112 basis points, the minimum level observed since August 2018. Similarly, the rates on deposits and credit decreased on average by 52 and 45 basis points, respectively. Market expectations of additional rate cuts in the policy rate in 2019 and 2020, together with banks' greater availability of liquidity as a result of BCRP injection operations, explain the recent trend observed in interest rates.

Table 33
INTEREST RATE IN DOMESTIC CURRENCY
(%)

		Sep.18	Dec.18	Mar.19	Jun.19	Sep.19
Passive	Deposits up to 30-day	2.7	3.1	2.6	2.9	2.3
	On 31 to 180-day term deposits	3.4	4.0	3.6	3.4	2.9
	On 181 to 360-day term deposits	3.6	4.2	4.1	3.9	3.4
Active	90-day corporate prime	3.9	4.5	4.0	4.0	3.4
	Corporates	4.3	4.9	4.7	4.5	3.6
	Large companies	6.2	6.4	6.5	6.3	6.2
	Medium-sized enterprises	10.3	9.8	10.3	9.9	9.8
	Small businesses	19.1	18.5	18.5	18.8	19.0
	Consumer	41.1	44.9	40.8	41.1	39.9
	Mortgage	7.5	7.6	7.9	7.7	7.2

* As of September 26.
Source: SBS.

The 90-day corporate prime rate, which shows a declining trend since January 2019, has fallen from its maximum level of 4.52 percent in December 2018 to its current level of 3.44 percent. Factors accounting for this evolution include the BCRP liquidity injection operations, the greater availability of liquid assets, and the increase of other financing sources for banks (institutional investors).

Graph 65
INTEREST RATE IN US$: 90-DAY CORPORATE PRIME AND LIBOR 3-MONTH
(%)

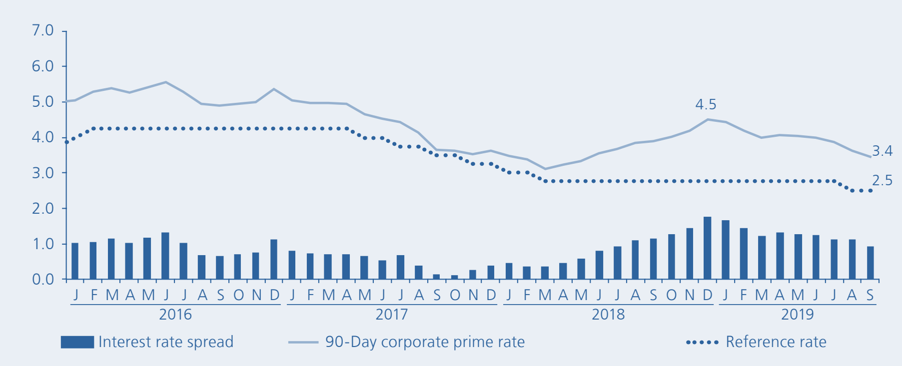


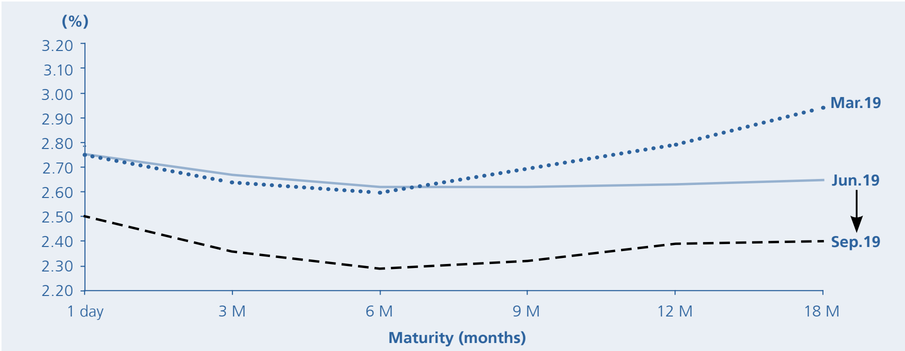
Table 34
SURVEY ON MACROECONOMIC EXPECTATIONS: REFERENCE INTEREST RATE AT THE END OF THE YEAR

	March 31	June 30	July 31	August 31
Financial entities				
2019	2.75	2.75	2.50	2.25
2020	3.00	2.75	2.50	2.25
2021	3.25	3.00	3.00	2.50
Economic analysts				
2019	2.75	2.75	2.50	2.25
2020	3.00	2.75	2.50	2.50
2021	3.25	3.00	3.00	2.50

Survey made in dates indicated on the items.
Source: BCRP.

53. The **yield curve** of **CDBCRP** for 3 to 18 month-terms decreased by 29 basis points on average between June and September 2019, mainly due to banks' high demand for high quality securities as well as due to the reduction in the benchmark interest rate. It is worth highlighting that the structure of BCRP securities in terms of 6 to 12 month maturities shows an inverted shape since June 2019, which is explained by expectations of additional cuts in the monetary policy interest rate and by the maturities of CDBCRP concentrated in such maturity terms.

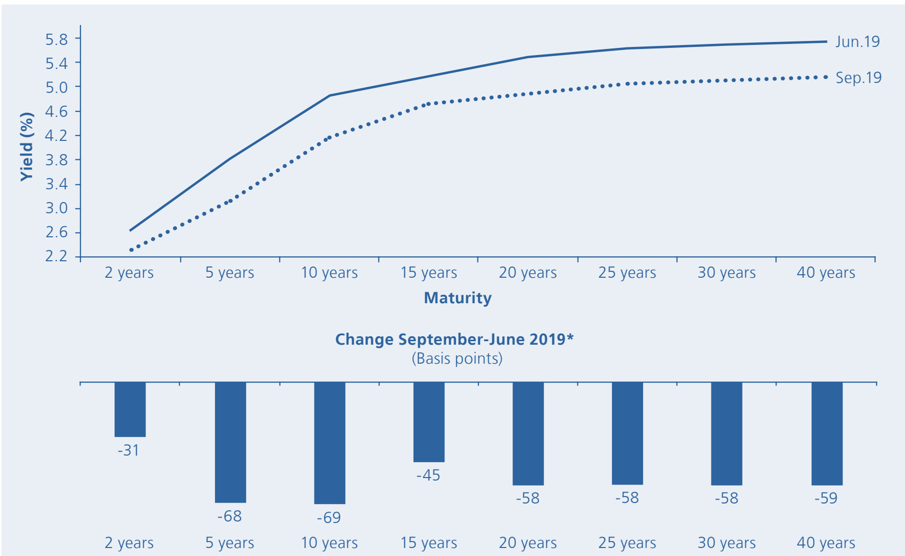
Graph 66
YIELD CURVE OF CENTRAL BANK SECURITIES [1/]



1/ Yield rate in the primary and secondary market.

54. Similarly, the interest rates on sovereign bonds decreased 56 basis points on average in September compared to the second quarter of 2019, with search for profit in financial markets fueling the demand for assets in the emerging economies with good macroeconomic fundamentals. Moreover, the international context marked by a reduction in the policy interest rates in the developed economies has favored the performance of Peruvian bonds in soles. Non-resident investors have increased their holdings of sovereign bonds by S/ 13.25 billion between December 2018 and September 2019. In August, the yield rate on the 10-year bond showed levels close to the minimum historical level of 3.94 percent (registered on April 19, 2013).

Graph 67
YIELD CURVE OF PERUVIAN SOVEREIGN BONDS
(%)



* As of September 26.
Source: MEF.

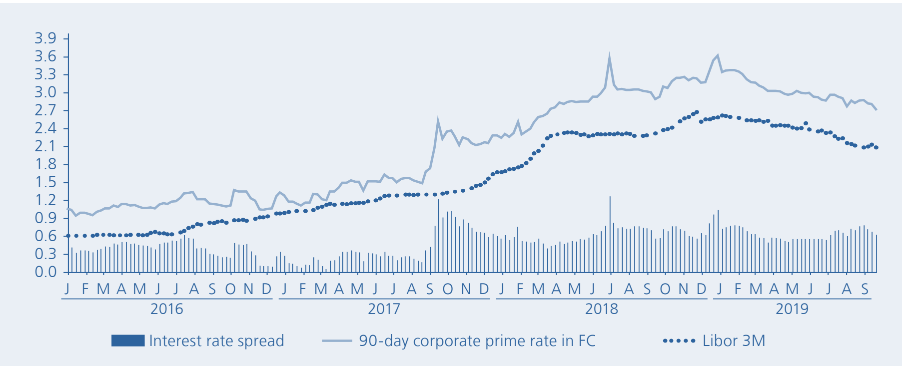
55. Interest rates in dollars declined as well, influenced by the downward trend of interest rates in the international money market. The 25 basis points cut in the Federal Reserve interest rate led the local interbank overnight rate to decrease from 2.50 to 2.00 percent between June and September 2019. On the other hand, the corporate prime rates for 30-day to 180-day loans and deposits decreased by 20 and 44 basis points, respectively. Moreover, the interest rates by credit segments decreased by 27 basis points on average.

Table 35
INTEREST RATE IN FOREIGN CURRENCY
(%)

		Sep.18	Dec.18	Mar.19	Jun.19	Sep.19
Passive	Deposits up to 30-day	1.4	1.9	1.9	1.7	1.6
	On 31 to 180-day term deposits	1.7	2.0	2.1	2.0	1.7
	On 181 to 360-day term deposits	1.3	1.9	2.1	1.9	1.6
Active	90-day corporate prime	3.0	3.6	3.1	2.9	2.8
	Corporates	3.7	4.0	3.7	3.6	3.1
	Large companies	5.4	5.5	5.4	5.6	5.4
	Medium-sized enterprises	7.3	6.9	7.4	6.8	7.2
	Small businesses	9.9	9.9	10.1	9.9	8.0
	Consumer	34.8	36.1	35.4	35.2	35.8
	Mortgage	6.1	6.1	6.3	5.9	5.8

* As of September 26.
Source: SBS.

Graph 68
INTEREST RATE IN US$: 90-DAY CORPORATE PRIME AND LIBOR 3-MONTH
(%)



Foreign Exchange Market

56. Between June and September 2019, the **sol** depreciated 1.7 percent against the dollar, bringing the exchange rate from S/ 3.295 to S/ 3.352 per dollar. As a

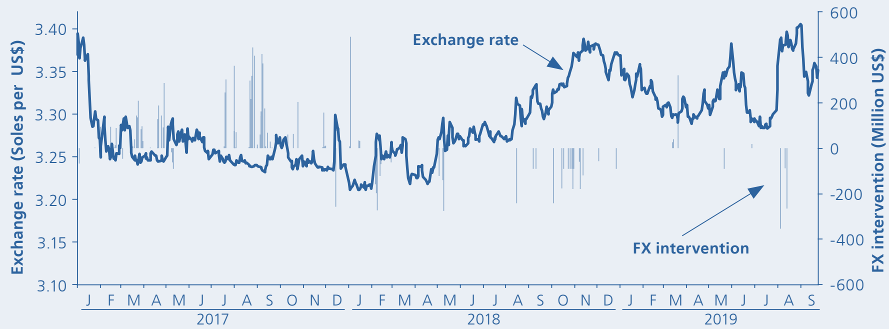
result, the Peruvian currency shows an accumulated appreciation of 0.5 percent so far this year. This evolution of the US-PEN exchange rate in the third quarter of the year is mainly explained by pressures associated with financial volatility in international markets and with local political uncertainty. In this context, the Central Bank intervened in the foreign exchange market placing FOREX swaps-sell for a total of US$ 708 million in August.

Table 36
FOREIGN EXCHANGE INTERVENTION

	Trading days	Number of intervention days: Spot market	Placement of derivatives and indexed instruments	Total (*spot* and/or placement)	% of days with intervention: *Spot*	Instruments	SD of the Exchange Rate (Annual % chg.)
2016	250	50	119	134	20%	48%	7.3%
2017	249	55	23	63	22%	10%	4.5%
2018	245	4	27	30	2%	11%	3.4%
2019*	184	4	4	8	2%	2%	4.2%

* As of September 25.

Graph 69
EXCHANGE RATE AND FX INTERVENTION 1/



1/ Includes Net purchases of US$ in the sopt market and placement of CDLD BCRP, CDR BCRP, and FX swaps .

57. As for flows in the local exchange market, between January and September 2019, the financial sector's net demand for dollars (US$ 1.53 billion) was offset by the non-financial sector's net supply of dollars (US$ 1.72 billion) and by the BCRP intervention in the foreign exchange market (US$ 197 million). Non-resident investors stood out in terms of the supply in the spot market and as demanders

in the derivatives market, while the administrators of private pension funds (AFPs) stood out in terms of the demand for dollars in the spot market.

Table 37
FLOWS OF FX MARKET *
(Million US$)

	January-September 2019		
	Spot	Derivatives	Total
Financial Sector (1)	**-115**	**-1,646**	**-1,525**
1. AFP	-1,461	295	-1,166
2. Non-residents	1,607	-1,941	-334
3. Financial institutions	-25	0	-25
FX intervention of BCRP (2)	**-405**	**208**	**-197**
Non-financial Sector (3)	**2,730**	**-1,008**	**1,722**
Net flow (1)+(2)+(3)	**2,210**	**-2,446**	**0**

* Positive (negative) means supply (demand).

Liquidity

58. Private sector deposits registered a year-on-year growth rate of 10.5 percent in August. By currencies, deposits in soles grew at a year-on-year rate of 12.2 percent, while deposits in dollars grew 7.8 percent, which reflected people's greater preference for saving in domestic currency, in line with the appreciation trend registered by the PEN during most of the year.

Graph 70
DEPOSITS OF THE PRIVATE SECTOR BY CURRENCY
(Annual % change)

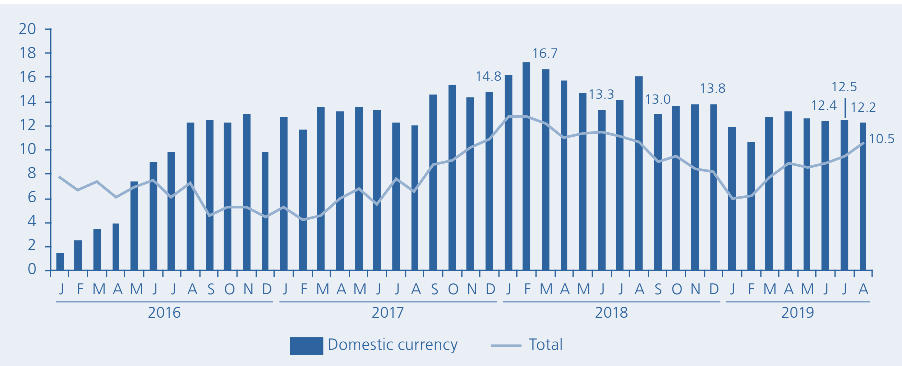


Table 38
DOLLARIZATION RATIO OF DEPOSITS 1/
(%)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19
Individuals	**35.0**	**34.4**	**33.7**	**32.5**	**32.5**	**32.2**	**31.7**
Demand deposits	48.5	50.3	47.9	46.3	45.3	47.5	46.2
Savings deposits	38.5	38.3	36.9	35.5	35.7	35.4	34.4
Term deposits	30.5	29.5	29.5	29.4	28.7	28.7	28.8
CTS	27.7	26.1	26.1	24.4	24.6	23.3	23.3
Business	**49.3**	**50.1**	**48.7**	**47.2**	**46.1**	**48.1**	**46.9**
Demand deposits	46.3	48.0	45.6	44.1	43.1	45.3	42.7
Savings deposits	60.9	55.5	74.6	45.4	57.6	41.3	50.7
Term deposits	57.9	57.5	56.8	63.9	57.2	59.9	61.3
TOTAL	**39.9**	**39.6**	**38.6**	**37.3**	**37.1**	**37.6**	**37.2**

1/ Balances are valuated at constant exchange rate on December 2018.

Table 39
MONETARY AND CREDIT ACCOUNTS OF THE DEPOSITORY CORPORATIONS (END-OF-PERIOD)1/
(Annual % change)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19	Dec.19*	Dec.20*
Currency in circulation (End-of-period)	10.8	10.3	8.5	7.9	5.3	4.8	6.4	5.7	6.0
Deposits in domestic currency	16.7	13.3	13.0	14.1	12.7	12.4	12.2	11.2	13.7
Total deposits 1/	12.2	11.5	9.0	8.3	7.7	8.9	10.5	9.2	10.6
Broad money in domestic currency	14.9	12.5	11.8	12.1	11.6	10.8	11.2	9.9	12.0
Total broad money 1/	12.2	11.4	9.2	8.1	7.5	8.4	10.1	8.6	9.9
Credit to the private sector in domestic currency	7.4	9.3	10.1	11.6	11.7	10.7	10.7	10.5	11.0
Credit to the private sector 1/	**7.8**	**9.1**	**8.9**	**8.7**	**8.4**	**7.6**	**8.1**	**7.3**	**8.5**

1/ Balances are valuated at constant exchange rate on December 2018.
* Forecast.

Credit to the Private Sector

59. Credit to the private sector grew at a year-on-year rate of 8.1 percent in August. By segments, credit to businesses grew 6.0 percent, while credit to households grew 11.4 percent. In the case of personal loans, consumer loans and mortgage loans continued to show higher growth rates (13.0 and 9.1 percent, respectively), while in the case of loans to businesses, the segments with the higher growth rates were loans to corporations and to large companies, as well as loans to small and micro businesses (7.5 and 6.6 percent, respectively).

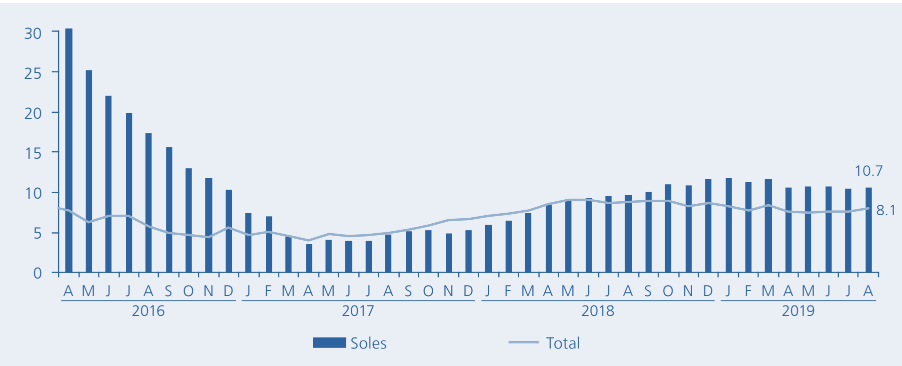
Table 40
CREDIT TO THE PRIVATE SECTOR 1/
(Annual growth rate)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19
Businesses	**6.7**	**8.0**	**7.4**	**7.1**	**6.4**	**5.3**	**6.0**
Corporate and large companies	8.1	10.6	9.9	9.1	7.2	6.2	7.5
Medium-sized enterprises	1.9	2.4	2.7	3.8	3.9	1.6	1.9
Small business and Microbusinesses	8.8	8.5	6.9	5.9	7.0	7.1	6.6
Individuals	**9.7**	**10.9**	**11.4**	**11.4**	**11.7**	**11.4**	**11.4**
Consumer	10.4	11.9	12.8	13.1	13.5	12.9	13.0
Car loans	-0.8	-2.9	-1.8	-3.7	2.6	6.9	6.8
Credit cards	3.8	6.0	8.5	11.9	14.7	14.8	14.8
Rest	14.8	16.1	15.9	14.7	13.4	12.3	12.4
Mortgage	8.6	9.4	9.5	9.0	9.1	9.1	9.1
TOTAL	**7.8**	**9.1**	**8.9**	**8.7**	**8.4**	**7.6**	**8.1**

1/ Balances are valuated at constant exchange rate on December 2018.

60. Credit in soles continues to grow at two-digit rates, while the pace of growth of credit in dollars has moderated due to the greater preference for local funding and due to the fact that interest rates in soles have remained below their historical average levels. Thus, credit in soles grew 10.7 percent, while credit in dollars grew 1.7 percent in August.

Graph 71
TOTAL CREDIT TO THE PRIVATE SECTOR
(Annual % change)



61. Moreover, the balance of total credit to the private sector continued to evolve in line with its long-term trend, in line with easing conditions for credit provision.

Graph 72
UNSEASONALLY CREDIT TO THE PRIVATE SECTOR AND TREND
(%)

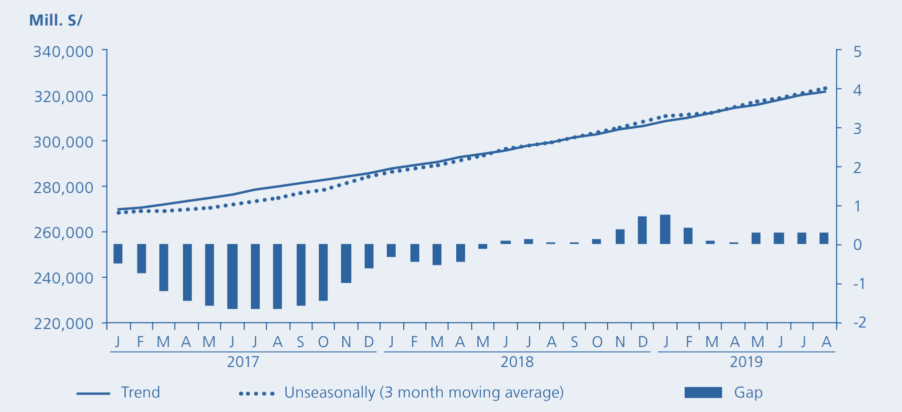


Table 41
CREDIT TO THE PRIVATE SECTOR 1/
(Annual % change)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19
Domestic currency	7.4	9.3	10.1	11.6	11.7	10.7	10.7
Foreign currency	8.6	8.7	6.0	1.9	0.6	0.2	1.7
Total	**7.8**	**9.1**	**8.9**	**8.7**	**8.4**	**7.6**	**8.1**

1/ Balances are valuated at constant exchange rate on December 2018.

62. As of August 2019, depository institutions' credit to the private sector in domestic currency increased by S/ 22.75 billion in year-on-year terms. This increase has been financed mainly by the increase observed in private sector deposits (S/ 18.42 billion).

Banks increased their deposits at the Central Bank (S/ 141 million in reserve funds and S/ 4.22 billion in other deposits) and acquired more BCRP securities (S/ 2.04 billion). This was offset by means of repo operations amounting to S/ 3.56 billion. In addition to this, the BCRP auctions of Public Treasury deposits, an instrument that has steadily gained importance as a funding source since 2017, also increased by S/ 1.30 billion.

Table 42
SOURCES EXPANSION OF OF CREDIT TO THE PRIVATE SECTOR IN SOLES 1/
(Million S/)

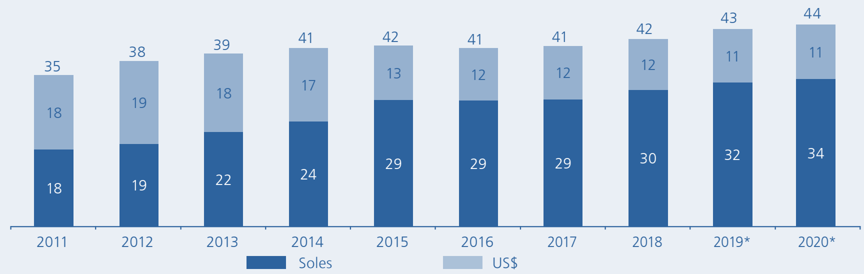
Domestic currency	Balance	Flows		
	Aug.19	2018	Acum.2019	Aug.19/Aug.18
Credit to the private sector	**236,210**	**23,382**	**11,951**	**22,753**
1.- Total liabilities 1/	**218,293**	**17,812**	**8,210**	**16,465**
a.- Non-financial Private sector	172,252	19,105	9,740	18,814
Deposits	*169,101*	*19,386*	*9,353*	*18,424*
Other securities	*3,151*	*-281*	*387*	*390*
b.- Non-financial Public sector 2/	20,195	-141	-1,222	-615
c.- Other financial institutions 3/	20,816	-3,133	318	-1,946
d.- Non-residents	5,031	1,980	-626	213
2.- BCRP operations	**-26,224**	**-1,265**	**641**	**-1,541**
a.- Reserve requirenments	-11,091	-491	276	-141
b.- Other deposits 4/	-10,537	64	-2,432	-4,222
c.- Securities	-25,055	4,773	-416	-2,040
d.- Repos	16,358	-8,412	3,112	3,562
Securities	*4,850*	*530*	*-1,100*	*-50*
Currency	*11,508*	*-8,942*	*4,212*	*3,612*
e.- Deposits auctions of Public sector	4,100	2,800	100	1,300
3.- Public sector financing	**-22,501**	**-3,055**	**4,140**	**3,566**
4.- Rest 5/	**66,642**	**9,889**	**-1,039**	**4,263**

Credit to the private sector = (1)+(2)+(3)+(4).
1/ Balance with positive signs means liabilities, flows with positive signs means source of expansion of credit to the private sector.
2/ Excludes auctions of Public Treasury deposits and Banco de la Nación in charge of the BCRP.
3/ Includes liabilities with mutual funds, AFPs, COFIDE, and Mivivienda.
4/ Includes term, overnight, and special deposits.
5/ Includes capital, provisions, exchange position, equity and other liabilities with positive sign and other assets with negative signs.

63. In the forecast horizon, **credit to the private sector** is expected to grow at higher rates than the nominal GDP and therefore the credit-to-GDP ratio would increase from 42 percent in 2018 to 44 percent in 2020. This forecast takes into account loose monetary conditions and a recovery in the pace of growth of domestic demand.

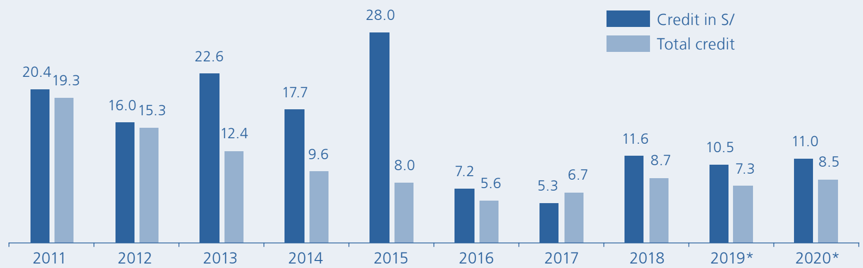
Credit to the private sector in domestic currency is projected to grow 10.5 percent in 2019 and 11.0 percent in 2020. Thus, total credit would grow 7.3 percent in 2019 and 8.5 percent in 2020. As a result, the credit dollarization ratio would continue to decline, reaching a level of 25 percent by the end of 2020.

Graph 73
RATIO CREDIT/GDP
(%)



* Forecast.

Graph 74
CREDIT TO THE PRIVATE SECTOR
(% change)



* Forecast.

64. Furthermore, credit expansion is projected to be financed mainly through deposits. It is also foreseen that, during 2019 and 2020, the Central Bank would withdraw liquidity through certificates of deposits and term deposits, which will depend on the evolution of monetary aggregates and in line with the BCRP policy interest rate.

Table 43
SOURCES EXPANSION OF OF CREDIT IN SOLES 1/
(Million S/)

	Balance			Flow		
	2018	2019*	2020*	2018	2019*	2020*
Credit to the private sector	**224,258**	**247,791**	**275,029**	**23,382**	**23,532**	**27,238**
1. Total liabilities 1/	210,084	227,024	251,827	17,812	16,940	24,803
2. BCRP operations	-26,865	-29,451	-32,114	-1,265	-2,587	-2,663
3. Public sector financing	-26,641	-24,262	-27,001	-3,055	2,379	-2,739
4. Rest	67,681	74,480	82,318	9,889	6,799	7,837

1/ Includes deposits and securities
* Forecast.

65. More broadly, total financing to the non-financial private sector (credit from financial intermediaries, funding from the local capital market, and foreign debt) is expected to accelerate its annual growth rate from 4.7 percent in 2018 to 5.8 percent in 2019 and to 7.3 percent in 2020. In relative terms, credit from depository institutions, which would grow 7.3 and 8.5 percent in 2019 and 2020, respectively, would continue to be the most dynamic source of credit.

Table 44
GLOBAL FINANCING OF PRIVATE SECTOR [1/]

	Balance (Mill. S/)			Change (%)			
	Aug.19[2/]	2019*	2020*	Dec.18/Dec.17	Aug.19/Aug.18	Dec.19/Dec.18	Dec.20/Dec.19
Credit of Depository Corporations	**324,954**	**335,081**	**363,558**	**8.7**	**8.1**	**7.3**	**8.5**
Soles	236,210	247,716	274,865	11.6	10.7	10.5	11.0
US dollars (Mill. US$)	26,334	25,924	26,318	1.9	1.7	-0.8	1.5
Dolarization (%)	*27.3*	*26.1*	*24.4*				
Credit of the other financial institutions and other 3/	**43,211**	**42,243**	**45,219**	**0.2**	**11.3**	**6.7**	**7.0**
Soles	26,948	26,191	27,946	6.8	23.3	13.1	6.7
US dollars (Mill. US$)	4,826	4,763	5,126	-7.8	-4.0	-2.2	7.6
Dolarization (%)	*37.6*	*38.0*	*38.2*				
Private indebtedness debt	**93,309**	**93,370**	**96,443**	**-5.2**	**-1.7**	**0.3**	**3.3**
(Million US$)	27,688	27,706	28,618	-5.2	-1.7	0.3	3.3
Short-term (Million US$)	3,948	3,948	3,948	-3.2	-3.4	-3.2	-
Medium- and long-term (Mill. US$)	23,740	23,758	24,670	-5.5	-1.4	0.9	3.8
TOTAL	**461,474**	**470,694**	**505,221**	**4.7**	**6.2**	**5.8**	**7.3**
Soles	268,267	279,020	308,121	11.4	13.3	12.1	10.4
US dollars (Mill. US$)	57,331	56,876	58,487	-2.8	-2.3	-2.3	2.8
Dolarization (%)	*41.9*	*40.7*	*39.0*				

1/ Balances are valuated at constant exchange rate on December 2018.
2/ Preliminary data for private external indebtedness.
3/ Comprises financing of AFP, mutual funds, insurances financial leasing companies (85.1 percent), and other financial societies as COFIDE and Edpymes (14.9 percent).
* Forecast.

As of August 2019, total financing to the private sector grew 6.2 percent, showing a higher rate than that registered in 2018 (4.7 percent). The largest component of this expanded financing was lending from credit makers, with a balance of S/ 324.95 billion in that month. The second largest component was the direct financing that companies obtained abroad, the balance of which was US$ 27.69 billion (S/ 93.31 billion) in that month. It is worth pointing out that these companies substituted their debt with the local financial system for debt in the external market during the first quarter of the year.

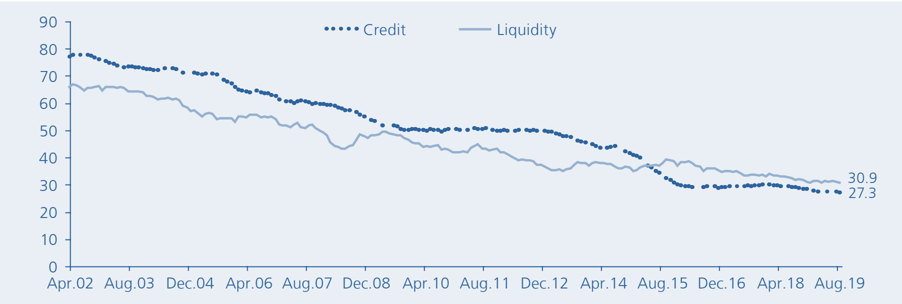
66. The ratio of dollarization of credit measured at a constant exchange rate was 27.3 percent as of August, lower than in December (28.2 percent). This reduction reflects the lower dollarization ratio of credit to households, which fell from 10.5 to 9.6 percent. The ratio of dollarization also continued to show a downward trend in the segments of mortgage loans (14.7 percent in August).

Table 45
RATIO OF DOLLARIZATION OF CREDIT TO THE PRIVATE SECTOR 1/
(%)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19
Businesses	**40.5**	**40.5**	**40.0**	**39.1**	**38.7**	**38.8**	**38.8**
Corporate and large companies	54.5	54.4	53.7	52.3	51.7	52.3	51.9
Medium-sized enterprises	41.2	41.4	40.5	40.6	40.4	40.2	40.2
Small business and Microbusinesses	6.7	6.6	6.6	6.3	6.0	5.8	5.9
Individuals	**11.8**	**11.4**	**11.1**	**10.5**	**10.1**	**9.8**	**9.6**
Consumer	6.8	6.8	6.7	6.5	6.4	6.4	6.3
Car loans	18.1	16.4	15.1	14.2	13.6	14.4	14.7
Credit cards	7.3	7.4	7.5	7.3	7.3	7.5	7.6
Rest	6.0	6.0	5.9	5.7	5.5	5.4	5.3
Mortgage	19.1	18.3	17.5	16.6	15.8	15.1	14.7
TOTAL	**29.7**	**29.5**	**29.0**	**28.2**	**27.6**	**27.4**	**27.3**

1/ Balances are valuated at constant exchange rate on December 2018.

Graph 75
RATIO OF DOLLARIZATION OF CREDIT AND LIQUIDITY: 2002 - 2019
(%)



67. The ratio of non-performing loans was 3.54 percent in August, 0.22 percentage points higher than at the end of 2018 (3.32 percent). It should be pointed out that the ratio of non-performing loans in credit to businesses has increased by 0.31 percentage points compared to December 2018, while the ratio of non-performing loans in personal loans has increased by 0.08 percentage points.

Table 46
NON-PERFORMING LOANS INDEX
(%)

	Mar.18	Jun.18	Sep.18	Dec.18	Mar.19	Jun.19	Aug.19
Businesses	**3.48**	**3.54**	**3.62**	**3.42**	**3.60**	**3.69**	**3.73**
Corporate and large companies	0.54	0.57	0.60	0.55	0.61	0.64	0.61
Medium-sized enterprises	7.38	7.46	7.75	7.53	8.02	8.28	8.77
Micro and Small businesses	7.53	7.75	7.83	7.35	7.44	7.50	7.57
Individuals	**3.27**	**3.28**	**3.15**	**3.13**	**3.07**	**3.15**	**3.21**
Consumer	3.60	3.59	3.32	3.21	3.16	3.26	3.34
Credit cards	4.89	4.84	4.16	3.88	3.87	4.09	4.21
Vehicular	6.14	5.59	5.30	4.45	3.92	3.97	3.99
Rest	2.60	2.68	2.68	2.70	2.66	2.69	2.75
Mortgage	2.86	2.89	2.92	3.03	2.96	2.99	3.03
Average	**3.40**	**3.45**	**3.45**	**3.32**	**3.41**	**3.49**	**3.54**

Box 4
RE-ESTIMATIONS OF THE POTENTIAL OUTPUT AND THE NATURAL INTEREST RATE

Potential output growth measures sustainable GDP growth in a context without inflationary or deflationary pressures. In line with this, the natural interest rate (NIT) is the real short-term interest rate that would be observed in an economy that remains at its potential level and with the inflation rate at its long-term equilibrium level. In other words, the NIT is the relative intertemporal price that balances the market of loanable funds in a balanced economic growth path. Because these variables are theoretical constructions, they are not directly observable, so their dynamics can only be inferred from observable macroeconomic variables.

The estimation of the potential output is relevant to BCRP because it provides the necessary information required to calculate the output gap. Since this variable acts as a leading indicator of demand-driven inflationary pressures, it allows the Central Bank to take preventive actions to avoid future inflation deviations from the target range. On the other hand, the NIT is very important to determine BCRP policy decisions because it provides the real short-term interest rate consistent with a neutral monetary policy position and, therefore, allows to determine if the policy stance is expansionary or contractionary. Thus, monetary policy is expansionary (contractionary) when the real interest rate observed is below (above) the NIT.

Potential Output

The potential or natural output is the level of aggregate GDP that can be sustained indefinitely without adding upward or downward pressures on inflation. The difference between the actual and the potential output, called the output gap, is a key indicator of inflationary pressures in the economy. Thus, on average, an economy's output should be at its potential level.

The Quarterly Projection Model (QPM) is used as a multivariate filter with economic structure to estimate the potential output. This method allows predicting the most likely behavior of the unobservable variables from a defined set of observable variables. Moreover, by using more than one equation, it allows identifying the supply and productivity shocks that affect the potential output, and to separate them from the demand shocks that affect the output gap. Thus, the estimation of the potential output obtained with this method is consistent with the concept of price stability.

The estimation results of the potential output growth provided in the following table show that it has slowed down in the last five years. More specifically, it is estimated that the potential growth decreased from 6.4 percent in 2007-2013 to 3.5 percent during the 2014-2019 period. Alternative estimates were obtained as a robustness check by applying a set of univariate filters, such as a non-observable component model and the Hodrick-Prescott and Baxter-King filters. The results show a similar pattern to the one found with the QPM, which indicates that the decreasing trend of potential growth is a robust result between estimates.

ESTIMATION OF THE GROWTH OF THE POTENTIAL PRODUCT : ALL METHODOLOGIES		
Methodology	**2007-2013**	**2014-2019**
Multivariate filter		
Quarterly Projection Model (QPM)	6.4	3.5
Univariate filters		
Non-observable component	6.5	3.3
Hodrick-Prescott	6.2	3.6
Baxter-King	6.1	3.6
Average all methodologies	**6.3**	**3.5**

1/ The Quarterly Projection Model (QPM) of the BCRP is a relevant macroeconomic forecasting tool for the medium- and long-term. The structure of the QPM corresponds to a small and open economy, which includes particularities of the Peruvian economy such as partial financial dollarization and the influence of foreign exchange intervention. Similar to Neo-Keynesian tradition models for small and open economies, the dynamics of the QPM reflect the unilateral influence of the world economy on the performance of the Peruvian economy. So, domestic variables of the model respond to conditions in the international environment, but not vice versa. In this line, the model consists of two blocks of recursive structure: external block, which reflects the characteristics of the country's trading partners; and domestic bloc, which describes the evolution of the macroeconomic variables relevant for monetary policy decisions. In particular, the equations of domestic block determine (i) inflation measures, (ii) interest rates, (iii) nominal depreciation, and (iv) the output gap.

Natural interest rate

The NIT can be estimated through different methods. In this update, we present the results obtained using three methodologies. The main estimate also uses the QPM as a multivariate filter, whose results are presented as a probable range, mainly due to the uncertainty concerning the parameters that determine the trajectory of the NIT. More specifically, the probable range is constructed from various sensitivity exercises to these parameters.

The second method estimates the NIT through a VAR model with parameters that change over time (TVP-VAR), following Lubik and Matthes (2015)[4], and in line with the work carried out by Pérez and Vega (2019)[5]. The estimation results are presented in confidence intervals of 20 percent around the median, due to the uncertainty associated with the estimation of a non-observable variable on the basis of macroeconomic data.

The third method is based on the uncovered interest rate parity (UIP) condition. This condition assumes a state of equilibrium where the expected return on domestic assets is equal to that of foreign assets adjusted for risk. Thus, in this state, agents become indifferent between the two types of assets and there is no possibility of arbitration.

4 Lubik, T. and Matthes, C. (2015): "Calculating the Natural Rate of Interest: A Comparison of Two Alternative Approaches". Economic Brief 15-10 - Federal Reserve Bank of Richmond.

5 Pérez, F. and Vega, M. (2019): "Inflation Targeting and the Long Term Inflation in Latin America". Mimeo. The variables considered in this paper are the inflation rate, the annual GDP growth rate, the interbank interest rate, the growth of the monetary base, and annual depreciation. The sample contains monthly data from December 2001 to June 2019.

The results of the NIT estimate are presented in the table below. The average estimate obtained from all the methodologies is calculated taking, on the one hand, the midpoint of the probable ranges associated with the results of the QPM and the TVP-VAR and, on the other hand, the point estimate obtained using the UIP method.

ESTIMATION OF THE NATURAL INTEREST RATE: ALL METHODOLOGIES

Methodology	2007-2013	2014-2019	2007-2019
Quarterly Projection Model (QPM)	[1.4-1.8]	[1.0-1.4]	[1.4-1.6]
VAR model with parameters that change over time (TVP-VAR)	[1.7-2.2]	[1.3-1.7]	[1.4-1.8]
Uncovered interest rate parity (UIP).	2.1	1.5	1.8
Average all methodologies	**1.8**	**1.4**	**1.6**

As we can see, the three methods show that the NIT has declined in recent years and, in fact, the sub-sample analysis shows the decreasing trend of this unobservable variable. On average, the NIT rose to 1.8 percent in the 2007-2013 period and fell to 1.4 percent in the 2014-2019 period. Moreover, it is worth pointing out that the average of the NIT in the estimate consistent with the QPM is 1.5 percent for the 2007-2019 period.

The economic structure inherent to the QPM allows to compute the contributions of the most important determinants of the NIT. To do so, we identify the influence of three factors relevant to the dynamics of the NIT in a small open economy such as Peru: the domestic potential growth (ΔY_t), the potential growth of our main trading partners (ΔY_t^*), and the external natural interest rate (TIN_t^*). On the one hand, changes in domestic potential growth caused by the movement of total factor productivity have an impact on the NIT by affecting long-term investment decisions. For example, lower domestic potential growth decreases the marginal productivity of future capital, contracts the investment curve, and reduces the natural interest rate. Similarly, fluctuations in the total factor productivity of our main trading partners lead to movements in external potential growth and external NIT. Both factors influence domestic NIT by shifting savings curves, especially the curve of external savings, and long-term investment. In this way, lower levels of potential external growth or external NIT expand the curve of total savings, generating a lower real market equilibrium rate.

In the case of the QPM, the probable range is constructed from different calibrations of the parameters that determine the dynamics of the NIT, which evolves according to the following equation expressed in deviations from the long-term equilibrium level[6]:

$$TIN_t = (1-\rho)[TIN + \alpha_1(\Delta Y_t - \Delta Y) + \alpha_2(\Delta Y_t^* - \Delta Y^*) + \alpha_3(TIN_t^* - TIN^*)] + \rho TIN_{t-1}$$

6 The long-term equilibrium level of each variable is expressed without sub-index .

The central estimate shows that, since the fourth quarter of 2012, the NIT has had a clear downward trend, the reversal in the NIT trajectory being consistent with the contraction of its main determinants. The table below shows that the contributions of the most relevant factors were positive in the 2007-2013 period and negative in the 2014-2019 period, which implies that these variables have shown lower values than their long-term equilibrium level in recent years.

As we can see, the deviation of domestic potential growth from its steady-state value has historically been the main force behind the dynamics of the NIT. Similarly, it is possible to see that external factors have gained importance in recent years, reinforcing the downward trend induced by the deceleration of potential growth in Peru.

MAIN DETERMINANTS OF THE NATURAL INTEREST RATE: CONTRIBUTIONS

Contributions	2007-2013	2014-2019
Deviation from domestic potential growth	0.20	-0.19
Deviation from external potential growth	0.05	-0.06
Deviation from the external natural interest rate	0.00	-0.04

It should be pointed out that the real monetary policy rate has also been lowered in recent years, from 1.4 at the end of 2016 to 0.3 percent in the second quarter of 2019. As a result, despite the reduction of the NIT, estimates show that, on average, the monetary policy stance has remained expansionary since January 2014.

Finally, it has been reported in recent research developed for the United States and Europe[7] that uncertainty associated to the estimation of the NIT is considerably high, so it is recommended that central banks update their estimates gradually. In the case of Peru, the NIT was estimated at 2.1 percent in 2016 and revised to 1.75 percent in 2017 (see Box 2 of the September 2017 Inflation Report).

Taking these factors into account, it is estimated that the potential output would show a rate of 3.5 percent and that the natural interest rate will be 1.5 percent.

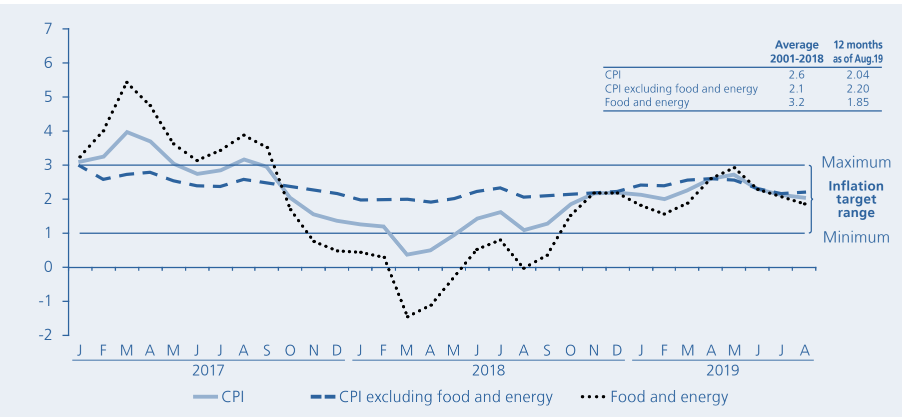
7 Hamilton, J., Harris, E., Hatzius, J. and West, K. (2016): "The Equilibrium Real Funds Rate: Past, Present, and Future," IMF Economic Review, Palgrave Macmillan; International Monetary Fund, vol. 64(4), pages 660-707, November.

VI. Inflation and Balance of Inflation Risks

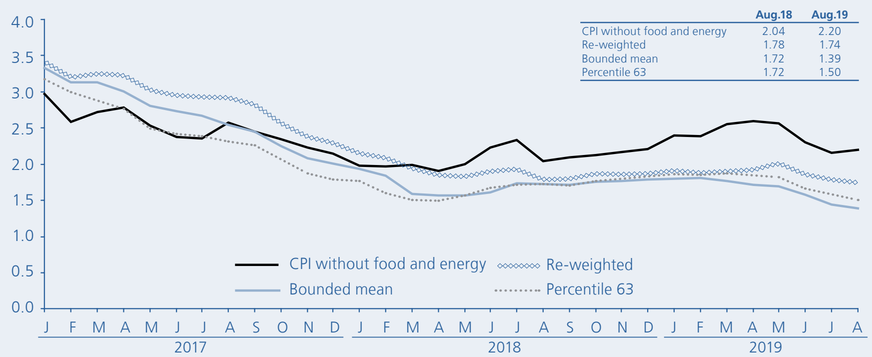
Recent Trends in Inflation and Inflation Expectations

68. The annual rate of inflation as of August was 2.04 percent, within the Central Bank target range (1-3 percent). On the other hand, the rate of core inflation (CPI excluding food and energy prices) registered 2.20 percent in August. All of the indicators of trend inflation show levels within the inflation target range.

Graph 76
INFLATION
(Last 12-month % change)



Graph 77
MEASUREMENTS OF THE INFLATIONARY TREND
(Last 12 months % change)



Memo:
CPI without food and energy: Excluding food, fuel and electricity.
Re-weighted: Reduces the weight of items with greater volatility, considers the original weights of each item between the standard deviation of their monthly percentage changes.
Bounded mean: Weighted average of the percentage change of prices between the 34th and 84th percentiles.
Percentile 63: Corresponds to the percentage changes of the item located in the 63th percentile.

69. In January - August 2019, the general price level increased 1.45 percent, at an average monthly rate of 0.18 percent. The CPI excluding food and energy grew 1.68 percent, while food and energy prices grew at a lower rate (1.19 percent), the prices of food and beverages showing the lowest price variation (1.07 percent) due to the reductions observed in the prices of items such as chicken meat, onions, tomatoes, and sugar.

Table 47
INFLATION
(% change)

	Weight	2018	2019	
			Jan.-Aug.	12 months
CPI	**100.0**	**2.19**	**1.45**	**2.04**
1. CPI excluding food and energy	**56.4**	**2.21**	**1.68**	**2.20**
a. Goods	21.7	2.25	1.14	1.64
b. Services	34.8	2.19	2.01	2.54
2. Food and energy	**43.6**	**2.17**	**1.19**	**1.85**
a. Food and beverages	37.8	1.95	1.07	1.78
b. Fuel and electricity	5.7	3.67	1.99	2.33
Fuel	2.8	5.35	1.29	1.87
Electricity	2.9	2.39	2.55	2.70

70. On the other hand, the services that showed the higher price increases in the last twelve months were education services. Tuition and education fees increased 5.2 percent, mainly as a result of the adjustment carried out in March at the beginning of the school year as well as due to the price increase in universities and higher institutes' tuition. With this increase, education expenses registered a higher variation than the annual average variation observed in the last eight years.

Almost all the other services, e.g. meals consumed outside the home and "other personal services" –which includes personal care (grooming, mainly)– showed lower rates than those recorded in 2010-2018, reflecting the lower labor costs associated with a greater availability of foreign labor.

Table 48
INFLATION
(Annual % change)

	Weight	2018	Mar.19	Aug.19	2010-18 Annual average
CPI	**100.0**	**2.19**	**2.73**	**2.04**	**2.97**
Education	**9.1**	**4.73**	**5.23**	**5.21**	**4.55**
Health	**1.1**	**1.76**	**1.52**	**1.45**	**3.42**
Meals outside the home	**11.7**	**2.19**	**2.00**	**1.81**	**4.71**
Other personal services	**3.3**	**1.29**	**1.50**	**1.37**	**1.85**
Of which:					
Domestic workers	2.1	0.66	0.93	0.98	0.78
Toiletries	0.6	2.21	2.36	2.12	3.94

71. At the disaggregated level, the items with the higher positive contribution to inflation in January-August included education (tuition and fees), meals outside the home, eggs, and beer. The cost of education services rose 5.3 percent, mainly due to the increase in tuitions in private schools and universities at the beginning of the teaching year in March. On the other hand, the category *food consumed outside the home* continues to be one of the items with the higher contributions to inflation, even though it shows a lower rate than in previous years due in part by the lower wage costs observed in recent years as a result of the greater availability of foreign labor. In the last 12 months, the increase in this item was similar to the one observed in *food consumed at home* (1.8 percent). Moreover, the price of eggs rose 29.2 percent, in a context in which production increased approximately by 10 percent compared to the same period in the previous year, while the price of beer increased 11.5 percent as a result of the modification of the excise tax in the month of June.

The items with the higher negative contribution to inflation were chicken meat, onions, and tomatoes. The price of chicken meat fell 7.3 percent in a context of a greater supply. Placements of baby chickens –the main indicator of the supply– increased approximately 4 percent compared to the period of January-August of 2018 and, in addition, this greater supply was reinforce by a higher supply of substitute products, such as mackerel and *bonito*. Moreover, the price of onions declined 11.2 percent in the January-August period, while the rises registered in the last quarter of 2018 reversed in the first months of 2019 as a result of the end of the harvest season in Camaná as well as of lower cultivation in other regions, such as Piura and La Libertad. Finally, the lower price of tomatoes (down 14.3 percent) was associated with an 8 percent increase in the supply compared to the same period in 2018 due to higher yields in the valleys of Lima and to minimum losses of this perishable product during the marketing stage due to lower weather temperatures as from May.

Table 49
ITEM WITH THE HIGHEST WEIGHTED CONTRIBUTION TO INFLATION: JANUARY - AUGUST 2019

Positive	**Weight**	**% Chg.**	**Contribution**	**Negative**	**Weight**	**% Chg.**	**Contribution**
Education costs (tuition and fees)	8.8	5.3	0.54	Chicken meat	3.0	-7.3	-0.20
Meals outside the home	11.7	1.2	0.17	Onion	0.4	-11.2	-0.05
Eggs	0.6	29.2	0.13	Tomato	0.2	-14.3	-0.03
Beers	0.8	11.5	0.10	Sugar	0.5	-6.2	-0.03
Electricity rates	2.9	2.5	0.09	Papaya	0.2	-12.6	-0.03
Fresh and frozen fish	0.7	12.9	0.09	Avocado	0.1	-17.2	-0.03
Other fresh fruits	0.4	17.9	0.07	National transportation	0.3	-6.4	-0.02
Show tickets	1.7	3.6	0.06	Telephone rates	2.9	-1.3	-0.02
Water rates	1.6	3.0	0.05	Tangerine	0.2	-7.8	-0.02
Potato	0.9	4.6	0.04	Airplane fares	0.4	-3.0	-0.01
Total			**1.34**	**Total**			**-0.44**

Forecasts

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

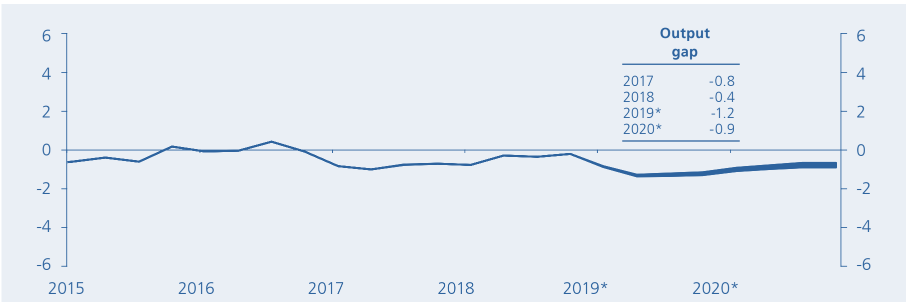
    Based on the new information available, the inflation rate is expected to remain around the midpoint of the inflation target, mainly as a result of the convergence of inflation expectations, a moderate rate of imported inflation, and a negative output gap.

Graph 78
INFLATION FORECAST: 2015-2020
(Last 12-month % change)

* Forecast.

73. The negative output gap estimated indicates the absence of demand inflationary pressures. GDP is expected to grow at a lower rate than its potential growth level in 2019 and the output gap is closing gradually in correlation with lower external demand (associated with the downward revision of commodity prices and of growth rates in our trading partners) and a more gradual recovery of business confidence.

Graph 79
OUTPUT GAP: 2015-2020
(% Potential GDP)



* Forecast.

74. Inflation expectations estimated on the basis of surveys conducted with financial and non-financial firms and economic analysts reveal that inflation is expected to show rates between 2.2 and 2.4 percent in 2019 and rates between 2.3 and 2.5 percent in 2020, within the target range. These inflation expectations are expected to continue declining as long as inflation remains around 2 percent.

Graph 80
EXPECTATIONS OF INFLATION FOR THE NEXT YEAR
(% points)

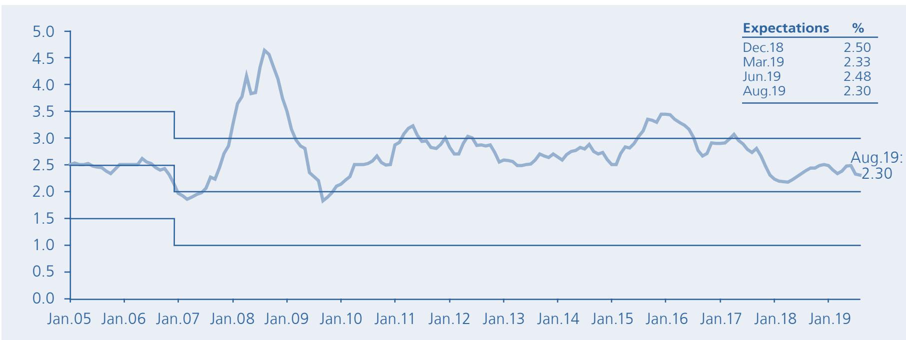


Table 50
SURVEY ON MACROECONOMIC EXPECTATIONS: INFLATION
(%)

	IR Mar.19	IR Jun.19	IR Sep.19*
Financial entities			
2019	2.40	2.40	2.20
2020	2.50	2.50	2.30
Economic analysts			
2019	2.35	2.50	2.20
2020	2.50	2.50	2.40
Non-financial firms			
2019	2.50	2.50	2.40
2020	2.50	2.50	2.50

* Survey conducted as of August 31.
IR: Inflation Report.

75. Another determinant of inflation is its imported component, which combines the effect of the international prices of goods we import –such as crude, wheat, soybean and maize, among other products– with the effect of exchange rate variations. Average import prices are projected to fall by 1.1 percent in 2019, mainly due to the lower prices of commodities such as crude, wheat, and soybean, and are then expected to increase by 0.9 percent in 2020. Moreover, the surveys on expectations about the US/PEN exchange rate show expect levels of around S/ 3.35 per dollar at the end of 2019 and around S/ 3.40 at the end of 2020.

Table 51
SURVEY ON MACROECONOMIC EXPECTATIONS: EXCHANGE RATE
(S/ per US$)

	IR Mar.19	IR Jun.19	IR Sep.19*
Financial entities			
2019	3.30	3.35	3.37
2020	3.33	3.35	3.35
Economic analysts			
2019	3.33	3.35	3.40
2020	3.36	3.37	3.40
Non-financial firms			
2019	3.35	3.35	3.35
2020	3.38	3.37	3.38

* Survey conducted as of August 31.
IR: Inflation Report.

Balance of Inflation Risks

76. The balance of inflationary or deflationary risks in this Report continues to show a downward bias. This balance takes into account some risks associated with the domestic and external demand shocks considered in our previous report that have materialized and that have, therefore, been taken into account in the forecast

baseline scenario. In this context, the expected impact of possible lower inflation due to lower economic growth exceeds the expected impact of higher imported inflation.

- **Domestic demand shocks**

  The growth of the output could be lower than the level foreseen in the central scenario if private expenditure and the execution of public investment are lower than expected. This would imply a more negative output gap in the forecast horizon, as a result of which inflation would tend to fall below the baseline scenario level.

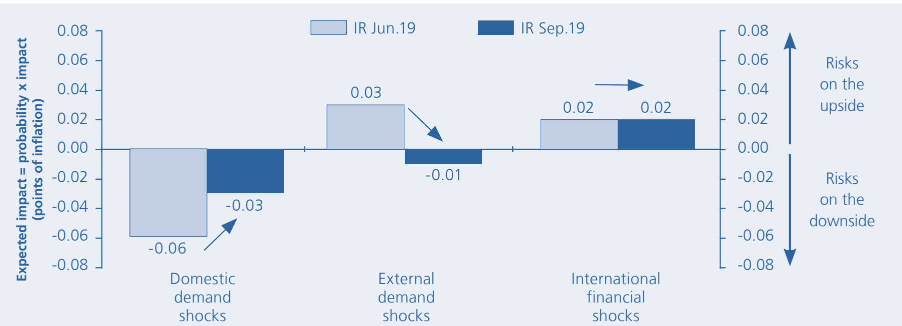
- **External demand shocks**

  A further escalation of the trade war would lead to lower commodity prices and to institutional investors' withdrawal of capital flows from the emerging economies due to the perception of greater risk. The slowdown in global trade, lower terms of trade, and higher financial costs would imply a greater risk of lower economic growth. In such a context, the US dollar would appreciate as it would be considered a hedge asset, which would generate upward pressures due to higher exchange rates. Inflation would decline due to lower domestic demand, with this effect prevailing over the effect of a higher exchange rate in the forecast horizon.

- **International financial shocks**

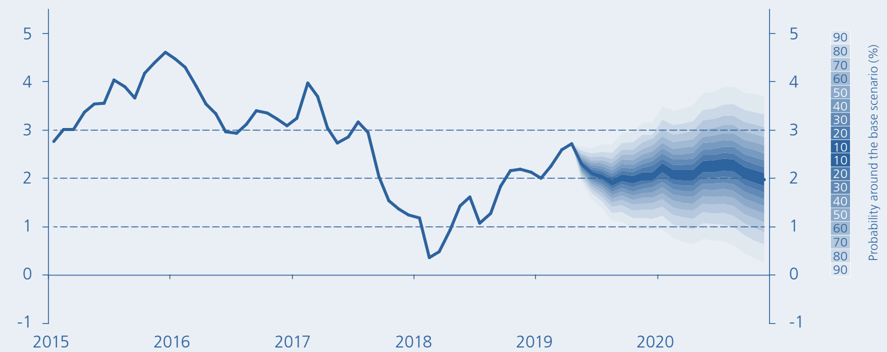
  Increased volatility in financial markets due to higher risk aversion could lead to capital outflows from the emerging economies, strengthening the US$ dollar against the domestic currencies of these economies. This would push inflation up due to an effect of higher imported inflation.

Graph 81
BALANCE OF RISKS AGAINST THE BASE SCENARIO



IR: Inflation Report.

Graph 82
INFLATION FORECAST: 2015 - 2020
(Last 12-month % change)



Memo: The graph shows the probability of occurrence of values of inflation in the future, according to the combination of the statistical analysis and the balance of risks. Each band concentrates 5% probability and the total bands cover 90% of probability. The darker bands contain the path of the base scenario.

Box 5
RECENT TRENDS IN GASOHOL PRICES

The recent evolution of the refinery price of gasohol fuel is compared with various international indicators of fuel costs in this box. The 90-octane gasohol is used as representative of this group of products because it accounts for about 60 percent of local consumption.

The information shows that the domestic refinery price of 90-octane gasohol fuel has not followed the same trend of the international price indicators, such as the theoretical indicators of Osinergmin and Sociedad Nacional de Minería, Petróleo y Energía (SNMPE), or the CIF price of imports of such product.

90-OCTANE GASOHOL
(Comparison of refinery prices)1/

	OSINERGMIN Price (S/ per gallon)			SNMPE Price (S/ per gallon)			CIF Price (S/ per gallon)			Country (US$ per gallon)		
	Refinery	Parity2/	Diff. %	Refinery	Parity3/	Diff. %	Refinery	CIF	Diff. %	Refinery	Chile4/	Diff. %
Sep.2018 (a)	7.31	7.22	1%	7.31	7.97	-8%	7.31	6.53	12%	2.21	2.23	-1%
Sep.2019* (b)	7.51	6.12	23%	7.51	6.78	11%	7.51	5.54	36%	2.23	1.87	19%
% chg. (b)/(a)	**3%**	**-15%**		**3%**	**-15%**		**3%**	**-15%**		**1%**	**-16%**	

1/ Corresponds to the refinery price. Excludes VAT, excise tax, and road tax charged in sale price.
2/ Adds S/ 0.19 per gallon like trading margin to the refinery price estimated by Osinergmin.
3/ Corresponds to the refinery price estimated by SNMPE.
4/ Corresponds to gasoline 93 octanes from ENAP-Chile.
* Average accumulated as of September 23.
Source: ENAP-Chile, Repsol, Osinergmin, and SUNAT.

The table below compares the Refinery Price of the 90-octane gasohol with the Osinergmin Parity Price, which is a theoretical indicator of the cost of importing this fuel. Between September 2018 and September 2019, the Osinergmin indicator declined by 15 percent, while Petroperú's refinery price increased by 3 percent. Moreover, the theoretical indicator of the SNMPE decreased by a similar percentage as the Osinergmin indicator (15 percent).

MONTHLY AVERAGE PRICE OF THE 90-OCTANE GASOHOL
(S/ per gallon)

	Sep.18 (A)	Sep.19* (B)	% chg. (B)/(A)
1. Crude WTI	5.54	4.52	-18%
2. OSINERGMIN parity price 1/	7.22	6.12	-15%
3. Adittional margin (=4-2)	0.09	1.39	
4. Petroperú's refinery price 2/	7.31	7.51	3%
Memo			
SNMPE parity price	7.97	6.78	-15%
Repsol's refinery price	7.96	7.51	-6%

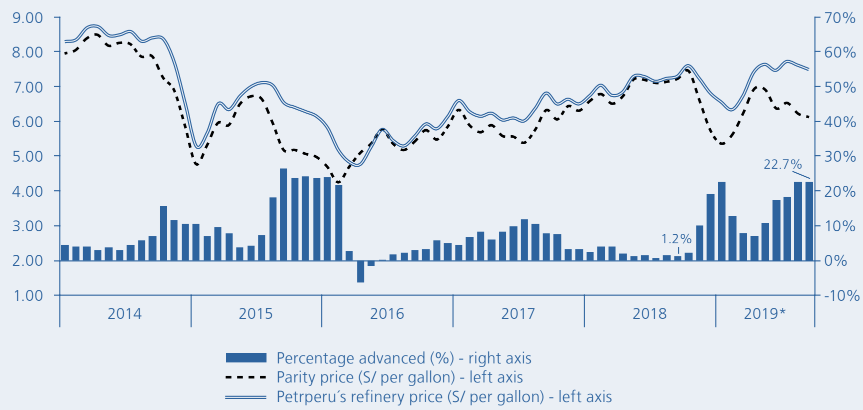
1/ Price in Gulf Coast plus theorical cost of imports. Published by OSINERGMIN.
2/ Published by Petroperú.
* Average accumulated as of September 23.

Thus, the differential with respect to the OSINERGMIN parity price has increased from S/ 0.09 per gallon in September 2018 to S/ 1.39 per gallon on average as of the third week of September 2019. Furthermore, if we compared the refinery price with the parity price published by the SNMPE, the evolution is similar since it has gone from a negative differential of S/ 0.66 per gallon in September 2018 to a gap of S/ 0.73 per gallon on average during the first three weeks of September 2019.

The evolution of the differential as a percentage of the OSINERGMIN parity price is shown in the graph below. The average differential at the third week of September reached 22.7 percent, while this differential in the same period of 2018 was 1.2 percent.

It is worth pointing out that local companies did not change their prices with the recent increase in the international price of oil as a result of the attack on Saudi Arabia oil facilities, so the differential fell to 17.7 percent in the third week of September.

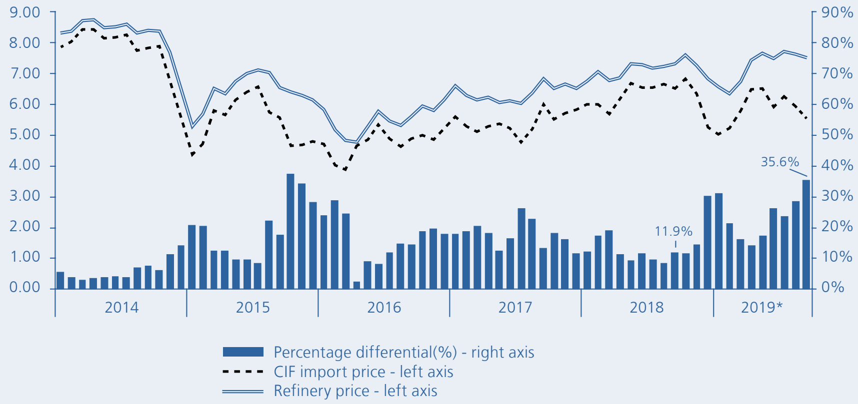
REFINERY PRICE AND IMPORT PARITY PRICE OF 90-OCTANE GASOHOL FUEL: JANUARY 2014 - SEPTEMBER 2019
(Soles per gallon)



* Average accumulated as of September 23.

Based on the information collected by SUNAT, we can estimate the CIF import price of 90-octane gasohol fuel. Thus, it is evident that the differential between the refinery price and the CIF price has increased from 11.9 percent in September 2018 to 35.6 percent in September 2019.

REFINERY PRICE AND CIF IMPORT PRICE OF 90-OCTANE GASOHOL FUEL
(Soles per gallon)



* Average accumulated as of September 17.
Source: SUNAT and Petroperú.