## **INFLATION REPORT:**

## Recent trends and macroeconomic forecasts 2012-2014

## December 2012



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INFLATION REPORT Recent trends and macroeconomic forecasts

CENTRAL RESERVE BANK OF PERU

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This *Inflation Report* was drawn up using data on gross domestic product and the balance of payments as of September 2012, data on the operations of the non-financial public sector and monetary accounts as of October 2012, and data on inflation, financial markets, and the foreign exchange rate as of November 2012.

# Foreword

- In accordance with the Peruvian Constitution, the Central Reserve Bank of Peru (BCRP) is a public autonomous entity whose role is to preserve monetary stability.
- In order to consolidate this goal, the Bank's monetary policy is based on an inflation targeting scheme, with an inflation target of 2.0 percent, plus or minus one percentage point (between 1.0 and 3.0 percent). The Central Bank's inflation target is aimed at anchoring inflation expectations at a similar level to the inflation rate observed in developed economies and reflects the BCRP's permanent commitment with monetary stability.
- The nature of monetary policy is preventive and therefore aimed at anticipating inflationary or deflationary pressures, taking into account that inflation may be influenced by factors beyond the control of the Central Bank, such as supply shocks or the prices of imported products, which may result in transitory deviations of inflation from the target. The BCRP considers the annual increase in the consumer price index recorded each month and not only at year end.
- Each month, and according to a previously announced schedule, the Board of the BCRP approves a reference rate for the interbank lending market. This interest rate, which is the monetary operational target, affects the rate of inflation through several channels in different timeframes and, therefore, is determined on the basis of macroeconomic forecasts and simulations.
- Additionally, the Central Bank implements preventive measures to preserve financial stability and monetary policy transmission mechanisms. Through interventions in the foreign exchange market, the Central Bank reduces excessive volatility in the exchange rate and accumulates international reserves, thus developing strengths to face negative events in an economy with still high levels of financial dollarization. The Central Bank also uses other monetary policy tools that affect the volume of liquidity and credit in a more direct manner, such as reserve requirements in domestic currency and in foreign currency.
- The forecasts on which monetary policy decisions are based are disseminated through the Inflation Report to show the consistency of the decisions adopted with the aim that economic agents' expectations take these forecasts into account. The Central Bank also disseminates the studies analyzing the risk factors that may cause deviations in the forecasts of the economic variables considered.
- The BCRP will publish its next Inflation Report in March 2013.



# Summary

i. Even though global economic activity at an aggregate level shows some signs of stabilization –a growth rate of 2.7 percent in Q3 and the recovery of the global manufacturing and services indices–, disparities are observed at the regional level. While on the one hand United States maintains a moderate pace of growth and China has increased its growth rate in Q4, on the other hand growth prospects for the Eurozone, Japan, and India have deteriorated.

Recent indicators in the case of the Eurozone show signs of a slowdown in the exports and consumption of its major economies, Germany and France. In addition to this, adjustment programs that will imply a negative fiscal impulse in 2013 are being implemented in most of the Eurozone, with the exception of Germany and a few other countries.

In this scenario, the forecast of global growth in 2013 has been revised downwards from 3.5 to 3.2 per cent.

ii. In this adverse international scenario, domestic demand offset the slowdown in our exports. In fact, the growth of GDP accelerated in Q3 rising from a rate of 6.1 percent in Q2 to 6.5 percent in Q3-2012. This was associated with the evolution of domestic demand, mainly private investment, in a context of favorable domestic expectations.

Based on the rate of growth observed during the year, the growth forecast for 2012 has been revised from 6.0 to 6.3 percent. An improvement in the terms of trade is foreseen for 2013 and 2014. A moderation in the growth of domestic demand and a recovery of net exports is considered for the period 2013-2014. The boost that construction would continue to provide to economic activity leads us to revise upwards the GDP forecast in 2013 from 6.0 to 6.2 per cent, while the growth forecast for 2014 remains at 6.3 percent, when growth would be driven by the onset of investment projects.

iii. A deficit in the current account of 3.7 percent of GDP –0.2 points lower than the one estimated in our September report– is projected in 2012 due to the lower decline of terms of trade and the higher volumes of non-traditional exports observed, especially agricultural and iron&steel and metallurgical products.

A lower deficit than the one estimated in our Report of September is also foreseen for 2013 and 2014 in the current account (3.7 and 3.4 per cent of GDP instead of 4.1 and 3.8 per cent of GDP, respectively). The forecasts have been revised downwards due to the increased flow recorded in the trade balance associated with improved terms of trade, which would be in part offset by higher outflows for income factors as a result of the greater profits generated in the country by non-resident companies.

A higher inflow of external capital in the form of private sector (financial and nonfinancial entities) bond placements abroad has been registered this year given the international context of high international liquidity and the demand for assets of countries with good growth prospects. The forecasts are based not only on the assumption that this conduct will continue in the near future, but also on the projected issuance of securities abroad by public entities such as the Municipality of Lima, COFIDE, and MiVivienda.

- iv. The forecast on the non-financial expenditure of the general government in 2012 is lower than the one estimated in our September Report since the pace of spending continues to be lower than expected, especially at the level of the national government. This lower non-financial expenditure explains the upward revision of the fiscal surplus for this year from 1.5 percent to 2.0 percent of GDP. The projections for 2013 and 2014 are the same than in our Report of September: a fiscal surplus of 1.1 percent of GDP is projected for both years with a total expenditure that considers the levels of spending set forth in the Multiannual Macroeconomic Framework.
- v. As foreseen in our previous reports, annual inflation returned to the target range reflecting the reversal of the supply factors that had been affecting food prices since mid-2011. Thus, annual inflation declined from 3.74 percent in September to 2.66 percent in November.
- vi. In this context, the Board of the Central Bank decided to maintain the monetary policy reference rate at 4.25 percent, the rate level observed since May 2011. In this period, the monetary policy communiqués have always emphasized the temporary nature of inflation's diversion from the target as a result of supply factors and that expectations of inflation remained within the target range. In order to maintain a sustainable pace of growth of credit, the Board of the Central Bank approved to increase the rates of reserve requirements for banks' obligations in national currency and in foreign currency.
- vii. The central forecast scenario considers that inflation will remain within the target range and that it will gradually converge to the 2.0 percent target. This scenario also considers that no major inflationary pressures associated with significant increases in commodity prices would be observed and that inflation expectations would decline to 2 percent in the forecast horizon. The inflation rate in 2013 and 2014 is forecast to be around 2 percent.
- viii. The balance of risks is **neutral** for the inflation forecast at end 2014. Based on the information available to date, the probability that inflation will be below the projected level of the baseline scenario is the same as the probability that it will be above this level.



ix. The **downside risks** in the inflation forecast are, on the one hand, external factors associated with the contingency that an international financial crisis may unfold and, on the other hand, domestic factors associated with a context of a lower growth of the domestic demand due to delays in the implementation of investment projects.

#### a. Uncertainty about the evolution of the world economy.

Although showing lower levels than in our last Inflation Report, uncertainty in international markets remains high. Some of the most important risks include the fiscal cliff in the United States and a worsening of the debt problem in the Eurozone. The materialization of these contingencies would bring about a less severe scenario than the one observed at end 2008, with a drop of global economic activity coupled by a decline in the terms of trade. In addition, an increase of global uncertainty could lead to a sudden and massive outflow of foreign capital.

In such a scenario, the Central Bank would use its wide availability of international reserves and various mechanisms to inject liquidity both in national currency and in foreign currency to lessen the impact of this shock on domestic financial conditions. If required, the Central Bank would respond easing monetary conditions.

#### b. Lower growth of domestic demand.

This scenario considers the possibility that investment projects are postponed or cancelled. This would generate a lower growth of aggregate demand and imply, in the short term, a rate of economic growth below the economy's potential growth which would generate downward pressures on inflation.

In this scenario, the Central Bank would increase monetary stimulus seeking to lead inflation within the target range in the forecast horizon.

x. On the other hand, there are two **upside risks** in the inflation forecast associated mainly with the increase of capital inflows and the increase of commodity prices.

#### c. Increased capital inflows.

The high availability of liquidity in international markets, together with few attractive investment options, in a context of high global uncertainty could bring about inflows of foreign capital to emerging economies with a good performance, such as Peru. A higher capital inflow would accelerate the expansion of credit, stimulating aggregate demand and inflation, on the one hand. On the other hand, it would generate appreciatory pressures on the Nuevo sol, which would translate into lower domestic inflation. It is estimated

that an increased capital inflow would have a slightly positive net effect on inflation.

In such a scenario, the Central Bank would adjust its monetary position and adjust macro-prudential policy instruments, such as the rates of reserve requirements.

#### d. Imported inflation and adverse climate conditions.

Like in our Inflation Report of September but with a lower probability of occurrence, the risk of having higher international prices of crude and crude oil derivatives is also considered in this report given the possibility that the geopolitical tensions in the Middle East may worsen. Should this occur, global inflationary pressures would rise. In the domestic arena, the risk that weather conditions could affect the normal development of the production and supply of food products (especially agricultural products) remains. In addition to this, the risk of the limits of the electricity generation capacity is also considered as this could cause electricity rationing problems.

In a scenario like this one, the Central Bank would adjust its monetary position only if these inflationary shocks were to increase economic agents' expectations of inflation.



	0010	0044	201	<b>12</b> <sup>1/</sup>	201	3 1/	201	<b>4</b> <sup>1/</sup>			
	2010	2011	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12			
	Re	al % chan	ge								
1. GDP	8.8	6.9	6.0	6.3	5.8 - 6.2	6.0 - 6.4	6.0 - 6.5	6.0 - 6.5			
2. Domestic demand	13.1	7.2	7.1	7.5	6.2	6.3	6.3	6.3			
a. Private consumption	6.0	6.4	5.8	5.8	5.5	5.7	5.7	5.7			
b. Public consumption	10.0	4.8	8.7	7.6	5.7	7.6	5.8	6.2			
c. Fixed private investment	22.1	11.7	13.5	14.7	8.2	8.2	8.2	8.2			
d. Public investment	27.3	-17.8	23.7	23.4	14.3	15.2	11.0	11.7			
3. Exports (goods and services)	1.3	8.8	3.3	5.5	7.7	7.7	9.4	9.1			
4. Imports (goods and services)	24.0	9.8	9.0	11.2	8.1	7.5	8.9	8.9			
5. Economic growth in main trading partners	4.6	3.6	2.7	2.6	3.0	2.7	3.3	3.3			
Memo:											
Output gap <sup>2/</sup> (%)	0.1	0.8	-0.5 ; +0.5	-0.5 ; +0.5	-0.5 ; +0.5	-0.5 ; +0.5	-0.5 ; +0.5	-0.5 ; +0.5			
% change											
6. Forecast inflation	2.1	4.7	3.0	2.8	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5			
7. Average price of crude oil	28.7	19.6	0.5	-0.8	0.0	-4.6	0.0	0.0			
8. Nominal exchange rate 3/	-2.1	-4.3	-5.1	-4.9	-0.4	-1.0	0.0	-1.0			
9. Real multilateral exchange rate 3/	-3.0	-5.8	-8.9	-7.5	-1.1	-1.0	1.6	-0.5			
10. Terms of trade	17.9	5.4	-6.6	-5.1	-2.1	-0.5	0.4	1.0			
a. Export price index	29.9	20.0	-5.2	-4.1	-2.1	-1.9	1.5	1.9			
b. Import price index	10.1	13.8	1.4	1.0	0.1	-1.5	1.1	0.9			
	Nom	ninal % cha	ange								
11. Currency in circulation	25.4	12.9	14.0	15.1	13.0	13.4	13.4	13.2			
12. Credit to the private sector 4/	21.0	19.6	14.0	15.3	12.5	14.5	12.7	13.0			
		% GDP									
13. Gross fixed investment rate	25.1	24.1	26.6	26.8	27.5	27.5	28.1	28.1			
14. Current account of the balance of payments	-2.5	-1.9	-3.9	-3.7	-4.1	-3.7	-3.8	-3.4			
15. Trade balance	4.4	5.3	1.8	2.2	1.3	1.8	1.6	2.3			
16. Gross external financing to the private sector 5/	8.7	6.8	7.9	8.9	5.8	6.2	5.7	5.6			
17. Current revenue of the general government	20.0	21.0	21.4	21.5	21.7	21.7	21.7	21.7			
18. Non-financial expenditure of the general government	19.2	18.1	19.1	18.7	19.5	19.5	19.6	19.6			
19. Overall balance of the non-financial public sector	-0.3	1.9	1.5	2.0	1.1	1.1	1.1	1.1			
20. Total public debt balance	23.3	21.2	20.0	19.5	18.6	18.6	17.2	17.2			

IR: Inflation Report.

1/ Forecast.

2/ Differential between GDP and potential GDP (%).

3/ Survey on exchange rate expectations.

4/ Includes loans made by banks' branches abroad.

5/ Includes foreign direct investment and private sector's long term disbursement.

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# I. International Environment

#### **Economic activity**

1. Since our last Inflation Report was published in September, the central banks of the United States and the Eurozone have adopted extraordinary actions to reduce uncertainty associated with the fiscal situation in these economies. In its meeting of September, the FED announced that it will buy US\$ 40 billion in mortgage-backed securities (MBS) every month for an indefinite period of time or until it is clear that the recovery of employment has reached sustainable levels. In addition to this, at its meeting of December the FED announced that it will start a new purchase program of MBS –for similar amounts initially– after its program "Operation Twist" finishes at the end of the year. Through the latter the FED trades short-term Treasury bonds for longterm bonds (US\$ 45 billion monthly).

On the other hand, the European Central Bank (ECB) announced that it would start buying government bonds of countries with fiscal problems if these countries agree to adopt a program monitored jointly by the ECB, the IMF, and the European Union ("Troika"). This announcement reduced significantly the risk of a debt event in Spain and Italy and thus the financial cost of new disbursements of public debt.

On its side, China began to show a recovery in the manufacturing sector as a result of its monetary expansion programs, which included reductions in the rates of reserve requirements and interest rates, and its fiscal expansion program in terms of spending in infrastructure.

It is estimated that global economic activity grew 2.7 percent in Q3. The emerging economies have shown a slight recovery reversing the trend registered in the previous quarter. In the case of China, the favorable results observed have exceeded market expectations.





Recent indicators of activity have also had higher-than-expected results in the United States, whereas Europe and Japan have shown data below the values expected.

Table 1 WORLD ECONOMIC INDICATORS									
			Data						
Indicators	Date	Executed	Expected	Previous					
United States Services PMI Manufacturing PMI Unemployment rate (%) Existing home sales (monthly % change) Retail sales (monthly % change)	Nov Nov Nov Oct Nov	54.7 49.5 7.7 2.1 0.3	53.5 51.4 7.9 -0.2 0.5	54.2 51.7 7.9 -2.9 -0.3					
Eurozone Services PMI Manufacturing PMI Unemployment rate (%) Industrial production (monthly % change) Retail sales (monthly % change)	Nov Nov Oct Oct Oct	46.7 46.2 11.7 -1.4 -1.2	46.0 45.6 11.7 0.0 -0.2	46.0 45.4 11.6 -2.3 -0.6					
Japan Manufacturing PMI Leading economic index, preliminary New construction orders (annual % change) Industrial production (monthly % change) Retail sales (monthly % change)	Nov Oct Oct Oct Oct	46.5 92.5 -13.8 1.6 0.7	91.9 -2.0 1.0	46.9 91.6 3.6 -4.1 -3.5					
China Manufacturing PMI Industrial production (annual % change) Exports (annual % change) Imports (annual % change) Retail sales (annual % change)	Nov Nov Nov Nov	50.6 10.1 2.9 0.0 14.9	50.8 9.8 9.0 2.0 14.6	50.2 9.6 11.6 2.4 14.5					
Source: Bloomberg.									

2. Other recent indicators –such as the global manufacturing and services indices– show some recovery. The services index, which reflects the dynamics of domestic demand, has remained in the expansion area, while the manufacturing index has recovered but still remains in the contraction area (below 50). Financial markets, on the other hand, show some improvement after the major central banks announced that they will maintain monetary stimulus for an extended period of time.



3. In the **United States**, the 2.7 percent annual growth rate and recent indicators show a moderate recovery in consumption in a context of slow recovery in the labor market. Since 416 thousand new jobs have been established in the past three months, a total of 4,533 thousand jobs have been gained since January 2010 (this figure is equivalent to 53 per cent of the jobs lost during the crisis). Moreover, the rate of unemployment dropped to 7.7 percent in November.



Other factors accounting for this trend in consumption are the stabilization of house prices, a gradual normalization of credit conditions, and the culmination of households' deleveraging process. The consumption of durable goods continues to be the most dynamic component given the increased spending on vehicles (and parts) and recreational goods registered.

On the side of investment, an improvement is observed in residential investment in a context of stable prices, declining inventories of houses, an improved builders' confidence index, and increased construction permits.







The measures announced by the FED would contribute to consolidate this trend in private demand. Given the economy's weakness, in September the FED announced a purchase program of mortgage-backed securities (MBS) through which it would buy MBS for a total of US\$ 40 billion every month for an indefinite period or until it is clear that employment has recovered to sustainable levels. In addition, it announced in December a purchase program of long-term securities, which together with the MBS will involve purchases of securities for a total of US\$ 85 billion per month.

The FED has also announced that it will maintain its current low interest rates policy while unemployment is above 6.5 percent, the inflation projection is below 2.5 percent –a rate equivalent to the long term target of 2.0 percent, plus 0.5 percent–, and inflation expectations remain anchored. It is worth pointing out that these announcements have been made in a context of controlled inflation pressures. In November annual overall inflation registered 1.8 percent, while core inflation registered a rate of 1.9 percent.



4. Activity in the **Eurozone** dropped 0.2 percent in Q3, registering a lower rate of contraction than in the previous quarter. However, recent indicators show signs of a slowdown in the major economies, i.e. Germany and France, as a result of the decline in the rate of its exports and the deterioration of consumers' confidence, the demand components that have accounted for the recovery observed until Q3. In addition to this, except for very few cases such as Germany, most countries in the Eurozone are implementing budget consolidation programs that will involve a negative fiscal impulse in 2013.

In its monetary policy meeting of September, the ECB reported that its new Outright Monetary Transactions (OMT) –purchases of sovereign bonds– would be potentially unlimited, completely sterilized, and involve short-term bonds (with maturities of 1 to 3 years). It also said that bond-issuing countries requesting these transactions will have to agree to the "conditionality" of a total macroeconomic adjustment or precautionary program (enhanced conditions credit line) with the bailout funds (EFSF/ESM). This new asset purchase program would seek to correct the excessive risk premium faced by some countries and to safeguard an appropriate monetary policy transmission.

Moreover, banking supervision mechanisms and fiscal coordination at the regional level was also discussed during September and October. The date set for the establishment and operation of the single banking regulator in the Eurozone, a necessary condition in order that the permanent European Stabilization Mechanism (ESM) will participate directly in the recapitalization of the Eurozone banks, was postponed until after January 2013.

As regards the countries with debt problems, these economies already register more than four consecutive quarters of contraction, affected by unfavorable conditions of growth, high unemployment, and fiscal adjustments which, in many cases, have exceeded initial expectations.





After several months of negotiation, in late November the leaders of the EU and the IMF reached an agreement on the new terms of the Greek Program (with an extension of two more years), initiating in this way the process to release the second tranche of the program aid which was suspended since Q2-2012 due to the electoral period in Greece.

The program includes the following elements: (a) the repurchase of private bonds carried out in December for a nominal value of  $\in$  31.9 billion and with an average price of  $\in$  33.8 cents; (b) extending the maturities of the bilateral loans of the EU and the EFSF by 15 years; (c) reducing the interests of the EU bilateral loans for a total of 100 bps, which will be carried out in two phases; (d) reducing the commissions paid to the EFSF by 10 bps; (e) postponing the payments of interests to the EFSF for 10 years; and (f) reimbursing as from 2013 the ECB and national central banks' earnings resulting from holding the Greek sovereign bonds acquired under the old bond purchase program (Securities Market Program - SMP). All these benefits are conditional upon the implementation of reforms aimed to achieve a credible and sustainable reduction of the debt ratio.

In the case of Spain, even though so far the Spanish Government has not requested a sovereign bailout program that can activate the OMT of the ECB, it is expected that it will eventually have to do so given that the cost of funding is still very high despite the fact that it has declined.

As regards Spanish banks, a second study released at the end of September shows that their capital requirements under an adverse scenario would be  $\in$  53.7 billion. A first study had estimated a capital shortfall of  $\in$  55-60 billion. In this context, the Spanish Government and the EU confirmed that the Eurozone assistance for the recapitalization of Spanish banks would amount to  $\in$  39.5 billion (of the maximum approved amount of  $\in$  100 billion).

- 5. In **Japan**, the economy shrank 0.9 percent in Q3 –a rate equivalent to 3.5 percent in annual terms–, registering declines both in the domestic demand (0.2 percent) and the external demand (0.7 percent). The boost derived from spending in the reconstruction of infrastructure has been more than offset by the drop of private demand and external demand. In the case of the former, consumption was affected by the culmination of subsidies for the purchase of automobiles, while in the case of the latter net exports declined due to the global economic slowdown and to the conflict with China (exports to China account for approximately 20 per cent of Japan's total exports). In 2012, Japan is estimated to grow 1.6 percent, lower than estimated in our previous report.
- 6. In the **emerging economies**, China continues to show the highest growth rates. Recent indicators reflect that the level of economic activity in China would have stabilized, after having registered a slowdown in the last three quarters. In November the annual rate of growth of industrial production and retail sales

continued to rise, while external trade remained weak. Investment, on the other hand, shows a gradual recovery, supported by infrastructure projects launched by the government to mitigate the slowdown.

Table 2 CHINA'S ECONOMIC INDICATORS										
		2012								
	Dec.	Mar.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.		
Manufacturing PMI index (50 neutral level)	50.3	53.1	50.2	50.1	49.2	49.8	50.2	50.6		
Industrial Production (12 month % change)	12.8	11.9	9.5	9.2	8.9	9.2	9.6	10.1		
Investment in fixed assets (12 month % change)	23.8	20.9	20.4	20.4	20.2	20.5	20.7	20.7		
Retail sales (12 month % change)	18.1	15.2	13.7	13.1	13.2	14.2	14.5	14.9		
Exports(12 month % change)	13.4	8.9	11.3	1.0	2.7	9.9	11.6	2.9		
Imports (12 month % change)	11.8	5.3	6.3	4.7	-2.6	2.4	2.4	0.0		
New loans (Billions of yuan)	641	1,010	920	540	704	623	505	523		
CPI (12 month % change)	4.1	3.6	2.2	1.8	2.0	1.9	1.7	2.0		

Source: Bloomberg.

Because of this, China is expected to show signs of recovery as from Q4. Thus, China is estimated to grow 7.6 percent in 2012 and 8.0 percent in 2013. In 2014, it would grow again at rates of over 8 percent.

In the medium term, the recent political changes would bring about a process of reform to rebalance the economy in favor of consumption, loosen interest rates to improve the allocation of resources, and gradually open the market to capital.

- 7. **India**, on its side, has shown a lower growth than expected. The decline in external demand has been coupled by a slowdown in consumption and a deterioration in the business climate in a context of domestic uncertainty associated with political disputes over the adoption of a package of economic reforms, as well as with persistent inflationary pressures and a depreciation of the rupee. In this context, India is projected to grow 5.5 percent in 2012, below its average growth in previous years. On the other hand, it is expected that the resolution of the fiscal problems –the fiscal deficit in 2012 would be of about 9.5 percent of GDP– and the improvement of the global context would lead India to grow 6.6 percent in 2013 and 7.0 per cent in 2014.
- 8. In **Eastern Europe**, macroeconomic data confirm that economic recession deepened in countries like Hungary and the Czech Republic, while growth in countries like Russia and Poland has declined reducing the high growth rates observed since the recovery from the international financial crisis. In this context, with the exception of Russia, central banks are implementing interest rate cuts. These measures are expected to continue until mid-2013, when the process of economic slowdown is expected to have subsided. In this context, Russia's growth forecast for 2013 has been revised downwards from 4.0 to 3.5 percent due to the weakening of domestic



demand. Consumption and new investment projects are being affected by the high real interest rates in a context in which, in addition, fiscal policy has become more conservative since the end of the presidential campaign in March this year. Moreover, the recently approved budget for 2013-2015 aims to reduce the federal deficit completely by 2015. The Central Bank's efforts are currently focused on regaining control of inflation expectations and cooling down the persistent excessive growth of credit.

9. Despite the international context, Latin American countries have continued to grow, supported by high terms of trade, favorable external financing conditions, and the dynamism of domestic demand which is still favored by the positive trend of credit. The countries with the highest growth rates include Chile, supported also by investments in the mining sector, and Uruguay, where growth has been accompanied by inflationary pressures. According to recent indicators, Brazil, whose economy slowed down in the previous quarters, would register a recovery as from this last quarter of the year in response to monetary and fiscal stimuli. Colombia has been showing a lower dynamism in manufacturing activity, although this is partially offset by the construction sector.







As regards **inflation**, in November inflation rates fell in most of the countries in the region, due mainly to the reversal of some transitory shocks that affected the prices of food in previous months and due to the correction of crude prices. However, demand pressures are still observed as a result mainly of tight conditions in the labor markets.



10. Global growth would show this year a slowdown compared to 2011, declining from 3.7 to 3.0 percent as a result of lower growth both in the developed economies –down from 1.6 to 1.2 percent– and in the developing economies –down from 6.1 to 4.9 percent–. This lower growth has led us to revise downwards even the growth rate projected in our last inflation report, especially given that China's estimated growth has been revised down from 7.8 percent in September to 7.6 percent; India's estimated growth has been revised from 6.1 to 5.5 percent, and growth in Brazil has been revised down from 1.8 to 1.4 percent. In addition to this, the situation of recession in the Eurozone should be highlighted since GDP in Spain and Italy are estimated to drop 1.5 and 2.1 percent, respectively.

Likewise, the forecast on global economic activity in 2013 has been revised down in this Inflation Report due to the transmission of Europe's recessive effects and to uncertainty generated by the delay in resolving the fiscal problems in the United States.

The developed economies would grow 1.2 percent and developing economies would grow 5.4 percent, so the world economy would have a growth rate of 3.2 percent, that is, lower than projected in our September Inflation Report.



Iable 3 WORLD GDP GROWTH (Annual % change)										
	2010	2011	2012 *		2013 *		2014 *			
	2010	2011	IR Sep.	IR Dec.	IR Sep.	IR Dec.	IR Sep.	IR Dec.		
Developed countries	3.0	1.6	1.3	1.2	1.6	1.2	2.1	2.0		
1. United States	2.4	1.8	2.2	2.2	2.0	1.9	2.4	2.4		
2. Eurozone	2.0	1.4	-0.5	-0.4	0.3	-0.1	1.3	1.2		
Germany	4.2	3.0	0.8	0.9	1.0	0.7	1.5	1.5		
France	1.7	1.7	0.0	0.1	0.5	0.0	1.4	1.0		
Italy	1.8	0.4	-2.3	-2.1	-0.4	-0.6	0.5	0.5		
Spain	-0.3	0.4	-1.6	-1.5	-1.3	-1.5	0.8	0.8		
3. Japan	4.4	-0.7	2.3	1.6	1.3	0.2	1.5	1.4		
4. United Kingdom	2.1	0.7	-0.4	-0.1	1.4	1.1	1.5	1.5		
5. Canada	3.2	2.5	2.0	2.2	2.0	2.2	2.0	2.2		
6. Other developed countries	5.8	3.2	2.2	1.9	3.2	2.7	3.6	3.4		
Developing countries	7.4	6.1	5.1	4.9	5.6	5.4	5.9	5.7		
1. Sub-Saharan Africa	5.2	5.1	4.3	4.3	5.4	5.4	5.4	5.5		
<ol><li>Central and Eastern Europe</li></ol>	4.6	5.2	2.0	1.8	2.8	2.5	3.4	2.9		
<ol><li>Community of Independent Countries</li></ol>	4.6	4.7	3.8	3.8	4.2	3.8	4.2	4.1		
Russia	4.0	4.1	3.7	3.7	4.0	3.5	4.0	3.9		
<ol> <li>Developing Asia</li> </ol>	9.5	7.7	6.8	6.6	7.4	7.1	7.8	7.5		
China	10.4	9.2	7.8	7.6	8.3	8.0	8.7	8.5		
India	10.1	6.8	6.1	5.5	7.0	6.6	7.5	7.0		
5. Middle East and Northern Africa	5.0	3.3	3.5	3.5	3.7	3.7	3.7	3.7		
6. Latin America and the Caribbean	6.1	4.5	3.1	3.0	3.7	3.7	3.9	3.9		
Brazil	7.5	2.7	1.8	1.4	3.9	3.8	4.0	4.0		
World Economy Memo:	5.1	3.7	3.1	3.0	3.5	3.2	3.9	3.8		
BRICs 1/	9.2	7.3	6.2	5.9	7.0	6.7	7.3	7.1		
Peru's trading partners 2/	4.6	3.6	2.7	2.6	3.0	2.7	3.3	3.3		

IR: Inflation report.

\* Forecast.

1/ Brazil, Russia, India, and China.

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

Source: Bloomberg, IMF, and Consensus Forecast.

11. In line with this, it is estimated that the **United States** economy would grow 2.2 percent in 2012 and 1.9 per cent in 2013. A risk factor in this projection is the disorderly fiscal adjustment that would occur if no agreement is reached about the 2013 budget, for which negotiations have already started. Uncertainty regarding the agreement is affecting investors' confidence and generating delays in private investment as well as in labor recruitment.

In this context, the projected growth in the **Eurozone** in 2013 has been revised downwards from 0.3 to -0.1 percent, since all the economies in the region would register negative (or zero) rates of growth, with the exception of Germany. It is worth pointing out that the projected growth in France has also been revised down as this country is also affected by the announced fiscal adjustment. In November Moody's downgraded France's Aaa rating to Aa1, maintaining a negative outlook for growth in this country. This decision follows a similar one adopted by taken by S&P in January. The rating agency reported a worsening of growth prospects and

pointed out that a new downgrading may occur if the Eurozone crisis should deepen or if France fails to implement structural reforms. For its part, Fitch maintained its AAA rating. Moody's also reiterated its negative outlook for all of the Eurozone sovereign securities.

In 2013, **Japan** would show a very slight recovery in consumption while public investment would have a negative contribution to growth due to the decline of spending as a result of the culmination of reconstruction works. In this context, it is estimated that growth would register a rate of 0.2 percent, recovering thereafter to 1.4 percent the following year.



12. Most of the risk factors discussed in our previous report remain, which introduces a downward bias on the central forecast.





- a. The situation in the Eurozone, particularly in Greece and Spain, is a factor of uncertainty which can continue deteriorating the conditions of financing for European peripheral economies and deteriorate consumers and investors' confidence.
- b. In the United States, there is the risk that no agreement is reached about the package of fiscal measures by the end of this year, which would bring about a disorderly fiscal adjustment whose magnitude is estimated at between 4 and 6 percent of GDP.
- c. Oil prices could show record hikes if the conflict in the Middle East should escalate.
- d. There is also the risk that some emerging countries, especially India, grow less than expected.
- e. However, the probability of occurrence of other risk factors considered in our previous report –such as a further slowdown in China– has decreased, so the risk of a serious deterioration in the international environment has moderated slightly.

#### **Financial markets**

13. International financial markets have registered a lower volatility since September, reflecting increased signals of stabilization of global economic activity (particularly in China and the United States) as well as the ECB announcements of new purchases of bonds and the FED's new monetary stimulus program.

Another factor contributing to this has been a greater optimism about the settlement of the European debt crisis after the progress made in the program for Greece and the confidence achieved in the U.S. negotiations to avoid the so-called "fiscal cliff". Despite these developments, these two factors are still the main risks to global growth.



14. In this context, tensions in the **sovereign debt markets** have significantly declined, particularly after an agreement was reached between the Troika and Greece and after the ECB announced the possibility that it would buy sovereign bonds. Although the spreads of the main Eurozone countries with debt problems have shown a clear downward trend, the levels registered are still quite far from those observed before the crisis, which reflects that uncertainty still remains high.

In the past two months, the EMBIG spreads and CDS of **Latin American** countries have shown a downward correction (except in the case of Argentina), confirming the trend seen during the year. This is associated with the improvement in risk perception, better fundamentals, growth expectations, and high international liquidity.

	Table 4           SOVEREIGN SPREADS OF DEVELOPED COUNTRIES											
			End of period	ł		Difference in basis points						
_	Dec.11 (5)	Mar.12 (4)	Jun.12 (3)	Aug.12 (2)	Nov.12 (1)	Aug.12 (1)-(2)	Dec.11 (1)-(4)					
CDS (bps)												
USA	49	30	48	40	37	-3	-12					
United Kingdom	98	63	69	54	30	-24	-68					
Germany	102	74	102	63	30	-32	-72					
France	220	168	189	139	80	-58	-139					
Spain	380	436	526	519	286	-233	-94					
Italy	484	395	484	468	245	-222	-239					
Greece 1/	8,786	25,423	10,667	14,543	5,065	-9,478	-3,721					
Portugal	1,082	1,070	786	656	488	-168	-594					
Ireland	724	573	553	435	181	-254	-543					
10 Year Treasury	10 Year Treasury yields (%)											
USA	1.87	2.21	1.64	1.55	1.62	6.7	-25.7					
United Kingdom	1.98	2.20	1.73	1.53	1.78	24.7	-20.2					
Germany	1.83	1.79	1.58	1.36	1.39	3.1	-44.3					

1/ After the first proceed from the Greek debt restructuring, the Greek spread was reduced to a level of 5,730 basis points. In November, the reduction is explained by the second proceeds from the Greek debt restructuring. Source: Bloomberg.

15. Likewise, market stability has implied slight gains in **stock markets**. The highest gains were observed in some Eurozone countries, particularly in Greece. On the other hand, the U.S. stock exchange showed a slight negative variation (like the stock exchange markets in Peru and Rumania).





#### **Money markets**

16. Money markets in Europe showed a stable evolution since October after the strong decline they recorded since June due to the high levels of liquidity and the low policy reference rates. Thus, the spread between the Euribor and the OIS rate –which measures tensions in the money market– remained stable at around 12 bps since mid-October.



#### Foreign exchange rate

17. The progress made in the program for Greece and optimism regarding a solution of the U.S. fiscal problem have implied a lower demand for dollars and for other hedge currencies such as the yen.

Thus, between August and November the dollar depreciated 1 percent against the major currencies basket due basically to the evolution of the US dollar against the euro and the currencies of other Asian, European, and Latin American emerging economies (such as Mexico, Chile, and Colombia). On the other hand, the dollar appreciated 5 percent against the yen due also to the weaker outlook of the Japanese economy.

It is worth pointing out that the dollar has strengthened significantly against some emerging currencies in the region, such as the Argentine peso and the Brazilian real due, among other factors, to the decline in the prices of some commodities (food and copper) and, in the case of Brazil, due to a strong capital outflow (capital outflows have been observed for three consecutive months. A capital outflow of US\$ 3.8 billion –the highest in over two years– was recorded in October).







Table 5 EXCHANGE RATE													
			I	End of pe	riod			Nov	Nov. % chg. compared to:				
	Dec.09	Dec.10	Dec.11	Mar.12	Jun.12	Aug.12	Nov.12	Aug.12	Dec.11	Dec.10	Dec.09		
Canada	1.052	0.997	1.019	0.998	1.017	0.986	0.994	0.8	-2.4	-0.2	-5.5		
Japan	92.90	81.15	76.94	82.79	79.79	78.39	82.48	5.2	7.2	1.6	-11.2		
United Kingdom (US\$/c.u.)	1.616	1.560	1.554	1.601	1.571	1.587	1.601	0.9	3.1	2.6	-0.9		
Eurozone (US\$/c.u.)	1.432	1.338	1.295	1.334	1.267	1.258	1.299	3.2	0.3	-3.0	-9.3		
Switzerland	1.036	0.934	0.938	0.902	0.949	0.955	0.928	-2.8	-1.0	-0.6	-10.4		
Brazil	1.743	1.659	1.863	1.826	2.037	2.031	2.136	5.2	14.7	28.7	22.6		
Chile	507.2	467.8	519.3	488.1	501.1	480.6	480.9	0.1	-7.4	2.8	-5.2		
Colombia	2,040	1,915	1,936	1,787	1,784	1,825	1,815	-0.6	-6.3	-5.2	-11.0		
Mexico	13.06	12.36	13.95	12.80	13.36	13.19	12.97	-1.7	-7.0	4.9	-0.7		
Argentina	3.799	3.979	4.302	4.377	4.572	4.639	4.837	4.3	12.4	21.6	27.3		
Peru	2.890	2.808	2.697	2.669	2.653	2.612	2.579	-1.2	-4.4	-8.1	-10.8		
Hungary	187.96	208.15	243.28	220.49	225.84	225.92	216.54	-4.2	-11.0	4.0	15.2		
Poland	2.86	2.96	3.44	3.10	3.35	3.31	3.16	-4.6	-8.1	6.9	10.5		
Russia	30.31	30.57	32.19	29.32	32.42	32.31	30.88	-4.4	-4.1	1.0	1.9		
Turkey	1.50	1.54	1.88	1.78	1.81	1.82	1.79	-1.7	-5.1	16.3	19.5		
China	6.83	6.59	6.29	6.30	6.35	6.35	6.23	-1.9	-1.1	-5.5	-8.8		
India	46.40	44.70	53.01	50.87	55.64	55.53	54.27	-2.3	2.4	21.4	17.0		
Israel	3.79	3.52	3.81	3.70	3.91	4.01	3.82	-5.0	0.2	8.3	0.8		
Courses Bloomborg and D	outoro												

Source: Bloomberg and Reuters.

#### Monetary policy decisions

18. In a context of high international uncertainty, most central banks have maintained their policy interest rates unchanged over the past few months. In many economies, the monetary policy response has been offset by inflationary pressures –associated with the high prices of food and crude–.

Thus, between September and November, 19 of the 32 countries subject to follow-up have maintained their policy rates, eleven countries have lowered them, and only two –Serbia and Iceland– have raised them. The most significant rate cuts were observed in Hungary and Pakistan (75 and 50 bps, respectively). In Latin America, Brazil lowered its rate by 25 bps and thus accumulated a rate reduction of 375 bps in the year in response to the marked economic slowdown it has experienced over the past quarters. The rate cut in Colombia is associated with the lower dynamism of manufacturing activity in a context of stable inflation around the central target and of appreciatory pressures.



		MONET	ARY POLI	CY INTER	REST RAT	E		
	Sep.08	Dec.08	Dec.11	Jun.12	Aug.12	Nov.12	Acummulated varia	ation (bps.) to Nov.12
							Oct.12	Dec.11
Hungary	8.50	10.00	7.00	7.00	6.75	6.00	-75	-100
Pakistan	13.00	15.00	12.00	12.00	10.50	10.00	-50	-200
Australia	7.00	4.25	4.25	3.50	3.50	3.25	-25	-100
Brazil	13.75	13.75	11.00	8.50	7.50	7.25	-25	-375
South Korea	5.25	3.00	3.25	3.25	3.00	2.75	-25	-50
Israel	4.25	2.50	2.75	2.25	2.25	2.00	-25	-75
Thailand	3.75	2.75	3.50	3.00	3.00	2.75	-25	-75
Colombia	10.00	9.50	4.75	5.25	4.75	4.50	-25	-25
Poland	6.00	5.00	4.50	4.75	4.75	4.50	-25	0
Philippines	6.00	5.50	4.50	4.00	3.75	3.50	-25	-100
Sweden	4.75	2.00	1.75	1.50	1.50	1.25	-25	-50
ECB	4.25	2.50	1.00	1.00	0.75	0.75	0	-25
Chile	8.25	8.25	5.25	5.00	5.00	5.00	0	-25
Indonesia	9.25	9.25	6.00	5.75	5.75	5.75	0	-25
Japan	0.50	0.10	0.10	0.10	0.10	0.10	0	0
Malaysia	3.50	3.25	3.00	3.00	3.00	3.00	0	0
Mexico	8.25	8.25	4.50	4.50	4.50	4.50	0	0
Peru	6.50	6.50	4.25	4.25	4.25	4.25	0	0
United Kingdom	5.00	2.00	0.50	0.50	0.50	0.50	0	0
South Africa	12.00	11.50	5.50	5.50	5.00	5.00	0	-50
Turkey	16.75	15.00	5.75	5.75	5.75	5.75	0	0
Canada	3.00	1.50	1.00	1.00	1.00	1.00	0	0
China	7.20	5.31	6.56	6.31	6.00	6.00	0	-56
USA	2.00	0.25	0.25	0.25	0.25	0.25	0	0
India	9.00	6.50	8.50	8.00	8.00	8.00	0	-50
Norway	5.75	3.00	1.75	1.50	1.50	1.50	0	-25
New Zealand	7.50	5.00	2.50	2.50	2.50	2.50	0	0
Switzerland	2.75	0.50	0.25	0.25	0.25	0.25	0	0
Taiwan	3.50	2.00	1.88	1.88	1.88	1.88	0	0
Uruguay	7.25	7.75	8.75	8.75	8.75	8.75	0	0
Island	15.50	18.00	4.75	5.75	5.75	6.00	25	125
Serbia	15.75	17.75	9.75	10.00	10.50	10.95	45	120

Source: Reuters and Bloomberg.

#### BOX 1 FISCAL ADJUSTMENT IN THE UNITED STATES

An unprecedented increase is expected to be seen in taxes in the United States after several fiscal stimulus measures expire on January 1, 2013. In addition to this, a cut in government spending has already been committed and additional tax increases are anticipated in order to fund the new health program implemented by the Administration. According to the Congressional Budget Committee (CBO), all these measures would cause a fiscal adjustment of around 4 percent of GDP in what Federal Reserve Chairman Ben Bernanke has called the "fiscal cliff".

Increased tax revenues would be obtained as a result of various tax rises:

- Over one-third of the tax increase would result from the expiration of the tax cuts introduced in 2001 and 2003. These tax cuts reduced the marginal rates on the income tax of almost all taxpayers, increased the fiscal credit granted for having children and for adoption, and increased the tax deduction for education costs and the costs that dependent people generate.
- About one-quarter of the increase in revenues in 2013 would come from the expiration of the temporary cut in workers' contribution to social security.
- Another quarter of the increase in the tax revenue would come from the expiration of the section of the Alternative Minimum Tax (AMT) which will raise the income limit that establishes which families are eligible for this tax. This would prevent middle-income families to be eligible for this special arrangement which in practice means lower tax rates.
- The rest of the tax increase would come mainly from the expiration of the tax cuts established as a fiscal stimulus measure in 2009 and from part of the new taxes that will come into effect to finance the Administration's health care reform program, particularly a surtax of 3.8 percent in addition to the hospital insurance tax imposed on high-income taxpayers (with incomes of over US\$ 250 thousand a year).

THE SIZE OF THE POTENTIAL "FISCAL CLIFF" IN 2013

(US\$ billions)						
Total	<b>-650</b>					
% GDP	-4.1					
Payroll tax cut	-120					
2001/2003 Tax cuts (Low-income/middle-income)	-120					
2001/2003 Tax cuts (US\$250k+incomes/estates)	-60					
Alternative Minimum Tax (AMT)	-100					
Other expiring provisions	-75					
Taxes to finance "affordable health care reform"	-25					
Sequester budget cuts	-90					
Emergency Unemployment Compensation	-30					
Medicare payment rates	-10					
Spending under American Recovery and Reinvestment Act (ARRA)	-20					
Source: Barclays Research, CBO, OMB, U.S. Treasury Department, U.S. Budget Committee.						

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The reduction of **federal expenditure** would come mainly from automatic expenditure cuts committed in the budget control in exchange for raising the debt limit, as well as from the expiration of the emergency benefits for unemployment and the reduction programmed in the rates of government contribution for Medicare, among other sources.

The economic impact of these measures is already noticeable: companies are postponing their investment decisions and hiring new employees, and households have increased their savings by reducing their consumption. According to the Congressional Budget Committee, if all the fiscal adjustment is carried out, the real GDP would fall 0.5 percent in 2013 –measured as the change in Q4-2013 compared to Q4-2012– and unemployment would grow at rates of over 9 percent in Q4-2013.

However, these measures are necessary because the large fiscal deficit is being funded with the issuance of new debt. The problem lies in the temporary nature of the fiscal adjustment. The OECD has advised the US Government to implement a gradual adjustment in its fiscal policy.

The external and the domestic debt of USA –which includes its own social security system among creditors– would amount to US\$ 16 trillion at end 2012, a figure equivalent to approximately 102 percent of its GDP. This ratio was only higher in 1945, when it reached 113 percent as a result of the country's reconstruction after World War II.

In the United States, the maximum amount of government indebtedness, which is called debt limit, is established by law and can only be amended by Congress. In February 2012, Congress raised this debt limit by US\$ 1.2 trillion to US\$ 16 trillion in exchange for public spending cuts and/or increased revenue for the same amount in the next 10 years.



It is estimated that the probability that the economy will face a "fiscal cliff" is less than 15 percent and, in any case, a political agreement is expected to be reached to avoid the fiscal cliff. However, some fiscal adjustment is foreseen in 2013 in order to reduce the fiscal debt.

# **II.** Economic Activity

19. The growth of GDP between January and September is explained mostly by the dynamism of domestic demand, especially private and public investment. In this period GDP grew 6.3 percent, domestic demand grew 7.3 percent, and private investment and public investment grew 14.7 percent and 29.2 percent, respectively.





Based on the recent evolution of the economy, the forecast on GDP growth in 2012 has been revised upwards from 6.0 percent (Inflation Report of September) to 6.3 percent in this report, while the forecast on GDP growth in 2013 has been revised from a range of between 5.8 and 6.2 percent to a range of between 6.0 and 6.4 percent due to the recent trend shown by the domestic demand. The growth forecast for 2014 considers the effects both of the downward revision of the estimated rate of global growth and the upward revision of the terms of trade, as a result of which the forecast on GDP growth remains at a range of between 6.0 and 6.5 percent.



#### Forecasts on spending components

20. After having shown a growth rate of 7.3 percent in Q2 and a rate of 5.0 percent in Q1, **domestic demand** accelerated its pace of growth in Q3 with a rate of 9.5 percent. Based on this information and on recent indicators of activity, the growth of domestic demand in 2012 has been revised upwards from a rate of 7.1 percent in the September Inflation Report to 7.5 percent in this report. This increase is mainly explained by the growth of private investment along the year which has shown higher rates than the ones observed in 2011.

Table 7           GDP AND DOMESTIC DEMAND           (Real % change)											
	201	1	2012*			20	)13*	201	4*		
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12		
1. Domestic demand	7.9	7.2	7.3	7.1	7.5	6.2	6.3	6.3	6.3		
a. Private consumption	6.3	6.4	5.9	5.8	5.8	5.5	5.7	5.7	5.7		
b. Public consumption	4.3	4.8	5.6	8.7	7.6	5.7	7.6	5.8	6.2		
c. Private investment	13.1	11.7	14.7	13.5	14.7	8.2	8.2	8.2	8.2		
d. Public investment	-24.3	-17.8	29.2	23.7	23.4	14.3	15.2	11.0	11.7		
2. Exports	9.3	8.8	6.0	3.3	5.5	7.7	7.7	9.4	9.1		
3. Imports	11.4	9.8	10.9	9.0	11.2	8.1	7.5	8.9	8.9		
4. GDP	7.4	6.9	6.3	6.0	6.3	6.0	6.2	6.3	6.3		
Memo: Government expenditure	-6.2	-4.2	12.6	13.8	13.0	8.9	10.4	7.8	8.3		
IR: Inflation Report	- Inflation Report										

\*Forecast.

Table 8       GDP AND DOMESTIC DEMAND       (Contributions to the real % change)													
	201	1	2012*			2(	J13^	201	2014*				
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12				
1. Domestic demand	8.2	7.5	7.6	7.4	7.8	6.5	6.6	6.7	6.7				
a. Private comsumption	4.3	4.2	3.9	3.9	3.9	3.6	3.7	3.7	3.7				
b. Public comsumption	0.4	0.5	0.5	0.8	0.7	0.5	0.7	0.6	0.6				
c. Private investment	2.8	2.5	3.3	3.0	3.3	2.0	2.0	2.0	2.0				
d. Public investment	-1.3	-1.1	1.1	1.1	1.1	0.8	0.8	0.7	0.7				
e. Inventory variations 1/	2.0	1.4	0.9	0.1	0.3	-0.3	-0.4	-0.6	-0.6				
2. Exports	1.6	1.6	1.1	0.6	1.0	1.4	1.4	1.7	1.7				
3. Imports	2.4	2.1	2.4	2.0	2.5	1.8	1.7	2.1	2.1				
4. GDP	7.4	6.9	6.3	6.0	6.3	6.0	6.2	6.3	6.3				
Memo:													
Government expenditure	-0.9	-0.7	1.6	1.9	1.8	1.3	1.6	1.2	1.3				
IR: Inflation Report.													

IR: Inflation Report. \*Forecast.

1/ Percentage of GDP.

21. **Private consumption** –the main component of domestic demand– maintained its growth rate in Q3 registering, like in the previous quarter, a rate of 5.8 percent, which would be confirming a gradual moderation in the growth rate of consumption compared to the evolution observed in 2011 and in Q1-2012. In a context of consumer optimism, the expansion of consumption is reflected in various indicators such as the sale of new family cars, which grew 26.6 percent in Q3, and the increase in consumer loans, which grew 20 percent.



Other indicators reflecting the recent evolution of private consumption include the following:

a. The Consumer Confidence Index remains on the optimistic tranche. Like in Q2, this indicator remained at an average level of 57 points in Q3, although this level was lower than the average level of 59 points recorded in Q1. Consumer confidence registered a transitory recovery in October, but declined again slightly in November.





b. The volume of imports of durable consumer goods continued to grow at high rates, showing a recovery in the last two months, even though with a lower rate than in Q2.



c. Urban employment in firms with 10 and more workers grew 3.9 percent in January-August 2012, a lower rate than the one recorded last year (5.4 percent).



Considering these indicators, the growth forecast of private consumption in 2012 continues to be 5.8 percent. On the other hand, the growth forecast of private consumption in 2013 has been revised upwards to 5.7 percent, in line with the evolution expected in the disposable national income. Moreover, private consumption would maintain a similar growth rate in 2014, closing the period 2012-2014 with an average growth rate of 5.7 percent.

- 22. **Private investment** maintained for the third consecutive quarter a two-digit growth rate, accumulating a growth of 14.7 percent and registering levels of above 20 per cent as a percentage of GDP. Various indicators reflect the evolution of private investment:
  - a. Business expectations on the situation of the economy in the three months ahead continue to be on the optimistic segment and have recovered in the last quarter, recording 64 points in October and November (a similar levels to the one observed in April of this year).



b. Economic agents have raised the rates of GDP growth expected in 2012, with the exception of non-financial firms. The annual growth rate expected in the next two years continues to be 6.0 percent.

Table 9 SURVEY ON MACROECONOMIC EXPECTATIONS: GDP GROWTH (%)				
	E	Expectations about:		
	IR Jun.12	IR Sep.12	IR Dec.12*	
Financial entities 2012 2013 2014 Economic analysts 2012 2013 2014	6.0 6.0 6.0 6.0 6.0 6.2	6.0 6.0 5.8 5.9 6.0	6.2 6.0 6.0 6.2 6.0 6.0	
Non-financial firms 2012 2013 2014	6.0 6.0 6.0	6.0 6.0 6.0	6.0 6.0 6.0	

\* Survey made during the second half of November 2012.



c. The volume of imports of capital goods, indicator of the investment demand, shows a recovery in recent months, with rising rates.



d. The domestic consumption of cement maintains a two-digit growth rate, showing higher rates than those recorded during the first half of the year.



e. The production of electricity continued to grow around 6 percent in Q3, with higher rates than in Q2. The data as of November shows an acceleration in this indicator.


23. Announced private investment projects that would be implemented in the period 2013-2014 amount to US\$ 31.1 billion, a figure lower by US\$ 2.0 billion than the one considered in our Inflation Report of September.

Table 10           ANNOUNCED PRIVATE INVESTMENT PROJECTS (Millions of US\$)									
	2013	2014	2013-2014						
Mining	7,370	7,655	15,025						
Hydrocarbons	2,506	1,960	4,466						
Electricity	2,408	1,372	3,780						
Industry	961	798	1,759						
Infrastructure	1,112	585	1,697						
Other sectors	3,024	1,376	4,400						
Total	17,381	13,746	31,127						
Courses Drees media and inform									

Source: Press media and information companies.

This decline is associated with the reprogrammed implementation of the portfolio of mining projects as a result of various factors, such as the presence of some still unresolved social conflicts and delays in obtaining exploration and exploitation permits. Rising costs, which in some cases have caused an increase in the total investment budget and implied an extension of the project implementation period, add to these factors. Despite this, in 2013 and 2014 the mining sector would reach investment levels that would be historic records, with projects such as the expansion of Cerro Verde and the new copper mines of Las Bambas, Toromocho, and Constancia standing out.



Investments in the industrial sector include Coazúcar, a company that after issuing bonds in the international market announced investments in its branches of Casa Grande, Cartavio, and San Jacinto to increase the production of sugar in the coming years. These investments add on to its investment program in the Olmos project until 2015.

On their side, other sectors connected to construction, such as the sectors of real estate, hotels, and retail, continue making important investment announcements.





	Table	e 11 IENT PROJECTS: 2013-2014
SECTOR	COMPANIES	PROJECT NAMES
Mining	Xstrata Copper Freeport-Macmoran Copper Norsemont Mining Inc., HudBay Minerals Inc. Anglo American Plc. China Minmetals Corporation y Jiangxi Copper Company Aluminium Corp of China Ltd. (Chinalco) Grupo México S.A.B. de C.V. Candente Copper Corp. Antares Minerals Inc. Marcobre S.A.C. Bear Creek Mining Corporation Shougang Corporation Minera Gold Corp. Grupo Milpo Volcan Compañía Minera S.A.A.	Las Bambas Expansion Constancia Quellaveco El Galeno Toromocho Expansion: Toquepala Cañariaco Norte Haquira Mina Justa Corani Expansion: Marcona Expansion: Marcona Expansion: Cerro Lindo and El Porvenir Expansion
Hydrocarbons	Pluspetrol Perú Corp. S.A. Savia Perú S.A. Petrobras Transportadora de Gas del Perú S.A. (TgP) Cálidda Gas Natural del Perú Perenco Pluspetrol Perú Corp. S.A. SK Energy Repsol YPF	Expansion of Pisco and Malvinas plants Lot Z-2B: Perforation, exploration and other investments Lot 58 and Lot X Expansion of gas and capacity of transportation Expansion of main grid Exploration Lot 67 and pipeline Exploration Lot 88 and 56 Exploration Lot Z 46 Lot 57 - Kinteroni
Electricity	Odebrecht S.A. Inkia Energy Norwind SN Power Perú S.A. Fénix Power Perú S.A. Energía Azul S.R.L. Solarpack y T-Solar GDF Suez Inevarante Energía Eólica S.A.	Hydroelectric plant of Cerro de Chaglla Hydroelectric plant of Cerro del Águila Wind energy park Cerro Chocan Hydroelectric plant Cheves Thermal power plant Hydroelectric plant Santa María Solar powerplant Hydroelectric plant Quitaracsa I Hydroelectric plant Acco Pucará Wind powerplant Cupisnique
Industry	Grupo Celepsa SAB Miller Siderperú Repsol YPF Hochschild Mining S.A. Grupo de Pilkington Limited Corporación JR Lindley Grupo Gloria Cementos Portland	Expansion of lamination plant (N° 2) Investment plan 2012-2014 Modernization of plant Expansion of La Pampilla plant Phospates projects Manufacture plant of float glasses Expansion and new plants: Trujillo,Pucusana, Cusco,and Iquitos Expansion of installed capacity Cement plant
Infrastructure	OAS S.R.L. Consorcio APM Terminal Callao Covisol Consorcio Transportadora Callao Grupo Romero Autopista del Norte SAC Tertir Terminais / Cosmos / Translei	Parque Rimac express way Modernization of North Pier Trujillo-Sullana: Sol Highway Minerals Pier Expansion of Port Matarani Pativilca – Port of Salaverry Road Network No. 4 Expansion of Port Paita
Other sectors	Telefónica del Perú S.A. América Móvil Perú S.A.C. Holding Banmédica Maestro Perú Inmobiliari S.A Besalco S.A. Cencosud Grupo Interbank Grupo Gloria	Optical fiber project at Los Andes and expansion Expansion and technological innovation Health centers Investment projects and expansión 2012-2014 Real state Real state New superpmarkets and malls Expansion and modernizations of new malls Expansion of plants

Considering that private investment has registered a more dynamic growth than expected so far this year, its growth forecast has been revised upwards from 13.5 percent (Inflation Report of September) to 14.7 percent in this report. The growth forecasts for 2013 and 2014 remain unchanged with an estimated growth rate of 8.2 percent each year.



24. Showing a lower dynamism than in the previous quarters due to the lower spending in investment projects of the national government and state enterprises, **public investment** grew 22.6 percent in Q3. This moderation in the growth of public investment would continue in Q4 and during 2013 and 2014 with rates below the average growth rate recorded in the period 2005-2011. However, given that public investment is expected to grow at higher rates than GDP, the ratio of public investment to GDP is expected to increase from 4.5 percent in 2011 to 6.1 percent in 2014.





The gross investment-to-GDP ratio would continue showing the rising trend observed in recent years. Considering the growth forecast of private investment and public investment for this year and for 2013 and 2014, it is estimated that this ratio would reach a value close to 28 percent of GDP in 2014.



25. Growth in the country's economy has been offset by the weakness of external demand associated with lower global growth. In Q3 real exports of goods and services recorded a slight increase of 1 percent, while the volume of non-traditional exports gradually slowed down recording rates of 12.5 percent in Q1, of 10.2 percent in Q2, and of 5.7 percent in Q3. Thus, the annual growth rate of exports in 2012 has been lower than the one recorded in 2011.

However, a rising trajectory is foreseen in the growth of exports in the forecast horizon considering the onset of operations of some mining copper projects such as Toromocho, Las Bambas, and Constancia.

Actual **imports**, which continue showing high rates of growth, registered a rate of 15.0 percent in Q3 mainly as a result of higher imports of inputs. Because of this, the estimated growth of imports in 2012 has been revised upwards.

A moderation in the growth of imports is expected in 2013 considering the lower rate of growth foreseen for private investment compared to the growth of imports observed this year and its subsequent effect on



imports of capital goods. However, imports are expected to recover in 2014 in line with increased demand resulting from the higher growth in the economy.





## **Sector GDP**

26. In the period of January-September 2012, GDP accumulated a growth rate of 6.3 percent, with an acceleration being observed in the growth of the non-primary sectors, which grew 7.1 percent, due mainly to the higher growth of the sectors of construction, commerce, and services, in line with the growth of domestic demand. On the other hand, primary sectors reduced their rate of growth compared to the rate observed in the same period in 2011, recording a rate of 2.1 percent (vs. 4.5 percent in 2011).

	201		2012*			)13*	2014*		
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12
Agriculture and livestock	4.2	3.8	4.6	4.0	4.5	4.3	4.3	4.2	4.2
Fishing	27.9	29.7	-7.7	-7.7	-9.5	4.9	2.6	1.1	1.1
Mining and hydrocarbons	-0.6	-0.2	3.6	3.3	1.9	9.2	7.1	11.8	12.6
Metallic mining	-4.9	-3.6	3.7	3.9	1.8	6.7	6.4	11.7	12.9
Hydrocarbons	24.1	18.1	3.1	0.8	2.3	18.6	9.4	12.4	11.3
Manufacturing	7.2	5.6	1.0	2.1	1.5	5.9	5.6	6.0	6.0
Raw materials	12.6	12.3	-6.2	-3.4	-6.0	6.7	4.9	3.9	3.9
Non-primary industries	6.3	4.4	2.3	3.1	2.9	5.7	5.8	6.4	6.4
Electricity and water	7.5	7.4	5.5	5.3	5.5	5.9	5.9	7.0	6.5
Construction	3.3	3.4	16.2	15.4	16.0	6.7	9.6	7.8	8.2
Commerce	9.2	8.8	6.8	6.4	6.7	5.4	5.8	5.9	5.9
Other services	8.7	8.3	7.2	6.6	7.2	6.1	6.3	5.9	5.9
GDP	7.4	6.9	6.3	6.0	6.3	6.0	6.2	6.3	6.3
Memo:									
Primary GDP	4.5	4.4	2.1	2.2	1.4	6.3	5.2	6.6	6.9
Non-Primary GDP	8.0	7.4	7.1	6.7	7.2	5.9	6.4	6.2	6.2

27. In the **primary sectors**, the growth of agricultural and mining production was offset by a lower production in fishing due to the lower catch of anchovy for industrial use.

The higher rate in the **agricultural sector** reflects the growth of production both in the agricultural sub-sector and in the livestock sub-sector. This growth in the case of the former is explained by the increased production of crops, such as rice –due to the standardization of the harvest calendar in Piura-, potatoes -especially in the inter-Andean valleys-, banana -due to increased rainfall in the rainforest areas-, grapes -due to increased crops and larger cultivated areas-, and other crops such asparagus, hard yellow maize, and olives, among others. On the other hand, some other crops showed a decline in their production. This was the case, for example, of garlic, due to the lower market prices; lemon, due to unfavorable weather conditions, and coffee, due to crop sequencing. In the case of the livestock subsector, this growth is explained by the increased production of poultry. Assuming normal weather conditions, the growth rates foreseen for 2013 and 2014 are the same as those estimated in our previous inflation report. This forecast considers a higher agricultural production oriented to the foreign market and agribusiness as a result of improved coffee and mango yields, increased markets for grape crops, and increased sugar production due to better weather conditions. On the other hand, the livestock sub-sector would continue showing a similar growing trend to the one observed in 2012.



The evolution of the **fishing sector** in this period reflects the lower quota of anchovy extraction for industrial consumption during the first fishing season and a lower catch of species to produce frozen products. The levels of anchovy catch by the end of this year and next year are expected to be lower than foreseen in our previous report, with total catch levels of 3.6 and 4.0 million tons, respectively, which reduces the projected growth rate of the fishing sector. The main reason that explains this is the lower quota assigned to the catch of anchovy in the North - Central areas, although this would be corrected by the end of 2013. On the other hand, the sea temperature anomalies recorded so far are not similar to those observed in earlier El Niño episodes, which has contributed to reduce the probability of occurrence of these events in the following months.

For its part, the growth of the **mining sector** is explained by a higher production of copper, zinc, natural gas, and silver. Our previous growth forecast for this year has been revised due to the lower expected extraction of metallic minerals in the last quarter as a result of the lower informal production of gold from Madre de Dios and the strike that affected Shougang production in October. In 2013 mining production would record a growth rate of 7.1 percent, mainly as a result of an increased extraction of copper and zinc. The operation of new projects such as Antapaccay and the expansion of Antamina for a complete year accounts for the higher production of copper, while the onset of the new project Santander in Lima and the expansion of Milpo and El Brocal in its unit of Colquijirca account for the higher production of zinc. Production in 2014 would increase to 12.6 percent mainly due to a higher production of copper, which would contribute with 8.1 percentage points to the sector's growth due to the onset of operations of the new projects of Toromocho, Las Bambas, and Constancia.

The sub-sector of **hydrocarbons** is projected to grow 9.4 percent in 2013, showing a higher growth rate than in 2012 (2.5 percent) as a result of the expected increased production of natural gas liquids in Pluspetrol's lot 88 given the higher external demand that has been observed since Q3-2012. The gradual expansion of Savia Peru's production of crude in lot Z-2B in Piura would also contribute to this growth. However, the growth rate in this subsector has been revised downwards compared to our September report (18.6 percent) given that the implementation of project Loop Sur of TGP, which would increase the capacity of transporting natural gas liquids by 30 thousand barrels per day and the capacity of transporting natural gas by 120 million cubic feet per day, has been reprogrammed for 2015.



28. **Non-primary sectors** grew 7.1 percent in the period January-September 2012 mainly as a result of the dynamism of construction, services, and commerce. This was offset by the moderate growth of non-primary manufacturing due to a lower production of textiles as a result of lower external demand. A higher pace of growth is foreseen in the non-primary sectors in the forecast horizon. In the case of non-primary manufacturing, this would be associated both with the growth of domestic demand and with the evolution of non-traditional exports, associated in turn with global demand, which would recover in 2014 and have a positive effect on this sector. On the other hand, construction would continue to grow, although at more moderate rates (after the recovery observed this year), supported by increased activity in the construction of home complexes, shopping centers, road works, and public infrastructure, both in Lima and in the rest of the country.











29. These projections imply that the economy would show a path of sustainable growth, with a GDP growth rate close to the potential GDP growth rate (estimated at around 6 percent).



30. Every growth forecast is subject to potential events that may divert it from the central scenario. In today's context of uncertainty, the materialization of some risks may lead GDP to register different growth rates from the ones originally projected.

The domestic risk scenario considers the possibility of having to face adverse demand shocks associated with the impact of social conflicts on private investment, as well as difficulties in the scheduled execution of public spending. On the other hand, despite recent improvements, uncertainty about how the evolution of the global economy would contribute to deteriorate macroeconomic conditions remains high. This situation would contrast with a massive capital inflow motivated by the search of profitable investment options in the emerging economies in a context of high liquidity in international markets. The risk scenarios considered in this report are discussed in the chapter Balance of risks.



**Nota**: The graph shows the probability of occurrence of GDP growth forecasts in the future, the values of which were established combining statistical analysis (using data as of September 2012) and the balance of risk of the BCRP. Thus, in each period of the forecast horizon, each pair of bands with the same shade concentrates a probability of 10%. This can be interpreted as that 10 of every 100 possible values of future GDP growth are expected to fall within the darkest bands (located in the center), that contain the baseline scenario trajectory.

1/ GDP growth is defined as the percentage change of the moving average in four quarters compared to the same quarter of the previous year. Thus, the figure in Q4 coincides with the GDP growth rate in the year.



## BOX 2 SUPPLY-DEMAND BALANCE IN THE ELECTRICITY SECTOR: 2013 - 2014

The projected supply and demand balance of the electricity sector in the period 2012-2014 shows some risks, such as a high concentration of electrical generation in the centre of the country, a heavy dependence on the Camisea gas, congestion in the transmission system, and exposure to power disruptions in the low water season and to events of generation and transmission failures.

A total of 62 unforeseen service outages of more than 15 MW were recorded between January and October 2012 (in 2011 the number of interruptions was 86). Although these events were partial and transitory, their magnitude indicates that actions must be taken to increase the power system reserve in Peru (6 disruptions exceeded 5 percent of peak demand, that is, they were power interruptions of over 250 MW).



The security of Sistema Eléctrico Interconectado Nacional (SEIN), the national interconnected power system, may be measured by the reserve margin, indicator of the excess power supply (effective power) as a percentage of the electricity demand (peak demand). Because of the risks mentioned above, the margin of reserve required to adequately ensure security in the power supply in Peru should not be lower than 20 percent.

#### **Baseline scenario**

Several assumptions have been used to project the supply-demand balance of the electricity sector in 2013-2014 and to estimate the margin of reserve in the forecast horizon:

- i. The peak demand would grow at an annual average rate of 8.8 percent, in line with the projections of the MINEM.
- ii. Effective power would grow at an annual average rate of 14.0 percent, from 7,080 MW in 2012 to 9,152 MW in 2014, in line with COES' work plan for 2013 and 2014.

MAIN GENERA (SEIN: 2	MAIN GENERATION PROJECTS 2013 - 2014 (MW) (SEIN: 2013-2014. Effective Power. MW)											
GENERATION PLANT	Zone	2013	2014	2013-14								
Hydroelectric plant HP Huanza - (Feb. 2013) HP Machupicchu II (Jun. 2014 HP Quitaracsa (Oct. 2014) HPs < 20 MW	Center South North	<b>207</b> 90 117	<b>233</b> 101 112 20	440								
Thermoelectric plant TP Fenix - GN CC (Mar. 2013) TP Reserva Fría - Talara (Jul. 2013) TP Chilca I - GN CC (Aug. 2013) TP Reserva Fría - Ilo (Sep. 2013) TP Reserva Fría - Etén (Apr. 2014)	Center North Center South North	<b>1,432</b> 521 183 268 460	<b>200</b> 200	1 632								
Total 2013 - 2014 (MW)		1,639	433	2,072								
Source: COES_OSINERGMIN_and MINEM												

- iii. The hydroelectric supply would decline by 25 percent between May and November, in line with the occurrence of severe drought episodes registered between 2004 and 2011.
- iv. The effective power of the thermal supply that operates with natural gas from Camisea would be affected by limitations since these plants currently operate at 70 percent of their capacity on average due to constraints in the fuel transport capacity. It should be pointed out that based on the period estimated for the execution of works, the expansion of the transporting capacity of the Camisea gas pipeline would be operational by 2015 given that the project implementation is currently interrupted.



This scenario shows that the reserve margin would be less than 20 percent between May and November in the following two years if there were a severe drought. Moreover, there is the risk of experiencing supply interruptions if this coincided with any failure in one of the main thermal power plants.



#### Negative event scenario

Furthermore, because the transportation of the Camisea gas from the Selva is carried out in conditions affected by uncertainty, the lack of supply of this fuel due to transport disruptions should be considered as an additional risk factor. Because of the relative importance of the power supply produced with this fuel and given the absence of policy measures to prevent these risks, the occurrence of such a negative event –an interruption of the supply of natural gas from Camisea– at any time during the next two years would imply the rationing of the power supply. Electricity rationing occurs when the power supply is lower than the demand in the SEIN, which would generate supply disruptions for a period of more than four hours.



In this scenario of total unavailability of gas from Camisea and regardless of the period in which it occurs, the projection of the supply-demand balance for 2013 - 2014 shows that rationing would be significant and that it could even exceed the maximum demand by 20 percent in the dry season of 2013 (up to 1,200 MW).

In a situation of rationing, COES provides the power supply based on the following order of priority:

- i. Essential power loads (e.g., hospitals)
- ii. Public electricity service (regulated market: residential customers, industry, and retail commerce).
- iii. Free users (free market: large industries with direct contracts with power generation and/or distribution plants).

Thus, in a scenario of disruption in the supply of natural gas from Camisea, rationing would affect more than 250 large free users concentrated in the sectors of mining, smelting, cement, chemicals, and metallurgy that currently have a contracted power supply of about 2,300 MW.

Measures aimed at promoting the alternative generation of electricity should be adopted to offset the impact of such an event on the economy. Among other measures, this could include converting all the gas-operating thermal power plants into dual technology plants and implementing the scheduled concession of power plants and transmission lines on a timely basis.

# **III.** Balance of Payments

31. In the period of January-September of this year, the current account recorded a deficit of US\$ 5.13 billion (3.5 percent of GDP), higher than the US\$ 2.55 billion deficit (2.0 percent of GDP) registered in the same period in 2011. This balance reflects the decline observed in the trade balance, which fell from a surplus of US\$ 7.30 billion in the first nine months of 2011 to US\$ 3.54 billion in the same period in 2012, which is explained by the decline of the prices of traditional exports by 6.4 percent, the slight growth in the volume of these exports (1.7 percent)<sup>1</sup>, and the dynamism in the volume of imports (up by 9.9 percent) associated with the growth of domestic demand (7.3 percent).

An aspect worth pointing out in the evolution of the balance of payments so far this year is the significant flow of long-term private capitals observed, which contrasts with the flow of US\$ 7.58 billion recorded between January and September 2011. This trend is associated with the implementation of investment projects and with the financing obtained by local enterprises abroad in a context in which pension funds reached their limit for investment abroad. The balance of payments showed a positive balance of US\$ 11.96 billion, substantially higher than the balance recorded in January-September 2011 (US\$ 3.77 billion).

Table 13         BALANCE OF PAYMENTS         (Millions of US\$)										
	20	011		2012*		20	)13*	2014*		
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	
I. CURRENT ACCOUNT BALANCE % of GDP 1. Trade balance a. Exports b. Imports	<b>-2,547</b> -2.0 7,298 34,757 -27,460	<b>-3,341</b> -1.9 9,302 46,268 -36,967	<b>-5,131</b> -3.5 3,543 34,140 -30,597	<b>-7,709</b> -3.9 3,541 44,330 -40,789	<b>-7,282</b> -3.7 4,435 45,810 -41,375	<b>-8,664</b> -4.1 2,809 47,162 -44,353	<b>-7,990</b> -3.7 3,965 48,425 -44,460	<b>-8,783</b> -3.8 3,817 53,067 -49,250	<b>-7,983</b> -3.4 5,439 54,608 -49,169	
2. Services	-1,591	-2,132	-1,618	-2,179	-2,236	-2,389	-2,020	-2,792	-2,422	
3. Investment income	-10,621	-13,710	-9,545	-12,418	-12,844	-12,596	-13,415	-13,451	-14,611	
<ol> <li>Current transfers Of which: Remittances</li> </ol>	2,367 1,989	3,200 2,697	2,489 2,108	3,347 2,830	3,364 2,852	3,511 2,969	3,480 2,959	3,643 3,073	3,610 3,073	
II. FINANCIAL ACCOUNT Of which:	6,318	8,065	17,093	19,508	22,237	11,664	12,990	11,783	11,483	
<ol> <li>Private Sector         <ol> <li>Long term</li> <li>Short term 1/</li> </ol> </li> <li>Public Sector</li> </ol>	5,714 7,575 -1,860 579	7,184 9,620 -2,436 848	15,327 13,191 2,136 1,754	17,303 14,347 2,956 2,186	20,361 16,713 3,648 1,857	11,602 10,668 934 58	12,050 10,545 1,505 935	11,972 11,168 803 -193	11,670 10,115 1,556 -192	
III. BALANCE OF PAYMENTS(=I+II)	3,771	4,724	11,962	11,800	14,955	3,000	5,000	3,000	3,500	
1/ Includes erros and omissions. IR: Inflation Report. * Forecast.										

<sup>1</sup> It should be pointed out that as a result of the intensification of measures against informal mining, gold traders' sales of gold abroad have declined from US\$ 1.55 billion in January-September 2011 to US\$ 1 billion in the same period of 2012.





32. A deficit in the current account of 3.7 percent of GDP –0.2 points lower than estimated in our September report (US\$ 427 million)– is expected in **2012** due to higher volumes of both traditional and non-traditional exports, especially agricultural, textile, and iron&steel and metallurgical products. Another factor contributing to this revision is the more moderate decline registered in the terms of trade.

In **2013** and **2014** the current account would show lower deficits than foreseen in our report of September, the projected deficits having been revised downwards from 4.1 to 3.7 percent of GDP and from 3.8 to 3.4 percent of GDP, respectively. This revision reflects the increased flow in the trade balance associated with the improvement in the terms of trade, which would continue to be partially offset by greater outflows for income factors as a result of the greater profits generated in the country by non-resident companies.

Given high international liquidity, greater bond issuances by both private financial and non-financial entities and by public financial institutions (COFIDE y MiVivienda) are being observed in foreign markets.

33. The **trade balance** in 2012 has been revised upwards from US\$ 3.5 billion (Inflation Report of September) to US\$ 4.4 billion in this report, taking into account the upward revision of the executed balance in the first semester (US\$ 438 million) given the regularizations of exports of gold and oil derivatives, as well as higher-than-expected exports in Q3.

Trade surpluses of US\$ 4.0 billion and US\$ 5.4 billion are projected for 2013 and 2014, respectively (vs. the surpluses of US\$ 2.8 billion and US\$ 3.8 billion estimated in our previous report). These surpluses are projected based on the lower deterioration of terms of trade due to lower-than expected prices of food and crude, as well as due to the higher prices of metals in the forecast horizon

and the lower growth expected in imports of capital goods associated with the postponement of some private investment projects. This would be in part offset by a lower growth in the volume of exports of minerals due to the rescheduling of the onset of some copper and gold projects.



Table 14         TRADE BALANCE         (Millions of US\$)											
	20	2011 2012*					)13*	2014*			
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12		
EXPORTS Of which:	34,757	46,268	34,140	44,330	45,810	47,162	48,425	53,067	54,608		
Traditional products Non-traditional products	27,193 7,340	35,837 10,130	25,781 8,107	33,333 10,617	34,501 10,970	35,064 11,727	36,081 12,126	39,787 12,892	40,915 13,475		
IMPORTS Of which:	27,460	36,967	30,597	40,789	41,375	44,353	44,460	49,250	49,169		
Consumer goods Inputs	4,823 13,571	6,692 18,255	5,955 14,409	7,999 19,020	8,147 19,449	8,864 19,809	9,353 19,945	10,184 21,404	10,645 21,659		
TRADE BALANCE	8,768 <b>7,298</b>	11,665 <b>9,302</b>	10,056 <b>3,543</b>	13,136 <b>3,541</b>	13,501 <b>4,435</b>	15,059 <b>2,809</b>	14,950 <b>3,965</b>	17,039 <b>3,817</b>	16,730 <b>5,439</b>		
IR: Inflation Report. * Forecast.											

34. The forecast on **exports** in 2012 has been revised up to US\$ 46 billion from US\$ 44 billion in our report of September. This projected amount of exports is still 1 percent lower than the amount recorded in 2011. The upward revision is mainly associated with the recovery observed in the prices of copper, zinc, and lead; with the higher volumes of exports of traditional products, especially copper, gold, and zinc, and with the higher exports of non-traditional products registered in the first nine months of the year.



Table 15         TRADE BALANCE       (% change)											
	201	1		2012*			)13*	2014*			
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12		
1. Value:											
a. Exports	35.9	30.1	-1.8	-4.2	-1.0	6.4	5.7	12.5	12.8		
Traditional products	36.1	29.5	-5.2	-7.0	-3.7	5.2	4.6	13.5	13.4		
Non-traditional products	35.5	32.6	10.5	4.8	8.3	10.5	10.5	9.9	11.1		
b. Imports	37.3	28.3	11.4	10.3	11.9	8.7	7.5	11.0	10.6		
2. Volume:											
a. Exports	8.7	8.5	3.2	1.1	3.2	8.6	7.8	10.9	10.7		
Traditional products	5.2	5.2	1.7	0.3	2.0	8.5	7.5	12.1	11.6		
Non-traditional products	21.5	20.2	9.3	4.1	7.0	8.9	8.3	7.1	8.3		
b. Imports	19.1	12.8	9.9	8.8	10.8	8.7	9.1	9.8	9.6		
3. Price:											
a. Exports	24.8	20.0	-4.6	-5.2	-4.1	-2.1	-1.9	1.5	1.9		
Traditional products	28.6	22.9	-6.4	-5.9	-5.6	-3.3	-2.7	0.8	1.6		
Non-traditional products	11.5	10.4	1.2	0.9	1.4	1.4	2.0	2.7	2.6		
b. Imports	15.2	13.8	1.5	1.4	1.0	0.1	-1.5	1.1	0.9		
IR: Inflation Report											

R: Inflation Repor

Exports in 2013 and 2014 would be higher than estimated in our previous report and would amount to US\$ 48 billion and US\$ 55 billion, respectively, due mainly to the improvement observed in the prices of the main mining exports. This forecast considers the onset of operations at the copper project of Antappacay (Cuzco) at end 2012, at the polimetallic project of Santander (Lima) in early 2013, and at the copper projects of Toromocho (Junín), Las Bambas (Apurímac), and Constancia (Cuzco) in 2014.





<sup>\*</sup> Forecast.







AB

35. The forecast on **imports** in 2012 has been revised upwards to over US\$ 41 billion, a figure that represents an increase of 11.9 percent compared to 2011. This higher value of imports estimated for this year reflects the actual increased imports observed in the first nine months of the year as a result of larger volumes of imports of industrial inputs, capital goods, and crude.

A level of imports of US\$ 44 billion is projected for 2013, while in 2014 imports would reach US\$ 49 billion. The volumes of imports would continue showing high growth rates in the forecast horizon (9.1 percent in 2013 and 9.6 per cent in 2014).



#### Terms of trade and commodity prices

36. Most of the prices of our main exports have declined in recent months, affected by fears in the Eurozone, risks associated with the fiscal measures in the U.S., and the slowdown of activity in China. This decline has in part reversed the trend observed in the year for most of these products.

As regards import prices, most of these prices have also corrected downwards in the last three months, in line with the partial and seasonal recovery of supply, prospects of greater harvests in the United States, and the decline in the price of oil.

Between January and October, export prices fell 4.1 percent compared to the same period of the previous year, a trend that is expected to continue in the rest of the year. On the side of the import prices, an increase of 1.6 percent

was observed between January and October compared to the same period of 2011, but this trend is expected to offset in the last two months of the year.



37. The forecast on the terms of trade in 2012 has been revised from -6.6 to -5.1 percent to show a lower decline due to the more moderate fall in the prices of exports and the lower growth of import prices. Likewise, the projections for the years 2013 and 2014 have been revised from -2.1 to -0.5 percent and from 0.4 to 1.0 percent, respectively.

Table 16         TERMS OF TRADE: 2011 - 2014         (Annual average data)										
	2011 2012*				20	)13*	2014*			
	JanOct.	Year	JanOct.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	
Terms of trade 1/	7.3	5.4	-5.6	-6.6	-5.1	-2.1	-0.5	0.4	1.0	
Price of exports 1/	23.5	20.0	-4.1	-5.2	-4.1	-2.1	-1.9	1.5	1.9	
Copper (US\$ cents per pound)	412	400	362	359	361	358	365	357	366	
Zinc (US\$ cents per pound)	102	100	88	87	88	88	90	89	94	
Lead (US\$ cents per pound)	113	109	92	91	93	93	98	95	99	
Gold (US\$ per ounce)	1,545	1,570	1,663	1,661	1,673	1,700	1,720	1,700	1,720	
Price of imports 1/	15.1	13.8	1.6	1.4	1.0	0.1	-1.5	1.1	0.9	
Oil (US\$ per barrel)	94	95	95	96	94	95	90	95	90	
Wheat (US\$ per ton)	288	280	269	280	278	330	331	324	324	
Maize (US\$ per ton)	267	262	271	281	274	295	276	259	245	
Soybean oil (US\$ per ton)	1,206	1,191	1,144	1,182	1,127	1,254	1,096	1,209	1,125	

IR: Inflation Report.

\* Forecast.

1/ Average annual % change.



38. During the year, the slowdown of growth in China –the world's major importer of commodities– has decreased global demand for these goods, generating expectations of a further contraction of global demand as well. Both of these factors have influenced the conduct of commodity prices. In October, in a context of lower activity, most of China's imports of commodities showed a slowdown compared to the same period in 2011. Imports of copper fell by 22 percent, for example. China is the main global consumer of copper and concentrates 39 percent of global consumption. On the other hand, food imports registered a rising trend fueled by the correction of the international prices of food commodities.

Table 17         CHINA: IMPORTS OF MAIN COMMODITIES         (% change)											
		Oct.11		Oct.12							
	Annual	Year acummulated	Annual	Year acummulated							
Basis commodities (refined) Copper Zinc	74.0 20.0	-15.0 1.0	-22.0 22.0	58.0 44.0							
Energy Crude	27.0	7.0	4.0	7.0							
Food commodities Wheat Maize Soybean oil	430.0 21.0 -37.0	-15.0 -37.0 -9.0	484.0 46.0 83.0	248.0 386.0 47.0							
Source: Barclays Capital.											

39. A net inflow of US\$ 13.1 billion that went to commodity investment funds was recorded in Q3, reversing the record outflow of US\$ 5.2 billion that had been observed in the previous quarter. A capital inflow of US\$ 7.3 billion –the largest since July 2011– was registered in September alone and a net inflow of US\$ 3.3

billion was registered in October (the fifth consecutive month with significant capital inflows). This development may be explained by the new monetary stimulus programs implemented by the major central banks and particularly, by the adoption of a new QE program.

Table 18         INVESTMENT FUNDS         COMMODITIES INVESTMENT FLOWS         (Billions of US\$)											
	Month	nly data			Annua	I data					
	Sep.12	Oct.12	2007	2008	2009	2010	2011	2012 (JanSep.)			
Total flow	7.3	3.3	17.0	19.5	76.8	66.1	14.6	14.7			
Precious metals	5.7	3.0	8.2	12.5	25.8	27.3	13.5	13.8			
Basis metals	0.3	0.0	1.7	1.0	5.7	3.9	0.9	0.4			
Food	0.4	-0.2	3.4	0.5	16.4	15.4	0.7	-1.7			
Energy	1.0	0.5	3.7	5.4	29.2	20.2	-0.2	2.1			

Source: Barclays Capital.

#### Copper

40. Even though the price of copper continued showing a downward during the last three months, falling from US\$ 3.66/pound in September to US\$ 3.49/pound in November (down 4.6 percent), it has accumulated an increase of 1.7 percent in the year.

Factors accounting for the recent downward trend include fears regarding a possible fiscal crisis in the United States, the situation of the Eurozone<sup>2</sup>, and above all, the evolution of activity in China, the world's major importer of copper. China's demand for refined copper has not increased significantly in Q3 or in early Q4, as it seasonally occurs, and copper inventories in this country have registered record levels in this period as well<sup>3</sup>.

A lower demand from some developed economies is expected in the forecast horizon, but this would be offset by the recovery foreseen in China and by the low levels of inventories on global metal exchanges (inventories have even declined relative to December 2011). In line with these developments, copper prices are estimated to register slightly higher levels in the forecast horizon than the ones considered in the last Inflation Report.



<sup>2</sup> The Eurozone went into recession for the second time in four years, registering a contraction of 0.1 percent in Q3-2012

<sup>3</sup> These inventories are not recorded as stock inventories.



### Zinc

41. In the past three months, the average price of zinc has declined 4.9 percent. At the end of November, it closed at an average price of US\$ 0.86 per pound, thus reversing the trend observed in the previous months and accumulating a drop of 0.5 percent in the year.

This reduction reflects less tight supply conditions in global markets and global inventories on the rise. This is consistent with the increase of mining production in the year and with the drop of demand associated with the economic contraction observed in Europe. Production has exceeded demand since 2007 after the record prices registered in December 2006 encouraged an increase in the supply of zinc, leading inventories at the London Metal Exchange (LME) to historical highs.

However, a reduction is foreseen in the surplus supply of zinc next year because low prices are causing the production of refined zinc to decrease, particularly in China, and also because the new Chinese authorities are implementing reforms that reinforce environmental regulations. In the forecast horizon, zinc would show slightly higher price levels than the ones estimated in our September Inflation Report.



# Gold

42. The price of gold dropped 1.3 percent in the last three months, from US\$ 1,745 per troy ounce in September to US\$ 1,722 per troy ounce in November. Despite this, the price of gold still shows an accumulated increase of 4.9 percent so far this year.

The recent declining trend in the price of gold has been influenced by the drop of global demand in  $Q3^4$  due to China's lower investment in this metal and purchases of jewelry and due to China's higher production in the first 9 months of the year.

However, the price of gold is still pushed upwards by a depreciated dollar after the monetary stimulus measures adopted by the FED in September, by fiscal uncertainty in the United States, the situation in the Eurozone, and conflicts in the Middle East. In these circumstances, the price of gold is estimated to remain high in the forecast horizon in a context of high uncertainty.





<sup>4</sup> Reported by the World Gold Council.



## **Financial account**

43. The flow of long term financial obligations of the private sector abroad was US\$ 14.31 billion, substantially higher than in the same period of 2011 (US\$ 8.44 billion), due to higher foreign direct investment in the country and greater long-term loans associated with the process of expansion of investment in the country. For its part, the flow of resident agents' portfolio investment abroad increased from US\$ 752 million to US\$ 1.20 billion this year.

Table 19           PRIVATE SECTOR FINANCIAL ACCOUNT FLOWS           (Millions of US\$)										
	20	11		2012*		2013*		201	14*	
-	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	
Assets (1)	-866	-1,298	-1,121	-1,956	-2,166	-2,183	-4,123	-2,350	-4,141	
Direct investment abroad	-115	-113	82	-68	82	0	0	0	0	
Portfolio investment abroad	-752	-1,185	-1,203	-1,887	-2,248	-2,183	-4,123	-2,350	-4,141	
Liabilities (2)	8,441	10,918	14,312	16,303	18,879	12,851	14,668	13,518	14,256	
Foreign direct investment in the countr	y 6,160	8,233	8,284	9,868	11,084	8,264	8,171	9,063	9,336	
Long-term loans	2,518	2,787	4,373	4,734	5,378	2,725	4,182	2,509	2,554	
Disbursements	2,918	3,886	5,280	5,845	6,595	4,043	5,440	4,041	3,941	
Amortization	-401	-1,099	-907	-1,112	-1,217	-1,318	-1,258	-1,533	-1,387	
Foreign portfolio investment in the count	try -236	-102	1,656	1,701	2,416	1,862	2,316	1,946	2,366	
Capital participation	-17	147	<sup>′</sup> 17	62	477	170	170	165	165	
Other liabilities	-220	-249	1,639	1,639	1,939	1,692	2,146	1,781	2,201	
Total (1+2) Memo:	7,575	9,620	13,191	14,347	16,713	10,668	10,545	11,168	10,115	
Percentage of GDP	5.8	5.4	9.0	7.3	8.4	5.0	4.8	4.8	4.3	
IR: Inflation Report. * Forecast.										

44. In 2012 the long term financial account of the private sector would be higher than foreseen in our Report of September and would amount to US\$ 16 billion (vs. US\$ 14.3 billion estimated in September). This upward revision is explained by non-residents' higher foreign direct investment and portfolio investment in the country, which would be offset by the higher capital flow of local institutional investors abroad.

A positive flow of US\$ 10.5 billion and US\$ 10.1 billion is foreseen for 2013 and 2014, respectively, based on the increased external financing required for the implementation of private investment projects –part of which is reinvestment– and higher external long-term liabilities of the financial sector, which would be offset by local institutional investors' purchases of assets abroad.



45. With this, the balance of the medium- and long-term external debt of the private sector would show a growing trend, rising from 9.6 percent of GDP in 2011 to 14.6 percent of GDP in 2014. This would contrast with the expected evolution of the external public debt, which would decline from 13.7 percent of GDP in 2011 to 11.7 percent of GDP in 2014, including the debt bonds held by non-residents.



46. The financial account of the balance of payments of the public sector had a flow of US\$ 1.75 billion between January and September 2012, a higher flow than the one recorded in the same period of 2011 (US\$ 580 million). The operations accounting for this flow include the purchase of sovereign bonds by non-residents (US\$ 1.55 billion) and the issuance of global bonds (US\$ 500 million) as well as the bonds issued by Cofide (US\$ 400 million) in Q1. As a result of this, this financial account would close the year with a positive flow of US\$ 1.86 billion, which includes the bonds issued by Cofide abroad (US\$ 100 million).



The issuance of bonds abroad by the financial public sector (Cofide and Fondo MiVivienda) is foreseen in 2013, but no new issuance of global bonds is foreseen in the forecast horizon.

47. The flow of **short-term** foreign capital showed a reversal from an outflow of US\$ 1.05 billion in January-September 2011 to a positive flow of US\$ 1.10 billion in the same period of this year, in line with conditions of greater domestic stability.

An inflow of short-term capital of US\$ 2.61 billion is estimated for 2012 –a balance equal to 4.5 percent of GDP–, of which 2.2 per cent is bank liabilities. It should be pointed out that these liabilities represent only 7 percent of total credit of depository entities to the private sector.



48. The accumulation of international reserves has allowed the country to continue reducing its vulnerability vis-à-vis events of abrupt reductions of external financing. Net international reserves (NIRs) now represent 33 percent of GDP, are more than 6 times the outstanding short-term external debt and approximately the total obligations of the financial system in the private sector (total liquidity).

Table 20 NIR INDICATORS										
	Nov.02	Nov.07	Nov.12							
Net International Reserves (NIR, millions of US\$) BCRP International Position (Millions of US\$)	9,767 3,241	26,348 18,632	63,216 44,993							
NIR / GDP (%) 1/	17.3	25.7	32.7							
NIR / Short term debt (# of times) 2/	1.9	3.1	6.4							
NIR / IOTAI LIQUIDITY (%)	79.8	98.5	98.2							

1/ Accumulated at the previous quarter.

2/ Includes short-term debt balance and amortizations in the next four quarters.



### BOX 3 THE PACIFIC ALLIANCE: A REGIONAL INTEGRATION INITIATIVE

Within the frame of a policy of integration to the world, Peru has since the nineties implemented a trade policy that includes a unilateral reduction of tariffs and, as part of a broader approach emphasized during the last decade, the negotiation of trade agreements with our main trading partners or with blocs of countries that have a high development potential.

Peru has signed bilateral and regional trade agreements with 52 countries: commercial agreements with 22 countries are already in force and agreements with other 30 countries are about to become effective shortly. In this way, showing a growing trade liberalization, Peru is integrated commercially with a market of 3 billion people, which represents 43 percent of the world's population and which concentrates 73 percent of global GDP.

TRADE AGREEMENTS: 2012 (*)							
In force	To become effective	Total (No. countries)					
15: Cuba, USA, Chile, Singapore, Canada, China, AELC (4), South Korea, Thailand, Mexico, Japan, Panama	30: Costa Rica, Guatemala, Venezuela, and European Union (27)	45					
7: CAN (3), Mercosur (4)		7					
22	30	52					
	TRADE In force 15: Cuba, USA, Chile, Singapore, Canada, China, AELC (4), South Korea, Thailand, Mexico, Japan, Panama 7: CAN (3), Mercosur (4) 22	TRADE AGREEMENTS: 2012 (*)In forceTo become effective15: Cuba, USA, Chile, Singapore, Canada, China, AELC (4), South Korea, Thailand, Mexico, Japan, Panama30: Costa Rica, Guatemala, Venezuela, and European Union (27)7: CAN (3), Mercosur (4)2230					

(\*) Sorted by date of enactment trade and/or signing the agreement. In the case of trading blocs, the number of countries is in parentheses.

As a result of this integration process, in 2011 ninety percent of Peru's international trade was carried out with countries with which it has trade agreement in force, about to become effective, or under negotiation.





The Peruvian commercial agenda in the near future includes completing the ongoing negotiation processes with Honduras, El Salvador, the Trans-Pacific Partnership –a bloc of 10 countries of America, Asia and Oceania, which includes 5 economies with which Peru does not have a trade agreement– and the Pacific Alliance, as well as opening new markets (India, Russia, Indonesia, Morocco and Nicaragua, among others).

#### The Pacific Alliance: A regional integration initiative

Integrated by Peru, Chile, Colombia, and Mexico, the Pacific Alliance (PA) is a regional integration initiative whose market concentrates 3.5 percent of global GDP and over 200 million people (3 percent of the world population) with a per capita income of US\$ 13.2 thousand expressed in purchasing power parity terms.

PACIFIC ALLIANCE: SELECTED INDICATORS - 2011									
	GDP (% World) (L	GDP per capita - PPP JS\$ thousand	Population (% World) s)	HDI (*)	GCI (*)	X - Goods (% World)	M - Goods (% World)	Average nominal tariff (%)	FDI inflow (% Latin America)
Pacific Alliance	<b>3.5</b>	<b>13.2</b>	<b>3.0</b>	-	-	<b>2.9</b>	<b>2.9</b>	-	<b>39.0</b>
Peru	0.4	10.1	0.4	80	61	0.3	0.2	3.7	5.5
Chile	0.4	17.4	0.3	44	33	0.4	0.4	6.0	11.6
Colombia	0.6	10.2	0.7	87	69	0.3	0.3	8.4	8.9
Mexico	2.1	14.7	1.7	57	53	1.9	2.0	8.3	13.1

(\*) Ranking in the Human Development Index (187 countries) and in the Global Competitiveness Index (144 countries). Sources: IMF, UNDP, WEF, WTO, and UNCTAD.

The bases for the constitution of the PA were established with the signing of the Framework Agreement for the Establishment of the Pacific Alliance in the IV Summit of the Alliance of the Pacific held in Chile in June 2012. The Framework Agreement establishes that the aim of the PA is to establish an extensive integration area oriented towards the free movement of goods, services, capital and people among the member countries.

The added value of the AP lies in two of its main goals: (i) deepen existing agreements on trade and related matters –e.g., rules of origin, services, and investments–, and (ii) develop an economic-commercial integration platform with global projection, particularly in the Asian-Pacific region.

The first goal is aimed to deepening existing agreements among member countries. To complement and improve existing agreements on non-tariff matters, the member countries of the PA would eliminate not less than 90 percent of the tariff universe immediately and would gradually eliminate the tariffs on other items according to a schedule of up to 7 years to be defined in the first half of 2013.

PACIFIC ALLIANCE: PROJECTED TRADE AND TRADE-RELATED ACTIONS							
Trade	Services, Investments, and other areas						
Elimination of tariffs.	Constitution of a Technical Group on Institutional Affairs in charge of implementing a Dispute Settlement Regime, among other things.						
Regulation of rules of origin, including the accumulation of origins and system of electronic certification of origin.	Joint Assembly Committee on Services and Investment in charge of identifying barriers to investment and trade in services.						
Roadmap on sanitary and phytosanitary measures.	Promote deeper integration in trade of services and capital, and assess the convenience of negotiating an agreement on these matters.						
Work plan regarding technical barriers to trade.	Cooperation in improving legal framework to promote increased productivity, competitiveness, and development.						
Implementation of interoperability of single window trade facililities, mutual recognition of Authorized Economic Operator, and customs cooperation agreement.	Several actions in terms of immigration regulations, among other actions.						

As added value for Peru, the PA would significantly expand Peru's access to the Mexican market since, unlike Peru's trade agreements with Chile and Colombia which include an almost comprehensive tariff elimination, the trade agreement between Peru and Mexico considers an immediate relief for Peruvian exports that covers less than 80 percent of the tariff universe.

As regards the second goal, the countries integrating the PA have the potential to constitute jointly an attractive platform for negotiations with other trading blocs, as well as to strengthen their attractiveness for investment from other countries. Some of the PA strengths worth pointing out include the following aspects:

- i. The macroeconomic stability of the PA is based on the stable sustained growth and moderate inflation of its country members over the last decade.
- ii. The PA bloc would be the world's fifth and sixth major economy in terms of population and GDP, respectively.
- iii. It would be the second major destination of direct investment inflows in Latin America
- It has significant complementary economic conditions because it covers the two hemispheres

   the production of agro-exports is favored by counter seasonal conditions in agriculture– and
   has access to both the Atlantic and Pacific Oceans.



v. High coincidence in the orientation of economic policy: three of its country members are members of APEC and two are members of the OECD. Moreover, all the bloc countries are included in the negotiations of the Trans-Pacific Partnership agreement.

Given the strengths and potentials of the AP, several countries are interested in the future development of this bloc. In addition to Costa Rica and Panama –observer countries of the AP–, other countries such as Australia, Spain, New Zealand, and Uruguay have expressed their interest in participating as observers in the PA.

The successful completion of the negotiations of the AP will contribute to strengthen Peru's global integration policy. This should be complemented with other actions, including the following:

- i. Develop new important trade agreements for Peru such as the Trans-Pacific Partnership agreement and a free trade agreement with India.
- ii. Implement reforms to strengthen competitiveness, and
- iii. Take advantage of the opportunities arising from trade agreements.

# **IV. Public Finances**

- 49. In the period of January-September 2012 the non-financial public sector accumulated an economic surplus of 5.0 percent of GDP –a balance higher by 0.8 percentage points than the one recorded in the same period of 2011– due mainly to the increase in the general government's current revenue in real terms (7 percent), which was higher than the real increase recorded in non-financial expenditure (4 percent). It is worth mentioning that current expenditure shows no substantial expansion in the budget execution (0 percent in real terms), whereas capital expenditure has increased 18 percent in real terms. With these results, the surplus of the last four quarters as of September 2012 amounts to 2.6 percent of GDP<sup>5</sup>.
- 50. The forecast of the general government financial spending in **2012** is lower than the one foreseen in our September report since the pace of government spending continues to be lower than expected, especially at the level of the national government. This explains that the expected fiscal surplus for this year has been revised upwards from 1.5 percent to 2.0 percent of GDP. On the other hand, the **fiscal surpluses** projected for **2013** and **2014** are the same ones estimated in the report of September, that is, a fiscal surplus of 1.1 percent in each year. These projections have been made considering the expenditure limits established in the Multi-annual Macroeconomic Framework and the levels of budget execution.

This result is consistent with a scenario in which there is still a high degree of uncertainty about the evolution of the global economy and some deterioration is observed in the external accounts. The levels of spending also consider the salary adjustments and hiring of personnel approved in the 2013 Budget along with the greater allocation of resources to the new budget resulting from 2012 savings. It should be pointed out, however, that the Financial Equilibrium Act in effect for 2013 establishes that the economic balance should show no deficit. This regulation replaces the macro fiscal rules of the Responsibility and Fiscal Transparency Act, which allowed a fiscal deficit of less than 1 percent of GDP and a maximum increase of 4 percent in real consumption expenditure.

<sup>5</sup> Based on data available at October 2012, the economic surplus in the past four quarters is 2.4 percent of GDP.



Table 21         NON FINANCIAL PUBLIC SECTOR         (% of GDP)									
	201	1	2012*			2013*		2014*	
	JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12
1. General government current revenues 1/ Real % change	<b>21.3</b> 15.0	<b>21.0</b> 13.6	<b>21.9</b> 6.6	<b>21.4</b> 5.2	<b>21.5</b> 6.7	<b>21.7</b> 6.6	<b>21.7</b> 6.5	<b>21.7</b> 6.7	<b>21.7</b> 6.6
2. General government non financial expenditure 2/ Real % change Of which: Current Real % change Gross capital formation	<b>16.0</b> -1.0 12.3 6.5 3.4	<b>18.1</b> 1.7 13.0 7.1 4.7	<b>16.1</b> 4.5 11.9 0.4 3.9	<b>19.1</b> 8.8 13.2 4.9 5.6	<b>18.7</b> 7.8 13.0 4.2 5.4	<b>19.5</b> 7.8 13.4 6.2 5.7	<b>19.5</b> 10.6 13.5 9.4 5.7	<b>19.6</b> 7.3 13.3 6.2 5.9	<b>19.6</b> 7.0 13.3 5.6 5.9
3 Others	-78.9	-0.7	0.3	0.2	0.2	0.0	0.0	0.0	0.7
4. Primary balance (1-2+3)	5.5	3.0	6.1	2.6	3.1	2.2	2.2	2.1	2.1
5. Interests 6. Overall Balance	1.3 4.2	1.2 1.9	1.2 5.0	1.1 1.5	1.1 2.0	1.1 1.1	1.0 1.1	1.0 1.1	1.0 1.1
Memo: (billions of S/.): 1. General government current revenues 2. General government non-financial expend	77.0 diture 57.8	102.1 87.8	85.4 62.7	111.4 99.1	112.9 98.0	121.6 109.3	123.1 110.9	132.0 119.2	133.4 120.4

1/ The central government includes the ministries, national universities, public agencies and regional governments. The general government has a wider coverage that includes the central government, social security, regulators and supervisors, government charity organizations and local governments.

2/ Includes accrued payments by Net payments of the Fuel Price Stabilization Fund.

IR: Inflation Report.

\* Forecast.



#### **Evolution of fiscal revenues**

51. In the third quarter the current revenues of the general government amounted to 20.8 percent of GDP –a figure higher by 0.9 percentage points than the one

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observed in the same period of 2011–as a result mainly of higher revenues from the value added tax (VAT) in a context in which the economy shows a growing trend, of other revenues associated with mining –i.e. the recently implemented Special Tax on Mining (Impuesto Especial a la Minería - IEM) and the Special Levy on Mining (Gravamen Especial a la Minería - GEM)–, and of amounts paid for tax withholdings to the Treasury.

Revenues from the income tax (6.1 percent of GDP) declined compared to Q3-2011 (6.3 percent of GDP) due mainly to lower tax collection from individuals as a result of the statistical effect associated with the exceptional income resulting from releasing the retained earnings of a mining company in 2011. If this statistical effect had not been considered, revenues from individuals' income tax would have shown an increase. On the other hand, revenues from the VAT amounted to 8.6 percent of GDP, which represented an increase of 0.3 percentage points compared these revenues in Q3-2011, in a context of growth of domestic demand and a noteworthy growth of imports.

Moreover, revenues for a total of S/. 541 million were obtained from the new mining royalty and the new mining taxes –IEM and GEM– resulting from the modification of the tax treatment and royalties to mining companies in Q3-2012. Thus, revenues from mining taxes and royalties between January and September amounted to S/. 1.52 billion.

Table 22         CURRENT REVENUES OF GENERAL GOVERNMENT         (% of GDP)										
		201	11	2012*			2013*		2014*	
		JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12
TAX REVENUES		16.1	15.9	16.6	16.2	16.3	16.4	16.6	16.4	16.5
Income tax		7.3	6.9	7.4	7.0	7.1	7.2	7.3	7.1	7.3
Value added tax		8.3	8.3	8.4	8.4	8.5	8.5	8.5	8.6	8.5
Excise tax		1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Import duties		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other tax revenues		1.3	1.4	1.6	1.6	1.6	1.6	1.7	1.7	1.7
Tax returns		-2.0	-2.0	-2.1	-2.1	-2.1	-2.1	-2.1	-2.2	-2.1
NON TAX REVENUES		5.2	5.1	5.3	5.2	5.2	5.2	5.0	5.2	5.1
TOTAL		21.3	21.0	21.9	21.4	21.5	21.6	21.7	21.6	21.7
IR: Inflation Report.										



52. In **2012** the current revenues of the general government would register a real growth of 6.7 percent, as a result of which the ratio of current revenue to GDP would be 21.5 percent of GDP, higher than in 2011 (21.0 percent) and higher than estimated in our September report (21.4 percent). In **2013** and **2014**, the current revenues of the general government are expected to grow 6.5 and 6.6 percent, respectively. Since these of growth are close to the rate of growth of the potential output, the ratio of revenues to GDP in the forecast horizon would remain at 21.7 percent of GDP.

Revenues from the **income tax** would be equal to 7.1 percent of GDP in 2012, which represents a slight real growth of these revenues compared to those registered in 2011 (6.5 percent). This growth is explained mainly by labor income, in a context of growth of formal employment, and by profit distribution. Revenues from the income tax would show a slight increase in 2013 and 2014 showing a rate of 7.3 percent of GDP in each year due to the higher expected growth of the economy.


Moreover, revenues from the **value added tax** (VAT) in 2012 would be equivalent to 8.5 percent of GDP. This slightly higher ratio than the one observed in 2011 would remain at similar levels in 2013 and 2014. It is worth pointing out that the domestic VAT is expected to register an increase as a result of gradual improvements adopted in the collection of this tax through administrative measures aimed at expanding the tax base.



The reduction enacted in the rate of the **excise tax** on fuels in mid-2011 implied a reduction of 0.1 percentage point in revenues from this tax to 0.9 percent of GDP. Since no changes are projected in the structure of this tax in 2013 and 2014, the revenues from this tax would remain at 0.9 percent of GDP in these years.





#### **Evolution of public expenditure**

53. In **Q3-2012** the non-financial expenditure of the general government grew 8.8 percent in real terms, reflecting a recovery in this component of expenditure relative to the first two quarters of the year. With this result, the non-financial public expenditure reached a ratio of 18.4 percent in GDP terms. A significant recovery was observed in this quarter in the levels of public investment –real variation of 25.9 percent–, specifically in the case of sub-national governments given that investment in the case of the national government registered a negative variation rate. The trend observed during 2012 would show that the management problems experienced at the level of sub-national governments as a result of the elections and change of authorities in 2011 have been overcome.

GEI	NERAL G	OVERNM	Table IENT NON	23 FINANCI	AL EXPEI	NDITURE		
			2011				2012	
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3
			Real % ch	nange				
CURRENT EXPENDITURE	<b>3.3</b>	<b>7.8</b>	<b>8.1</b>	<b>8.5</b>	<b>7.1</b>	<b>-3.2</b>	<b>1.2</b>	<b>2.9</b>
National government	6.8	9.6	11.3	3.5	7.6	-11.8	-4.3	-2.0
Regional governments	-0.2	2.2	1.3	21.3	6.7	10.8	11.7	9.9
Local governments	-11.9	6.9	2.4	17.7	5.0	34.6	15.7	19.0
CAPITAL EXPENDITURE	<b>-22.5</b>	<b>-15.9</b>	<b>-21.5</b>	<b>5.4</b>	<b>-10.1</b>	<b>34.1</b>	<b>1.1</b>	<b>26.4</b>
National government	7.2	3.6	-6.5	-11.8	-3.9	-31.7	-39.5	2.4
Regional governments	-10.6	-26.4	-28.2	15.0	-9.4	44.0	41.9	43.5
Local governments	-59.8	-38.7	-30.5	19.4	-17.0	213.1	74.3	44.0
TOTAL EXPENDITURE	<b>-2.1</b>	<b>0.3</b>	<b>-1.2</b>	<b>7.3</b>	<b>1.7</b>	<b>3.1</b>	<b>1.2</b>	<b>8.8</b>
National government	6.8	8.1	7.8	-0.6	5.0	-14.6	-12.7	-1.3
Regional governments	-2.3	-6.7	-8.5	18.9	1.6	17.0	19.1	18.7
Local governments	-34.8	-17.7	-17.3	18.8	-7.8	87.1	39.2	31.6
		(Contribu	ution to the	real % cha	ange)			
CURRENT EXPENDITURE	<b>2.6</b>	<b>5.3</b>	<b>5.6</b>	<b>5.3</b>	<b>4.9</b>	<b>-2.6</b>	<b>0.9</b>	<b>2.1</b>
National government	3.7	4.4	5.2	1.5	3.5	-7.1	-2.2	-1.0
Regional governments	0.0	0.3	0.2	2.4	0.9	1.6	1.5	1.4
Local governments	-1.1	0.6	0.2	1.4	0.4	2.8	1.5	1.8
CAPITAL EXPENDITURE	<b>-4.7</b>	<b>-5.1</b>	<b>-6.8</b>	<b>2.0</b>	<b>-3.2</b>	<b>5.7</b>	<b>0.3</b>	<b>6.6</b>
National government	0.6	0.6	-0.7	-1.9	-0.5	-3.1	-6.3	0.3
Regional governments	-0.4	-1.5	-1.9	1.1	-0.6	1.5	1.8	2.1
Local governments	-5.0	-4.1	-4.2	2.8	-2.1	7.3	4.8	4.2
TOTAL EXPENDITURE	<b>-2.1</b>	<b>0.3</b>	<b>-1.2</b>	<b>7.3</b>	<b>1.7</b>	<b>3.1</b>	<b>1.2</b>	<b>8.8</b>
National government	4.4	5.0	4.5	-0.4	3.0	-10.2	-8.5	-0.8
Regional governments	-0.4	-1.3	-1.7	3.5	0.3	3.2	3.3	3.5
Local governments	-6.1	-3.5	-3.9	4.3	-1.6	10.1	6.3	6.0

54. In spite of the higher rate of growth of spending observed in Q3, the non-financial expenditure of the general government in **2012** is estimated to grow by a real 7.8 percent, that is, less than estimated in our report of September (8.8 percent).

Thus, in 2012 this variable would show a level equivalent to 18.7 percent of GDP, a higher ratio than the one recorded in 2011 (18.1 percent) but lower than the one estimated in our previous report (19.1 percent). In **2013** the non-financial expenditure of the general government would grow at a level equivalent to 19.5 percent of GDP, while in 2014 it would grow 19.6 percent of GDP (rates similar to those considered in the report of September).









## Structural Economic Balance and Fiscal Impulse

55. The **structural economic balance**, indicator of the long-term fiscal position that deducts the effects of the economic cycle and the price effects of the major mining exports from the conventional economic balance, would be 0.1 percent of GDP in 2012. In 2013 the structural balance would show a negative rate of 0.5 percent of GDP, while in 2014 the structural deficit would decline to 0.2 percent of GDP.



56. The variation in the structural balance determines the **fiscal impulse**. This indicator allows us to identify changes in the fiscal position isolating the effects of the economic cycle. In 2012 the fiscal impulse would be negative by 0.6 points of GDP (contractionary stance) as a result of the slow recovery in the growth of public spending. The fiscal impulse in 2013 and 2014 is estimated at 0.7 and -0.2 percentage points of GDP, respectively.



## **Financial requirements**

57. Since the fiscal surplus in 2012 would be higher than the payment of amortizations in the year, the **financial requirements of the public sector** would be negative by S/. 6.0 billion. The lower fiscal surpluses foreseen for 2013 and 2014 would translate into less negative financial requirements in those years. The sovereign bonds issued between October and November were reopening of the issuance of bonds maturing in 2023 and 2042.

Table 24         FINANCIAL REQUIREMENTS OF THE NON FINANCIAL         PUBLIC SECTOR AND ITS FINANCING 1/         (Millions of S/.)										
		20	2011 2012* 2013*					201	4*	
		JanSep.	Year	JanSep.	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12	IR Sep.12	IR Dec.12
	I. USES 1. Amortization a. External debt Millions of US\$ b. Domestic debt Of which: Recognition bonds 2. Overall balance (negative sign indicates surplus)	-12,436 2,836 1,606 578 1,230 370 -15,273	-5,315 3,763 2,292 831 1,471 530 -9,078	-16,044 3,327 2,352 883 975 353 -19,371	-3,710 4,373 3,082 1,164 1,291 503 -8,083	-6,027 4,343 3,092 1,168 1,252 515 -10,371	<b>-2,147</b> 4,240 2,485 943 1,755 451 -6,387	<b>-2,276</b> 4,206 2,451 943 1,755 451 -6,481	-2,648 4,557 3,233 1,226 1,325 448 -7,205	-2,565 4,513 3,188 1,226 1,325 448 -7,078
	<ul> <li>I. SOURCES</li> <li>1. External Millions of US\$</li> <li>2. Bonds 2/</li> <li>3. Domestic 3/</li> </ul>	<b>-12,436</b> 1,792 647 863 -15,091	- <b>5,315</b> 2,808 1,023 1,195 -9,318	-16,044 678 255 3,847 -20,569	<b>-3,710</b> 1,444 551 4,095 -9,249	- <b>6,027</b> 1,356 517 4,196 -11,580	<b>-2,147</b> 2,457 932 1,422 -6,025	<b>-2,276</b> 2,552 981 1,422 -6,250	<b>-2,648</b> 2,133 809 1,484 -6,265	<b>-2,565</b> 2,104 809 1,484 -6,153
	Memo: Balance of gross public debt Billions of S/. % of GDP Balance of pet public debt 4/	99.5 20.9	103.3 21.2	99.8 19.4	104.1 20.0	102.2 19.5	104.7 18.6	105.8 18.7	105.2 17.2	106.2 17.3
	Billions of S/. % of GDP	33.9 7.1	39.3 8.1	19.2 3.7	31.8 6.1	28.4 5.4	25.4 4.5	24.5 4.3	18.3 3.0	17.7 2.9

1/ The effect of exchanging treasury bonds for longer-maturity bonds, as well as the effect of placements made for the prepayment of both internal and external operations has been isolated in the case of amortization and disbursements.

2/ Includes domestic and external bonds.

3/ A positive sign indicates a withdrawal or overdraft and a negative sign indicates higher deposits.

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

IR: Inflation Report.

58. After COFIDE placed 10-year debt securities for a total of US\$ 400 million in February of this year, it made a bond reopening of US\$ 100 million in November, achieving an annual yield of 3.32 percent. COFIFE expects to continue its program of external placements next year.

Moreover, Fondo Mivivienda hopes to make external placements next year in order to expand its offer of housing loans. In addition, the Municipality of Lima



<sup>\*</sup> Forecast.

has also indicated its intention to place bonds for a total of US\$ 500 million, both in the domestic market and abroad, to finance works in Peru's capital city.

59. On the side of the central government, only issuances of sovereign bonds are foreseen in the next years since priority would be given to operations that allow increasing the share of the local currency in the balance of the public debt. It is worth pointing out in this regard that the debt contracted in soles has increased and now represents 46.3 percent of the total debt. Moreover, the percentage of debt contracted at a variable rate has declined substantially since 2002 reaching a rate of 14 percent today.



60. The share of sovereign bonds held by non-residents exceeded 51 percent (S/. 17.06 billion) at September 30. In terms of the origin of bondholders, it is worth pointing out that Americans rank first, with a share of 40.2 percent of total bonds held by non-residents, followed by the members of the Eurozone with a share of 5.7 percent.



By category of sovereign bonds, the most demanded bond by non-residents continues to be the 2020 bond. As regards the segments of the sovereign bonds yield curve, foreign investors continue to be predominant in the short-term and medium-term segments of the curve and begin to position themselves with increasing significance in the long-term segment of the curve. These investors also show a preference for Global Depositary Notes (GDNs).<sup>6</sup> Of the total public debt instruments held by non-residents, 62.8 percent is GDN (S/. 10.72 billion) and the remaining 37.2 percent is sovereign bonds (S/. 6.34 billion).

Maturity date	Non residents balance	Sovereig	Sovereign bonds		Global Depositary Notes	
	Mill S/.	%	Mill S/.	%	Mill S/.	
2013	461	57.9	267	42.1	194	
2015	1,402	35.7	501	64.3	902	
2016	7	100.0	7	0.0	0	
2017	894	47.8	427	52.2	467	
2020	7,320	37.9	2,775	62.1	4,545	
2023	15	0.0	0	100.0	15	
2024	93	100.0	93	0.0	0	
2026	2,280	38.2	870	61.8	1,409	
2031	2,524	19.5	491	80.5	2,032	
2035	35	100.0	35	0.0	0	
2037	1,425	42.5	605	57.6	820	
2042	606	44.3	269	55.7	338	
TOTAL	17,062	37.2	6,340	62.8	10,722	

61. The debt indicators continue to show positive results. The average life of the public debt reached 12.8 years in Q3-2012, while the gross debt and the net debt continued to decline, recording rates of 19.4 percent and 3.7 percent of GDP, respectively, at September 2012. Considering both the increase in economic activity and the increase in public sector deposits, it is estimated that the gross debt at end 2012 would reach 19.5 percent of GDP, while in 2014 this ratio would be 17.2 percent of GDP. Replicating the same trend, the net debt would decline to 2.9 percent of GDP in 2014.

<sup>6</sup> Debt instruments created by a depositary bank of Peruvian sovereign bonds abroad. The characteristic of this financial instrument is that those who acquire GDNs in the international market can repay the service of this debt in dollars, even though the underlying asset (the sovereign bonds) that backs up the issuance of GDNs is paid locally and is denominated in Peruvian nuevos soles.





# BOX 4 FISCAL MULTIPLIERS CONTINGENT TO THE STATE OF THE ECONOMY

Determining the power that fiscal policy has to affect the evolution of economic activity is still a controversial question in macroeconomics. Traditionally, this effectiveness is calculated in terms of the ratio between the increase of GDP due to an exogenous increase in public spending and the increase in government spending, which is commonly known as the "multiplier" of public spending.

Since the early stages of macroeconomics, several hypotheses on the size of this multiplier have been proposed based on certain characteristics of the economy. Thus, the fiscal multiplier should be higher if the economy is closed to foreign trade, if it is under a fixed exchange rate regime, or if the public debt-to-GDP ratio is relatively low. However, several empirical studies that have tried to estimate these multipliers do not categorically demonstrate the validity of such assumptions since these studies generate a wide range of estimates.

For instance, Blanchard and Perotti (2001)<sup>7</sup> found a maximum multiplier of around 1.3 for the purchases of the U.S. Government, Perotti (2002)<sup>8</sup> shows that such estimates may vary among countries and over time, and Mountford and Uhlig (2002)<sup>9</sup> found that the multiplier for U.S. public spending would be around 0.5.

For Latin American economies, Restrepo and Rincón (2006)<sup>10</sup> found that the maximum multiplier would be 1.9 in Chile and 0.12 in Colombia, while in accumulated terms –long-term– the values of multipliers would converge towards 1.37 in the case of Chile and 0.17 in the case of Colombia.

<sup>7</sup> Blanchard and Perotti (2001), "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output", NBER Working Paper 7269.

<sup>8</sup> Perotti (2002), "Estimating the Effects of Fiscal Policy in OECD Countries", European Central Bank Working Paper 168.

<sup>9</sup> Mountford and Uhlig (2002), "What are the effects of Fiscal Policy Shocks?" Humboldt University Center and CEPR Discussion Paper 2002-31.

<sup>10</sup> Restrepo and Rincón (2006), "Identifying Fiscal Policy Shocks in Chile and Colombia", Banco Central de Chile, Working Paper 370.

A limitation of these studies is that they consider a linear model in which the fiscal policy response to shocks is the same both in periods of expansion and in periods of recession. From a theoretical point of view, traditional macroeconomics considers that the fiscal multiplier can be very high in the case of an economic depression and that it can be close to zero when the economy is close to its potential output level. Christiano et al (2009)<sup>11</sup> explored this and found that, in a dynamic stochastic general equilibrium model, when the lower limit of zero in the nominal interest rate is binding, the government spending multiplier can be notoriously higher than one.

In line with these ideas, several non-linear statistical models have been estimated recently with the aim of determining if there are asymmetries in the economy's response to fiscal shocks and if these are associated with the state of the economy.

Batini et al. (2012)<sup>12</sup>, for example, estimated a TVAR –Threshold Vector Autoregressive Model– to measure the fiscal policy response in episodes of recession and episodes of expansion in the United States, Europe, and Japan, and found that fiscal multipliers are higher in periods of recession than in periods of expansion. On the other hand, Auerbach and Gorodnichenko (2010)<sup>13</sup> estimated a smooth transition structural vector autoregressive model for the American economy and also found that fiscal multipliers are significantly larger in periods of recession than in periods of expansion.

The main outcomes of the estimation of a nonlinear vector autoregressive model for the Peruvian economy are discussed here. A TVAR model was used to identify the possible asymmetry in the response of fiscal policy towards the macroeconomic environment. This model was estimated with quarterly data from Q1-1992 to Q1-2012. Variables considered in the vector of endogenous variables to non-primary GDP included the current revenues of the general government, the current and the capital expenses of the general government, the monetary base (M1), and private investment, all of which were expressed as growth rates. The rate of growth of terms of trade was also included as an exogenous variable to control external factors.

The difference between the annual growth of quarterly GDP and the annual growth of potential GDP was used as a variable that determines the state of the economy. Thus, if this difference is positive the economy is in an expansionary phase, while if it is negative, the economy is going through a phase of lower growth in the economic cycle. According to this, between 1992 and early 2012, the Peruvian economy experienced periods of expansion in 51 quarters and showed levels below its potential growth in 30 quarters.

The assumptions of Blanchard and Perotti (2001) in the sense that fiscal measures (of revenue or expense) require more than one quarter to be designed and implemented were used to identify the exogenous component of changes in fiscal variables.

The analysis showed that the response of GDP to an unforeseen shock in the general government's current expenditure and capital spending shows a strong asymmetry depending on the phase of the economic cycle.

<sup>13</sup> Auerbach y Gorodnichenko (2010), "Measuring the Output Response to Fiscal Policy", NBER Working Paper.



<sup>11</sup> Christiano, Lawrence et al. (2009), "When is the Government Spending Mutiplier Large?" Northwestern University.

<sup>12</sup> Batini et al. (2012), "Successful Austerity in the United States, Europe and Japan", IMF Working Paper.

	FISCAL MULTIPLIERS - GENERAL GOVERNMENT (Accumulated effect in S/.)								
	Linear	Model	Phase of slower	economic growth	Expansion	ary phase			
	Current Expenditure	Capital Expenditure	Current Expenditure	Capital Expenditure	Current Expenditure	Capital Expenditure			
Impact	0.23	0.50	0.24	0.49	0.24	0.49			
1 Year	0.46	0.75	1.22	1.53	0.38	0.74			
2 Years	0.52	0.82	1.03	1.42	0.29	0.73			
3 Years	0.54	0.84	0.97	1.42	0.28	0.73			
4 Years	0.55	0.85	0.93	1.42	0.28	0.73			
5 Years	0.56	0.86	0.92	1.42	0.28	0.73			

Thus, when the economy is in an expansionary phase, one nuevo sol of higher current expenditure would generate 28 cents of GDP, while a nuevo sol of increased capital spending would generate 73 cents of GDP. On the other hand, when the economy is going through a phase of slower economic growth, these multipliers increase to S/. 0.92 and S/. 1.42, respectively.



In terms of elasticity, when the economy is going through an expansionary phase, the accumulated (long-term) effect of current expenditure is estimated at 0.05 and the accumulated effect of capital spending is estimated at 0.03. On the other hand, in the phase of slower economic growth, the elasticity of these variables increases to 0.15 and 0.06, respectively.

	FISCAL ELASTICITY - GENERAL GOVERNMENT (Accumulated effect)								
	Linear	Model	Phase of slower	economic growth	Expansion	ary phase			
	Current Expenditure	Capital Expenditure	Current Expenditure	Capital Expenditure	Current Expenditure	Capital Expenditure			
Impact	0.04	0.02	0.04	0.02	0.04	0.02			
1 Year	0.07	0.03	0.19	0.07	0.06	0.03			
2 Years	0.08	0.04	0.16	0.06	0.05	0.03			
3 Years	0.09	0.04	0.15	0.06	0.05	0.03			
4 Years	0.09	0.04	0.15	0.06	0.05	0.03			
5 Years	0.09	0.04	0.15	0.06	0.05	0.03			

These preliminary results show that the impact of fiscal policy is non-linear and depends on the position of the economy in the economic cycle. Because of this, the timely design and implementation of fiscal measures is very important to adopt countercyclical policy actions.

# V. Monetary Policy

62. Between September and December, the Board of the Central Bank approved to maintain the policy rate at 4.25 percent, the same rate level observed since May 2011. In this period, the Central Bank's monetary policy communiqués highlighted the temporary nature of inflation's deviation from the target range (between 1 and 3 percent) as well as that this deviation was due mostly to supply factors.





#### SUMMARY OF MONETARY POLICY COMMUNIQUÉS

**September**: The Board of the Central Reserve Bank of Peru approved to maintain the monetary policy reference rate at 4.25 percent.

This decision is based on that inflation's deviation from the target has reflected transitory supply factors in a domestic context characterized by a level of economic growth close to the economy's potential growth, and in an external context marked by uncertainty in international financial markets,





lower terms of trade, and prospects of lower growth in both developed and emerging countries. The Board oversees the inflation forecasts and inflation determinants to consider additional adjustments in monetary policy tools.

**October**: The Board of the Central Reserve Bank of Peru approved to maintain the monetary policy reference rate at 4.25 percent

This decision is based on the fact that inflation's deviation from the target has reflected mainly transitory supply factors in a domestic context characterized by an economic pace of growth close to the economy's potential rate of growth and in an external context characterized by high uncertainty in international financial markets, lower terms of trade, and prospects of lower growth in both developed and emerging countries. The Board oversees the inflation forecasts and inflation determinants to consider additional adjustments in monetary policy tools.

**November**: The Board of the Central Reserve Bank of Peru approved to maintain the monetary policy reference rate at 4.25 percent.

This decision is based on the fact that inflation's deviation from the target has reflected temporary factors on the side of supply in a domestic context characterized by an economic pace of growth close to the economy's potential rate of growth and in an external context still characterized by high uncertainty. The Board oversees the inflation forecasts and inflation determinants to consider future adjustments in monetary policy instruments.

**December**: The Board of the Central Reserve Bank of Peru approved to maintain the monetary policy reference rate at 4.25 percent.

This decision is based on the fact that inflation continues to decline and that it has returned to the target range after the shocks on the side of supply partially reversed in a domestic context characterized by an economic pace of growth close to the economy's potential growth and in an external context still characterized by high uncertainty. The Board oversees the inflation forecasts and inflation determinants to consider future adjustments in monetary policy instruments.

63. The Central Bank increased the rate of reserve requirements in domestic currency and in foreign currency to maintain credit growth at a sustainable level. The adjustments were made increasing the rate of mean reserve requirements, that is, the rate applied to the balance of the obligations of financial institutions.

Thus, the Central Bank increased the rate of mean reserve requirements by 0.5 percentage points in September and October and by 0.75 percentage points in November<sup>14</sup>. With these measures the rate of mean reserve requirements in national currency rose from 16.9 percent in September to 18.7 percent in November, while the rate of mean reserves in dollars rose from 38.9 percent in September to 40.7 percent in November.

<sup>14</sup> The 0.75 percentage point increase is a maximum increase of up to a limit of 20 percent in mean reserve requirements in national currency and of 45 percent in mean reserve requirements in foreign currency.



The rate of reserve requirements would induce financial institutions to maintain ample levels of liquidity both in national currency and in foreign currency, which reduces their vulnerability to possible scenarios of capital outflows. Moreover, as this raises the cost of financial intermediation, it also leads to rises in the lending rates of credit.

Table 26 RESERVE REQUIREMENTS MEASURES										
					Domestic Currenc	;y				
	Logal	Foreign cu	rrency	General	regime	Foreign liabilities				
	reserve requirement	Marginal reserve requirement on deposits	Increase in the average reserve requirement	Marginal reserve requirement on deposits	Increase in the average reserve requirement	Short- term				
Feb.10	6.0%			30%		35%				
Jul.10	7.0%			35%		40%				
Aug.10	8.0%	12%		45%	0.1%	50%				
Sep.10	8.5%	15%		50%	0.2%	65%				
Oct.10 1/	9.0%	25%		55%	0.2%	75%				
Nov.10	9.0%	25%		55%		75%				
Dec.10	9.0%	25%		55%		75%				
Jan.11 2/	9.0%	25%		55%		60%				
Feb.11	9.0%	25%	0.25%	55%	0.25%	60%				
Mar.11	9.0%	25%	0.25%	55%	0.25%	60%				
Apr.11	9.0%	25%	0.50%	55%	0.50%	60%				
May.12 3/	9.0%	30%	0.50%	55%	0.50%	60%				
Jul.12 4/	9.0%	30%		55%		60%				
Sep.12 5/	9.0%	30%	0.50%	55%	0.50%	60%				
Oct.12 6/	9.0%	30%	0.50%	55%	0.50%	60%				
Nov.12 7/	9.0%	30%	0.75%	55%	0.75%	60%				

1/ Since September 12, 2010, the rate of reserve requirements on short-term external debt was raised to 75%

2/ The operations in the domestic financial market of local bank's branches abroad are subject to reserve requirements since January 2011.

3/ Since May 2012, the 60 percent rate of reserve requirements extended also to new short term debts with maturities of 3 years or less. The base period was updated to April 2012.

4/ Since July 2012, the rate of reserve requirements in foreign currency on credit for foreign trade operations was lowered from 60% to 25%.

5/ Since September 2012, the deduction on either 7% of total obligations subject to reserves or S/. 80 million, the lower amount, was modified and the base period was updated to August 2012.

6/ Since October 2012, the deduction on either 8% of total obligations subject to reserves or S/. 80 million, the lower amount, was changed and the base period was updated to September 2012. The base rate was increased by a maximum of 0.5 percentage points with a limit of up to 20% in domestic currency and up to 45% in foreign currency.

7/ Since November 2012, the base period was updated to October 2012. The base rate was increased by a maximum of 0.75 percentage points, with a limit of 20% in domestic currency and 45% in foreign currency.



#### Interest rates in domestic currency

64. The 90-day corporate prime rate in domestic currency fell 11 basis points since the end of August to a level of 5.06 percent, where it has remained stable since then. Because it is a short-term rate and because it premium for credit risk is lower, this interest rate is the rate that has the highest relationship with the policy interest rate.



65. The cost of corporate credit in national currency for businesses has increased between 15 and 55 basis points, which would reflect the effect of the recent measures adopted in terms of reserve requirements. A greater increase is observed in the interest rates on consumer loans, which have increased by 214 basis points between November and August, while the interest rate on mortgage loans has fallen 16 basis points to 8.9 percent.

	Table 27 INTEREST RATE BY TYPE OF LOANS <sup>1/</sup> (%)								
			Domestic cu	rrency					
	Corporate	Large companies	Medium-size firms	Small businesses	Micro-businesses	Consumer	Mortgage		
Dec.10 Dec.11 Mar.12 Jul.12 Jul.12 Aug.12 Sep.12 Oct.12 Nov 12	4.6 6.0 6.1 6.0 5.8 5.8 5.8 5.7 6.0 6.2	5.9 7.4 7.0 7.3 7.5 7.5 7.5 7.5 7.5	10.3 11.2 11.2 11.2 10.7 11.1 11.1 11.0 10.9	23.3 23.2 23.4 23.1 22.9 22.8 22.9 23.0 23.0	27.2 33.0 32.9 33.0 32.4 32.3 33.2 33.0 32.8	40.7 38.5 35.6 34.9 35.7 36.4 38.0 38.8 38.5	9.3 9.4 9.4 9.3 9.1 9.0 8.9 8.9 8.9		
Accumulated change (bps)									
Nov.12Aug.12 Nov.12Dec.11	33 15	15 25	-14 -23	18 -14	55 -18	214 8	-16 -54		

1/ Annual active interest rates on the operations carried out in the last 30 working days.

66. As regards the deposit rates in domestic currency, the very short-term rates have increased between 3 and 17 basis points, while the 180-day and longer term rates have declined by 12 basis points.

	Table 28 INTEREST RATES IN NUEVOS SOLES (%)							
	Deposits up to 30 days	Rate on 31 to 180-day term deposits	Rate on 181 to 360-day term deposits					
Dec.10	2.2	2.9	3.8					
Dec.11	3.9	4.1	4.7					
Jan.12	3.8	4.0	4.7					
Feb.12	3.7	4.0	4.7					
Mar.12	3.7	3.9	4.5					
Apr.12	3.7	3.9	4.4					
May.12	3.7	3.9	4.3					
Jun.12	3.7	3.9	4.3					
Jul.12	3.8	3.9	4.3					
Aug.12	3.8	3.9	4.2					
Sep.12	3.7	3.8	4.3					
Oct.12	3.7	3.9	4.2					
Nov.12	3.7	4.0	4.2					
	Accumulated char	nge (bps)						
Nov.12-Sep.12	3	17	-12					
Nov.12-Dec.11	-17	-9	-53					

#### Interest rates in foreign currency

67. A lower availability of liquidity in dollars is observed as a result of the higher rates of reserve requirements in foreign currency and of banks' sales of foreign currency to the Central Bank, which has reflected in an increase of 103 basis points in the corporate prime rate in dollars since September. Moreover, the interbank interest rate reached an average level of 3.43 percent in the quarter, a rate higher by 210 basis points than the average level seen in September.



68. The increase in the short-term rates in dollars passed-through to the other lending interest rates in foreign currency in the market, especially to corporate rates, to the rates on credit for micro enterprises, and to the rates on consumer loans. Thus, the interest rates for loans to micro-businesses rose from 19.6 to 20.3 percent, the corporate rate rose from 3.8 to 4.0 percent, and the rate on consumer loans rose from 23.6 to 24.3 percent in the quarter.



Table 29 INTEREST RATE BY TYPE OF LOANS <sup>1/</sup> (%)									
			Foreign cur	rency					
	Corporate	Large companies	Medium-size firms	Small businesses	Micro-businesses	Consumer	Mortgage		
Dec.10	3.3	5.5	8.6	14.2	14.8	19.4	8.1		
Dec.11	3.0	5.4	8.9	15.0	19.2	22.0	8.2		
Mar.12	3.8	5.7	8.9	16.4	19.3	23.0	8.2		
Jun.12	4.0	6.1	8.7	15.2	20.0	22.9	8.0		
Jul.12	3.9	6.1	8.9	14.9	18.9	21.6	7.9		
Aug.12	3.8	5.9	9.2	15.8	19.8	23.3	7.9		
Sep.12	3.8	5.8	9.2	15.6	19.6	23.6	8.0		
Oct.12	3.7	5.9	9.2	15.5	20.1	24.0	8.1		
Nov.12	4.0	5.9	9.2	15.8	20.3	24.3	8.1		
		Acc	umulated ch	ange (bps)					
Nov.12Aug.12	13	-6	4	4	45	94	12		
Nov.12Dec.11	95	47	32	78	112	227	-17		

1/ Annual active interest rates on the operations carried out in the last 30 working days.

69. In the case of deposit interest rates in foreign currency, an increase was observed in all the interest rates. Thus, the average interest rates in foreign currency up to 30 days increased by 66 basis points since September, the rates on deposits up to 180 days increased by 67 basis points, and the rates on deposits for periods up to 1 year increased by 21 basis points.

Table 30 INTEREST RATES IN US DOLLARS (%)							
	Deposits up to 30 days	Rate on 31 to 180-day term deposits	Rate on 181 to 360-day term deposits				
Dec.10 Dec.11 Jan.12 Feb.12 Mar.12 Apr.12 May.12 Jun.12 Jun.12 Jul.12 Aug.12 Sep.12 Oct.12 Nov.12	0.9 0.7 0.9 1.0 1.3 1.4 2.1 1.7 1.1 0.8 0.9 0.9 0.9 1.5	1.2 1.0 1.1 1.2 1.2 1.1 1.2 1.2 1.2 1.2 1.2 1.1 1.0 1.7	1.7 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.8 1.8				
	Accumulated char	ige (bps)					
Nov.12-Sep.12 Nov.12-Dec.11	66 88	67 73	21 18				

## **Monetary operations**

70. The Central Bank's monetary operations were mainly oriented at stabilizing liquidity through interventions in the foreign exchange market to maintain the interbank interest rate close to the policy interest rate.

Between September and November 2012, the Central Bank's net placements of its instruments amounted to S/. 5.55 billion, which included mainly overnight deposits for a total of S/. 3.25 billion. In the same period, public sector deposits at the Central Bank amounted to S/. 483 million.



71. As a result of monetary sterilization operations, the participation of BCRP instruments increased in terms of the total liabilities of the Central Bank. As the following table shows, the share of monetary instruments increased from 16.0 percent of net international reserves (NIRs) in September to 18.5 percent in November 2012. Moreover, the share of total deposits for reserve requirements increased from 28.0 to 28.3 percent. Public sector deposits continued to be the main source of sterilization of foreign exchange interventions with a share of 38.4 percent of the total liabilities of the BCRP.

	SIMPLIFIED (As 9	Table 31           D BALANCE SHEET OF THE BC           % of Net International Reserves)	RP
Net	assets	Sep.12	Nov.12
I.	Net International Reserves	100% (US\$ 61,161 mills.)	100% (US\$ 63,216 mills.)
Net	liabilities		
II.	Total public sector deposits In domestic currency In foreign currency	<b>40.1%</b> 26.3% 13.8%	<b>38.4%</b> 25.4% 13.0%
III.	Total reserve requirements In domestic currency In foreign currency 1/	<b>28.0%</b> 12.0% 16.1%	<b>28.3%</b> 12.1% 16.2%
IV.	BCRP Instruments CD BCRP Term deposits	<b>16.0%</b> 12.4% 3.6%	<b>18.5%</b> 13.6% 5.0%
V.	Currency	17.9%	17.8%
VI.	Others	-2.0%	-3.0%

1/ Includes banks' overnight deposits at the Central Bank.



# Credit

72. Credit to the private sector has tended to stabilize with an annual variation of 16.4 percent after showing a growth rate of 19.6 percent at the end of 2011 and a rate of 17.1 percent in September 2012. Corporate credit has also tended to register more sustainable rates after declining from 17.9 percent in December 2011 to 15.3 percent in September 2012 and to 14.6 percent in October. On the other hand, personal credit showed a rate of 19.9 in October, while consumer credit showed a rate of 16.4 percent and mortgage credit showed a rate of 25.5 percent.



Graph 78 CREDIT BY TYPE OF LOANS: JANUARY 2010 - OCTOBER 2012 (12 month % change)





73. The dollarization of credit ratio continued declining in October although at a lesser extent than the dollarization of liquidity. The ratio of dollarization of credit fell from 43.8 percent in September to 43.6 percent in October, while the ratio of dollarization of liquidity dropped from 32.7 percent in September to 31.6 percent in October.



By credit segments, the ratio of dollarization of credit declined less in the segments of corporate credit.

RATIO OF DOLLA	RIZATIC	Table N OF CR	e 32 EDIT TO	THE PRI	VATE SE	CTOR 1/	
	Dec.08	Dec.09	Dec.10	Jul.11	Dec.11	Sep.12	Oct.12
Corporate credit	62.0	55.8	55.9	56.0	54.9	54.4	54.3
Individual credit	34.3	29.1	26.5	25.3	25.1	24.7	24.5
Consumer loans	15.1	12.2	10.8	9.9	9.8	9.7	9.7
Motor vehicle credit	80.5	68.9	64.0	64.8	69.7	74.4	75.0
Credit cards	8.8	7.7	7.2	6.7	6.3	6.4	6.7
Mortgage loans	67.9	58.0	52.2	49.7	49.2	47.0	46.4
By type of institutions							
Banks (*)	57.8	53.1	52.7	52.2	51.2	50.3	50.2
The state bank	1.7	4.7	1.8	1.1	1.1	0.1	0.1
Non financial institutions	20.4	14.0	14.4	13.6	13.4	12.4	12.2
TOTAL	53.0	46.8	46.1	45.7	44.6	43.8	43.6
Memo:							
Credit dollarization to constant exchange rate	49.2	45.1	45.1	45.3	44.6	44.7	44.7
1/ Includes hanks' branches from abroad							



# **Capital market**

74. In a context of low interest rates both in the domestic and international markets, a recovery was seen in the domestic bond market in bond issuances of non-financial companies in the quarter. In October nonfinancial firms placed bonds for S/. 576 million –the highest level observed since November 2009–, while private banks placed bonds for a total of S/. 200 million.



Non-financial companies' issuance of bonds on the international market has increased significantly, rising from US\$ 320 million in 2011 to US\$ 1.66 billion in 2012, with the bond issuances of Volcan (US\$ 600 million), Ajecorp (US\$ 300 million), and Coazucar (US\$ 325 million) standing out.

Table 33 BONDS: INTERNATIONAL MARKETS											
	Millions of U	S\$ Maturity	Rate	Wealth	Sale revenues						
2011 Lindley	320	10 Years	6.75%	258	626						
2012 Total	1,660										
Volcan	600	10 Years	5.33%	450	1,212						
Camposol	125	5 Years	9.88%	277	168						
Terminal Portuario Paita	110	25 Years	8.13%	36	169						
Ajecorp	300	10 Years	6.50%	177	1,254						
Coazucar (Gloria)	325	10 Years	6.38%	922	484						
Maestro	200	7 Years	6.75%	58	377						

75. In line with the evolution of the country risk indicator, the market interest rates of sovereign bonds continued showing a downward trend between September and November due to investors' increased demand for these bonds, as a result of which an increasing flattening was observed in the yield curve. The rates of return in the short-term segment of the curve –bonds maturing in less than 5 years– continue to be below

the Central Bank's reference rate of 4.25 percent. Between August and November, non-resident investors increased their holdings of sovereign bonds by approximately S/. 617 million –from S/. 15.51 billion to S/. 16.12 billion–, which represents 51 percent of the balance of sovereign bonds issued.



76. A relevant factor that explains in part the decline in the yields of sovereign bonds has been the drop in the country risk perception. In the last quarter, the spreads of Peru's 5-year to 10-year sovereign debt bonds, measured by the Premium of Credit Default Swaps (CDS), declined by approximately 20 basis points. Furthermore, compared to the previous year, the spread on the 10-year sovereign bonds has declined by 64 basis points, while the spread on the 5-year sovereign bonds has decreased by 67 basis points.



77. Another important factor is associated with the demand of pension funds (AFPs) for local assets since they can raise their demand for bonds and shares in the domestic market, pushing prices upwards if they are close to the limit established for their investments abroad. Today, pension funds already have 29.0 percent of their portfolio invested abroad, a level close to 30 percent of the limit set.



In November, the investments of AFPs in government bonds increased by S/. 122 million compared to September, whereas investment in shares of non-financial companies declined by S/. 579 million in the same period.

AFP: CONSOLII BY FINANC (M	Table DATED PO IAL INSTR illions of nue	34 RTFOLI UMENT	IOS MANA AND AFF	AGED			
	Dec	.11	Sep.	12	Nov	/.12	
	Amount	%	Amount	%	Amount	%	
DOMESTIC INVESTMENT     Government     Certificates and term depostis of BCRP 1/     Bonds of Central Government     Financial system     Shares and Securitised Shares     Shares and Securitised Shares	<b>58,185</b> <b>13,915</b> 886 13,029 <b>14,333</b> 5,294 <b>23,175</b> 16,881 <b>3,000</b> <b>3,763</b>	<b>71.1</b> <b>17.0</b> 1.1 15.9 <b>17.5</b> 6.5 <b>28.3</b> 20.6 <b>3.7</b> <b>4.6</b>	67,063 15,907 2,134 13,773 16,988 5,233 25,813 18,971 3,211 5,143	71.9 17.1 2.3 14.8 18.2 5.6 27.7 20.3 3.4 5.5	66,914 16,954 3,060 13,895 16,476 5,530 25,212 18,393 3,235 5,037	<b>70.8</b> <b>17.9</b> 3.2 14.7 <b>17.4</b> 5.9 <b>26.7</b> 19.5 <b>3.4</b> <b>5.3</b>	
<ol> <li>FOREIGN INVESTMENTS         <ol> <li>Government</li> <li>Financial system</li> <li>Non financial firms</li> <li>Fund managers</li> <li>Securitization companies</li> </ol> </li> </ol>	23,437 949 2,738 8,220 11,529	28.6 1.2 3.3 10.0 14.1	25,840 2,267 2,798 6,327 14,448	27.7 2.4 3.0 6.8 15.5	27,422 1,955 2,654 5,483 17,329	29.0 2.1 2.8 5.8 18.3	
III. OPERATIONS IN TRANSIT	260	0.3	372	0.4	188	0.2	
TOTAL Foreign investment / Portfolio managed	<b>81,881</b> 28.6%	100.0	<b>93,275</b> 27.7%	100.0	<b>94,524</b> 29.0%	100.0	

1/ Includes Overnight deposits and BCRP Certificates of Deposit with Restricted Negotiation (CDBCRP-NR) Source: SBS.

78. In the stock exchange market, the General Index of the Lima Stock Exchange (LSE) dropped 7.5 percent in November compared to September as a result of uncertainty in international financial markets, which has reinforced in part investors' increased demand for government bonds.



# Real estate market

79. Real estate prices have been showing a growing trend since the last quarter of 2006. In Q3-2012, prices in constant soles increased 16.2 percent relative to Q3-2011, which represents a moderation of growth compared to the previous quarter (21.5 percent).



An indicator used to assess real estate prices is the Price to Earnings Ratio (PER), which has been showing a rising trend in recent years, although a moderation in its pace of growth was observed in Q3-2012.

Table 35 PER: PRICE TO EARNING RATIO													
Medians 1/	Q2.10	Q3.10	Q4.10	Q1.11	Q2.11	Q3.11	Q4.11	Q1.12	Q2.12	Q3.12			
Jesús María	11.8	10.5	11.9	12.6	13.1	12.9	13.0	13.0	15.7	15.5			
La Molina	13.0	15.7	16.1	16.5	17.2	15.2	15.8	12.7	10.7	12.4			
Lince	15.9	14.2	14.8	14.3	15.6	16.5	14.1	13.9	14.2	14.2			
Magdalena	10.6	11.7	10.9	11.6	13.7	12.7	12.5	14.5	14.1	13.1			
Miraflores	10.9	12.1	13.3	12.9	14.0	15.6	15.7	19.0	17.0	15.3			
Pueblo Libre	14.5	13.6	14.1	15.6	15.6	15.0	15.3	15.4	16.5	15.2			
San Borja	15.8	15.5	14.7	15.3	17.2	16.6	17.2	15.3	19.5	16.8			
San Isidro	14.4	13.6	13.8	15.6	15.9	14.9	16.7	19.7	17.7	17.2			
San Miguel	13.6	12.0	14.8	17.7	15.9	13.7	12.8	14.8	15.3	16.1			
Surco	12.8	13.8	14.7	15.9	15.8	13.3	16.3	16.6	16.7	17.1			
Aggregated													
Average	13.3	13.3	13.9	14.8	15.4	14.6	14.9	15.5	15.7	15.3			
1/ Rates have bee	n calculated	d using the	sale price	median an	d rent of ea	ch district.							

Source: BCRP.



# Foreign exchange rate

80. Between late August and November, the dollar registered a nominal appreciation of 0.73 percent against the nuevo sol, the exchange rate declining from S/. 2.599 to S/. 2.58 per dollar. This appreciation of the dollar was lower than that observed in the previous quarter (2.5 percent). Greater volatility than in previous months was observed in the exchange rate during this period.

The BCRP also modified its foreign exchange intervention strategy and made intervention operations even in periods of depreciation of the nuevo sol, but these operations involved lower daily amounts. This strategy seeks to increase uncertainty about the exchange rate to generate higher exchange rate volatility. Between August and November, the Central Bank has intervened in the foreign exchange market buying FC for a total of US\$ 3.04 billion.



The supply of dollars in the period, which came mainly from private agents, such as mining companies and retail customer agents, was offset by non-residents' demand in the forward market and by the intervention of the Central Bank.



81. In the forward market, banks' net purchases of dollars decreased since the end of August from US\$ 854 million to a net sale of US\$ 75 million in November.



82. Between August and November the multilateral real exchange rate index rose from 89.4 to 90.2, which represented a real depreciation of 0.85 percent in the period. This real depreciation results from an increase of the nominal exchange rate of 0.2 percent relative to a basket of currencies registered between August and November and from a greater differential in the rates of inflation.



It should be pointed out that the appreciation of the real exchange rate has been accompanied by a significant increase of labor productivity in Peru. According to The Conference Board Total Economy Database, between 2006 and 2011 Peru ranks second in terms of growth of labor productivity, outranked only by China.





# BOX 5 SUPPLY SHOCKS AND MONETARY POLICY

In theory, under inflation targeting, the Central Bank should respond to shocks that affect inflation expectations with timely monetary policy actions. The typical example is a "demand shock", where excess demand would alter expectations by revealing future inflationary pressures. However, expectations remain anchored and the effects of the shock on inflation are transitory because economic agents know that the Central Bank will take corrective measures.

For these reasons, textbooks conclude that the Central Bank should not respond to "supply shocks" –such as price rises generated by adverse weather conditions or rises in the international prices of commodities– given that it is considered that, despite their magnitude, these shocks are limited in duration and revert rapidly. In practice, however, a supply shock may be so persistent that it can "contaminate" inflation expectations. This seems to have been the case, for example, with the increase observed in the international prices of food products until 2008.

The results of an analysis that distinguishes between "normal" or short-term supply shocks and "persistent" supply shocks estimating a vector autoregressive model similar to the one proposed by Winkelried (2012)<sup>15</sup> for the period 1994-2012 are discussed here. The model includes a variable strongly affected by supply shocks –non-core inflation, which includes external and internal

<sup>15</sup> Winkelried, D. (2012), "Traspaso del tipo de cambio y metas de inflación en el Perú", Banco Central de Reserva del Perú, Revista Estudios Económicos, 23, pp. 9 – 24.

factors–, a variable that reflects demand shocks –the output gap–, nominal depreciation, and three inflation measures that reflect the behavior of the "distribution chain"; namely, wholesale imported inflation, wholesale domestic inflation, and CPI inflation.

The particularity of this model is that it allows asymmetrical effects according to two conditions: if non-core inflation shows the "usual" behavior or if it is showing a faster pace, that is, if it is subject to a sequence of positive shocks. The pass-through effect is an elasticity that measures inflation's response to a shock that generates an increase of one percent in non-core inflation and depends on the position of the economy in the economic cycle.

The table below shows estimates of the pass-through effect in several horizons. In total CPI inflation, the pass-through of the impact in normal times is around 38 percent and three years after the shock it increases to 46 percent. This result is associated with inflation components, since non-core inflation is a component of total CPI inflation with a weight close to 30 percent. In periods of "acceleration", the pass-through is higher and three years after the shock it is approximately 60 percent, which suggests that an additional shock transmission channel is activated in stages of acceleration. This channel would be that of inflation expectations.

The table also shows the response of core inflation. In normal times the pass-through is fairly limited and rises to 14 percent three years after the shock has occurred. It should be pointed out that this figure is not statistically significant. This is also an expected result, since core inflation is more related to expectations and demand pressures than to supply shocks. However, if the supply shock occurs in a stage of acceleration, the pass-through to core inflation increases significantly to 36 percent, which would be confirming the hypothesis that inflation expectations would have been affected by this event.

It could be argued that core inflation contains some items, such as meals outside the home, which could be affected by supply shocks through a cost channel even though they are not particularly volatile. To isolate these effects, the third panel of the table shows estimates using data of inflation excluding food or energy. The estimates show again that the pass-through is not important in normal times, but becomes important when the economy experiences persistent supply shocks.

PASS-THORUGH EFFECT TO NON-CORE INFLATION SHOCK, ACCORDING TO THE SHOCK (%)										
Period	Total CP	l inflation	Core CP	'l inflation	Inflation excluding food and energy					
(month)	Normal	Persistent	Normal	Persistent	Normal	Persistent				
1	39	42	-2	4	2	15				
6	43	49	5	16	6	32				
12	44	53	8	24	9	42				
24	46	58	12	33	13	51				
36	47	60	14	36	15	53				





#### BOX 6

# RECENT REGULATORY MEASURES ADOPTED BY THE SUPERINTENDENCY OF BANKS, INSURANCE COMPANIES AND AFPs

On November 9, 2012, the SBS –Superintendence of Banks, Insurance Companies, and Administrators of Private Pension Funds (AFPs)– published resolution SBS N° 8548-2012 which amends the regulations on effective equity requirements for credit risk.

This new regulation establishes that regulatory capital requirements are defined according to the type of credit –mortgage loans, revolving and non-revolving consumer loans– and according to the currency in which credit is granted, and establishes greater requirements for credit in foreign currency. For example, a fixed rate mortgage loan in dollars with a maturity of less than 20 years to purchase a first home without a registered warranty is subject to a weight factor of 100 percent up to a loan-to-value (LTV) ratio of 80 percent and to a weight factor of 150 percent if the credit is above the 80 percent LTV ratio.

The resolution exempts mortgage loans from the new requirements until 31 December 2012 and establishes that the new requirements will apply to loans granted only after January 1, 2013. With this measure, the SBS seeks to hedge the exposure of financial entities to risks associated with the real estate market in a context of a significantly rapid growth of this market.

On December 10, 2012, the SBS published resolution N° 9076-2012, which amends the Regulation for the Administration of Foreign Exchange Risk in financial entities and reduces the limit of the overall oversold position from 15 to 10 percent of their regulatory capital, the limit of the overall overbought position from 60 to 50 percent, and the limit of the absolute value of the net position in financial products derived from foreign currency from 30 to 20 percent of their effective equity or S/. 300 million, whichever is higher.

The Regulations for the Administration of the Foreign Exchange Risk, which are in force since October 2003, sets limits on financial entities' positions in order to induce a lower exposure to foreign exchange risk and preserve the strength of the financial system. Limits have been established to the overall oversold position and the overall overbought position, understanding the overbought (oversold) as a positive (negative) balance of the overall position. The latter is the result of the sum of foreign exchange position of the balance (assets less liabilities, in foreign currency) and the net position in financial derivatives (future purchases position less future sales position in foreign currency in financial derivatives, such as forward operations of currency, currency swaps, among other derivatives).

These limits have been gradually lowered since they were implemented in 2003. In addition, on January 25, 2011, the SBS expanded regulations to include an additional limit, establishing that the absolute value of companies' net position in financial derivatives in foreign currency could not be higher than 40% of the company's effective equity or S/. 400 million, whichever amount was higher. This limit has also been gradually changed since then.

LIMITS TO THE POSITION IN FOREIGN CURRENCY OF SYSTEM'S FINANCIAL ENTITIES									
Resolution SBS N° Date:	1455-2003         351-2005           Oct. 16, 2003         Mar. 04, 2005		<b>)5</b> 005	<b>1593-2010</b> Feb. 13, 2010	<b>15536-2010</b> Nov. 28, 2010		<b>9076-2012</b> Dec. 10, 2012		
a) Limit of the overall oversold position. The overall oversold position in financial entities won't be able to be higher to this percentage of its regulatory capital.	5% 10%		15%		15%	10%			
b) Limit of the overall oversold position. The overall overbough position in financial entities won't be able to be higher to this percentage of its regulatory capital.	100% 100%		75%	60%		50%			
Resolution SBS N° Date:	<b>923-20</b> Jan. 25, 2	<b>11</b> 2011	<b>11 1</b> 2011 Oc		90 Dec.		<b>76-2012</b> .10, 2012		
c) Limit of the absolute value of the net position in financial products derived from foreign currency. Limit defines as a higher amount between a percentage of its regulatory capital and a fixed amount in soles.	40% S/. 400 m	illion		30% S/. 350 million	ion S/. 3		20% 00 million		

These measures are not prohibitive. The system's financial entities are free to buy and sell foreign currency. The regulation simply requires them to limit the currency risk incurred in when they take a markedly short or long position in foreign currency. It is worth pointing out that all the companies in the financial system currently hold positions well below the limit allowed.

Moreover, there have been initiatives aimed at amending the Regulations for the Evaluation and Classification of Debtors and the Requirement of Provisions to introduce new requirements of provisions for foreign exchange denominated credit risk, applicable to debtors classified as Normal debtors which are exposed to foreign exchange risk or which have not been evaluated. The portion of credits covered by preferred guarantees, readily liquid preferred guarantees, and preferred self-liquidating guarantees have been excluded from the application of provisions for credit exchange risk.

Companies would have until December 31, 2015, to constitute the level of provisions required for credit exchange rate risk. Although this can be carried out gradually, the rates cannot be lower than the ones indicated in the table below:

Type of loans	Provision rates						
	12/31/2013	12/31/2014	12/31/2015				
Corporate loans	0.20%	0.30%	0.40%				
Big companies loans	0.20%	0.30%	0.40%				
Medium enterprise loans	0.20%	0.30%	0.40%				
Small business loans	0.40%	0.80%	1.20%				
Micro business loans	0.80%	1.20%	1.20%				
Revolving consumer loans	0.40%	0.80%	1.20%				
Non-revolving consumer loans	0.40%	0.80%	1.20%				
Mortgage loans	0.10%	0.20%	0.30%				



The regulation in force today exempts loans granted to customers evaluated by the financial entities from loan provisions provided that the financial entities take their own measures to internalize the currency risk. The proposed regulation requires provisions whenever debtors are considered to be exposed to a currency risk or if they have not been evaluated. The current provision requirements are: 0.25 percent for operations covered by readily liquid preferred guarantees, 0.5 percent for credits in foreign currency covered by other preferred collaterals, and 1 percent for other direct credit in foreign currency.

The new requirements of foreign exchange denominated credit risk provisions are aimed at promoting that the entities in the financial system internalize this risk more effectively and at contributing to prevent the exposure of debt holders to currency mismatches through interest rates.

# **VI. Inflation**

83. Between September and November, last 12-month inflation dropped from 3.74 to 2.66 percent due to the reversal of the supply shocks that had affected agricultural products in the domestic market. As anticipated in our previous inflation reports, the reversal of these shocks has led inflation to return to the target range.



84. The annual rate of core inflation –which excludes from the CPI the items with higher volatility– fell from 3.7 to 3.2 percent between December 2011 and November 2012, while the rate of inflation without food and energy declined from 2.4 to 1.9 percent.

			ble 36 _ATION change)						
	Weight	2006	2007	2009	2000	2010	2011 -	20	12
	2009=100	2006	2007	2008	2009	2010	2011	JanNov.	12 months
I. Inflation	100.0	1.14	3.93	6.65	0.25	2.08	4.74	2.38	2.66
II. CPI excluding food and energy	y 56.4	1.28	1.49	4.25	1.71	1.38	2.42	1.50	1.92
III. Core Inflation	65.2	1.37	3.11	5.56	2.35	2.12	3.65	3.08	3.23
Goods	32.9	0.97	3.30	5.32	2.17	1.53	3.17	2.44	2.55
Services	32.2	1.85	2.88	5.86	2.56	2.72	4.13	3.73	3.92
IV. Non core inflation	34.8	0.83	5.07	8.11	-2.54	2.00	6.79	1.11	1.62
Foods	14.8	2.06	7.25	10.97	-1.41	1.18	11.50	2.53	2.43
Fuels	2.8	-1.50	6.45	-0.04	-12.66	12.21	7.54	-1.15	-1.24
Transportation	8.9	1.12	0.82	5.86	0.19	1.94	3.61	-0.33	1.91
Utilities	8.4	-3.22	0.24	7.48	-4.56	0.01	1.50	0.81	0.84
Foodstuffs	37.8	1.8	6.0	9.7	0.6	2.4	8.0	3.9	4.0



Non-core inflation, which had been affected in 2011 by rising international food prices, dropped from a rate of 6.8 percent in December 2011 to 1.6 percent in November 2012. The correction of prices in the international markets of these goods as a result of the normalization of global supply led food prices to go from recording an annual increase of 11.5 percent in December 2011 to register a rate of 2.4 percent in November 2012.

Table 37         INFLATION         (Weighted contribution)									
	Weight	2006	2007	2008	2009	2010	2011 -	20	12
	2009=100							JanNov.	12 months
I. Inflation	100.0	1.14	3.93	6.65	0.25	2.08	4.74	2.38	2.66
II. CPI without food and en	ergy 56.4	0.58	0.67	1.88	0.74	0.78	1.36	0.82	1.05
III. Core Inflation	65.2	0.79	1.80	3.20	1.34	1.38	2.38	1.99	2.09
Goods	32.9	0.31	1.05	1.69	0.68	0.50	1.04	0.79	0.82
Services	32.2	0.48	0.75	1.52	0.66	0.88	1.34	1.21	1.27
IV. Non core inflation	34.8	0.35	2.13	3.44	-1.09	0.69	2.36	0.39	0.57
Food	14.8	0.48	1.69	2.63	-0.35	0.17	1.68	0.39	0.38
Fuels	2.8	-0.09	0.36	0.00	-0.68	0.34	0.23	-0.04	-0.04
Iransportation	8.9	0.10	0.07	0.51	0.03	0.17	0.32	-0.03	0.17
Oundes	0.4	-0.14	0.01	0.30	-0.09	0.00	0.12	0.06	0.07

85. In the period January-November, inflation was mainly associated with the evolution of the prices of perishable food products. Weather anomalies affected the yields and the supply of several agricultural crops, such as citrus fruits and onion, although this situation that began to reverse since October.

The items that contributed most to increase the inflation rate between January and November were meals outside the home and education, although the rises in the prices of potatoes and onions were also noteworthy. On the other hand, the items that contributed most to reduce the rate of inflation were telephone rates, national transport, carrot, and gasoline.

Table 38 ITEM WITH THE HIGHEST WEIGHTED CONTRIBUTION TO INFLATION January - November 2012										
	Positive	Weight	% Chg.	Contribution	Negative	Weight	% Chg.	Contribution		
	Meals outside the home Education (fees and tuition) Potato Onion Water rates Evaporated milk Electricity Toiletries Essential spices Sodas	11.7 8.8 0.9 0.4 1.6 1.6 2.9 4.9 0.5 1.3	5.4 4.8 24.7 32.6 5.2 5.4 3.0 1.5 11.8 4.6	0.66 0.43 0.21 0.09 0.09 0.08 0.07 0.06 0.06	Telephone rates National transportation Carrots Gasoline and oil Sugar Citrics Papaya Rice Apparatus of recreation and culture Plane tickets	2.9 0.3 0.1 1.3 0.5 0.5 0.2 1.9 0.9 0.4	-4.2 -20.4 -31.3 -3.4 -7.1 -5.9 -14.4 -1.9 -3.7 -5.4	-0.11 -0.08 -0.06 -0.05 -0.04 -0.04 -0.03 -0.03 -0.03 -0.02		
	Total			1.85	Total			-0.52		



#### Table 39 ITEM WITH THE HIGHEST WEIGHTED CONTRIBUTION TO INFLATION December 2011 - November 2012

Positive	Weight	% Chg.	Contribution	Negative	Weight	% Chg.	Contribution
Meals outside the home	11.7	5.8	0.71	Telephone rates	2.9	-4.1	-0.10
Education (fees and tuition)	8.8	4.8	0.43	Carrots	0.1	-32.6	-0.06
Potato	0.9	27.3	0.23	Gasoline and oil	1.3	-3.5	-0.06
Urban fares	8.5	1.9	0.16	Sugar	0.5	-7.1	-0.06
Water rates	1.6	5.2	0.09	Rice	1.9	-2.7	-0.05
Evaporated milk	1.6	5.5	0.09	Apparatus of recreation and culture	0.9	-4.3	-0.03
Onion	0.4	28.4	0.09	Papaya	0.2	-12.7	-0.03
Toiletries	4.9	1.7	0.08	Pumpkin	0.1	-16.8	-0.02
Electricity	2.9	3.0	0.08	Televisions	0.5	-4.2	-0.02
Sodas	1.3	4.2	0.06	Plane tickets	0.4	-4.3	-0.02
Total			2.02	Total			-0.45



86. Imported inflation at November 2012 recorded a variation of 0.5 percent in the last 12 months, a lower rate than the one registered in December 2011 (4.9 percent). The fall in the prices of food products, such as bread, oil, and noodles, stands out because the annual variation in these prices went from 9.6 percent in December to 2.1 percent in November 2012 due to the lower prices of imported inputs and to the appreciation of the nuevo sol.





Table 40           DOMESTIC AND IMPORTED INFLATION: 2006 - 2012           (Accumulated % change)										
Weight 2006 2007 2008 2000 2010 2011 2012										
	2009=100	2006	2007	2008	2009	2010	2011	JanNov.	12 months	
I. IMPORTED CPI	10.8	0.27	10.46	2.20	-6.25	3.78	4.87	0.57	0.47	
Foods	3.0	2.08	18.83	4.75	-3.07	0.76	9.59	2.01	2.13	
Fuels	2.8	-1.50	6.45	-0.04	-12.66	12.21	7.54	-1.15	-1.24	
Electric appliances	1.3	-1.29	-1.50	-0.06	-2.39	-0.58	-1.13	-2.27	-2.38	
Others	3.7	0.64	0.47	0.46	-0.34	1.20	0.83	-4.78	0.42	
II. DOMESTIC CPI	89.2	1.28	2.84	7.44	1.35	1.87	4.72	2.61	2.93	
III. CPI	100.0	1.14	3.93	6.65	0.25	2.08	4.74	2.38	2.66	
Exchange rate		-6.40	-7.00	4.47	-7.59	-2.15	-4.24	-2.98	-4.51	

#### Inflation components at November 2012

87. The item **meals outside the home** continued showing the rising trend observed over the past five years and registered an accumulated variation of 5.8 percent between January and November. This rate is higher than the general index (2.4 percent) and higher than the rate of total inflation for food and beverages consumed at home (3.2 percent).

The 4.8 percent increase in **education tuition and fees** reflected mainly the price increase registered in the month of March (3.4 percent) before the beginning of the school year. In addition to this, increases were also recorded in the cost of education in private universities and higher education institutes during this year.

As regards **food products**, the rises in the prices of potatoes and onions stand out. Harvests and the transport of agricultural products to Lima were affected by climate alterations in the central and southern Andean areas. The price of potatoes was affected due to lower sown areas with yellow potatoes in Huánuco due to scarce rainfall and due to lower yields of white potatoes in the valleys of Lima. On its side, the price of onions was affected until the month of August by excess rainfall and temperatures below normal in Arequipa that affected the quality of the crop, but this situation normalized as from October.

**Water and electricity rates** also had an impact on inflation. Water rates increased by 5.2 percent in the period January-November, in line with the rate increases authorized by Superintendencia Nacional de Servicios de Saneamiento (Sunass). In addition to the rate adjustments, water rates were raised again by 1.7 percent in July in order that Sedapal can cover the costs of La Chira project.

The increase of 3 percent observed in **electricity rates** in the period January-November reflects the upward and downward adjustments established by the regulating entity, Osinergmin. For example, the rate was adjusted downwards in July

(-1.3 percent) due to the update of the rate formula which, among other variables, considers variations in the exchange rate and the wholesale price index. The rise in August (1.7 per cent) reflected mainly the quarterly rate adjustment of the prices of electricity generation components as well as the update of additional costs for electricity generation included in the toll of transmission. Moreover, an adjustment of 0.3 percent was established in November due to the price update of the main components of the rate: generation (-0.1 percent), transmission (1.0 percent), and distribution (-0.5 percent).

# Inflation forecast

88. The main factors affecting the trajectory of inflation are supply factors, the output gap, imported inflation, and inflation expectations. Inflation in the central forecast scenario is expected to remain within the target range and to gradually converge to the 2.0 percent target. No major inflationary pressures associated with the prices of commodities or with local climate factors are foreseen in central forecast scenario and inflation expectations would remain within the target range. In 2013 and 2014 the rate of inflation would be around 2.0 percent.

Table 41           INFLATION: 2009 - 2013           (Last 12 month % change)									
	Weight	2009	2010	2011	201	2	2013*		
					November	Year*			
CPI	100.0	0.2	2.1	4.7	2.7	2.7	2.0		
Food and energy	43.6	-0.9	3.0	7.7	3.6	4.0	2.5		
Food	37.8	0.6	2.4	8.0	4.0	4.4	2.4		
Energy	5.7	-10.4	6.8	6.0	0.7	1.0	3.2		
CPI excluding food and fuels	56.4	1.7	1.4	2.4	1.9	1.7	1.5		
* Forecast.									

## Food and fuels

External shocks are associated with the evolution of the prices of commodities (grains and oil) while domestic shocks result from abnormal weather conditions that affect the supply of perishable food products. The outlook for these shocks is discussed below.

The international price of oil has declined in recent months because there has been a higher production of crude in the United States. As a result of this, the projected price of WTI oil for the period 2012-2014 is below the levels considered in our September Inflation Report, although risk factors persist on the upside due to political tensions in the Middle East.

On the other hand, international food prices have shown a decline since August, reversing in part the increase observed in the previous months. Based on the



recent evolution and the balance of the global supply and demand for food, the forecasts on the prices of maize and soybean in the following years has been revised downwards compared with our September Inflation Report while the forecast on the price of wheat remains unchanged.

## Fuels

89. The price of West Texas Intermediate oil (WTI oil) fell 8.4 percent in the last three months, declining from US\$ 94.6 per barrel in September to US\$ 86.7 per barrel in November. With this decline, the price of oil accumulates a drop of 12.0 percent so far this year.

The downward trend in the price of oil was associated with the upward revision in the production of crude in the United States where it reached levels unheard of in at least 15 years due to the rise of non-conventional crude. This increase surprised analysts, who had projected that the production of crude oil in the United States in 2012 would remain at similar levels as in previous years. In addition to this, the OPEC also registered higher production levels than those announced, bringing about a relative market abundance of petroleum which is expected to continue in 2013. Despite this, however, upward pressures continued to be seen in the price of oil due to increasing geopolitical fears in the Middle East associated with the reduction of exports from Iran as a result of the embargo imposed on Iran by the European Union and U.S. sanctions, as well as due to tensions in Syria and Israel.

Because of the higher production of crude in the United States, the price of WTI oil is expected to show lower levels than those estimated in our September report. However, risk factors on the upside are still high. The likelihood that prices will increase remains high due to the recurring political tensions in the Middle East.




Based on these projections of the international prices of oil, slight adjustments are foreseen in the domestic prices of fuels. In addition, an increase is also foreseen in energy rates to cover the development of projects such as the implementation of new transmission lines and to finance the south gas pipeline.

#### Food

90. After the 6.2 percent monthly increase registered in July, FAO's real food price index has had a volatile behavior in recent months, accumulating a decrease of 1.0 percent between August and November. In annual terms, the index shows negative variations since December 2011. A decline of 1.5 percent was recorded In November.



Most international **food** prices have declined in the past three months, partially correcting the rises observed in the previous months. Factors accounting for this include the partial and seasonal recovery of supply (particularly in the USA), a lower livestock and industrial demand, lower oil prices and, in some periods, investors' liquidation of positions in commodities due to increased risk aversion.

The U.S. Department of Agriculture's World Agricultural Supply and Demand Estimates (WASDE) report of November says that projections of production and global final inventories confirm the tight conditions in the markets of maize, wheat and soybean oil expected for this season.



2010/11	0044440		Table 42   USDA: BALANCE OF GLOBAL SUPPLY AND DEMAND   (Millions tons)								
	2011/12	2012/13 % change		inge							
(3)	(2)	(1)	(2) / (3)	(1) / (2)							
145.3 831.0 <b>976.2</b>	127.0 880.5 <b>1,007.5</b>	132.1 839.7 <b>971.8</b>	-12.6 6.0 <b>3.2</b>	4.0 -4.6 <b>-3.5</b>							
849.2	875.4	853.8	3.1	-2.5							
127.0	132.1	118.0	4.0	-10.7							
200.8 652.1 <b>852.9</b>	198.0 696.1 <b>894.0</b>	197.9 651.4 <b>849.3</b>	-1.4 6.7 <b>4.8</b>	0.0 -6.4 <b>-5.0</b>							
654.9	696.1	675.1	6.3	-3.0							
198.0	197.9	174.2	0.0	-12.0							
3.3 41.3 <b>44.6</b> 40.8 3.6	3.6 42.4 <b>46.0</b> 42.1 37	3.7 43.1 <b>46.8</b> 43.7	8.8 2.6 <b>3.1</b> 3.2	4.5 1.6 <b>1.8</b> 3.8							
	849.2 127.0 200.8 652.1 <b>852.9</b> 654.9 198.0 3.3 41.3 <b>44.6</b> 40.8 3.6	849.2 875.4   127.0 132.1   200.8 198.0   652.1 696.1   852.9 894.0   654.9 696.1   198.0 197.9   3.3 3.6   41.3 42.4   44.6 46.0   40.8 42.1   2.6 3.7	849.2 875.4 853.8   127.0 132.1 118.0   200.8 198.0 197.9   652.1 696.1 651.4   852.9 894.0 849.3   654.9 696.1 675.1   198.0 197.9 174.2   3.3 3.6 3.7   41.3 42.4 43.1   44.6 46.0 46.8   40.8 42.1 43.7	849.2 875.4 853.8 3.1   127.0 132.1 118.0 4.0   200.8 198.0 197.9 -1.4   652.1 696.1 651.4 6.7   852.9 894.0 849.3 4.8   654.9 696.1 675.1 6.3   198.0 197.9 174.2 0.0   3.3 3.6 3.7 8.8   41.3 42.4 43.1 2.6   44.6 46.0 46.8 3.1   40.8 42.1 43.7 3.2							

Source: USDA - WASDE November 2012.

#### Maize

91. The price of maize in recent months has shown a downward behavior and accumulated a decline of 4.2 percent since September, reversing the trend observed in the first eight months of the year when the price rose 36 percent. This conduct is explained by expectations of lower production in USA and by the decline of oil prices. The average price of maize in November was US\$ 290 per ton.

The downward correction in this price is explained by the increased supply in the U.S. at a pace above historical averages, as well as by expectations of recovery in the global supply. In its November report, the USDA revised up its estimate of the world production of maize for the first time since June, mainly due to the greater harvests expected in USA. On the demand side, expectations of a greater global slowdown also caused downward pressures on the price of maize in this period.

In line with these developments, it is estimated that the price of maize will show lower levels in the forecast horizon than those estimated in the September Inflation Report. Despite the better prospects observed recently in terms of the supply, the market continues to show tight conditions.



## Wheat

92. Contrasting with the trend observed in the prices of other food commodities, the price of wheat continued showing an upward conduct in recent months, accumulating an increase of 35 percent in the year and closing November with an average price of US\$ 319 per ton.

Expectations of a lower supply have been pushing the price of wheat upwards. Factors accounting for this in recent months included continued fears of restrictions on Ukraine's exports and lower production in Australia, as well as unfavorable weather conditions that deteriorated cultivation and crop conditions in the U.S., the leading exporter of wheat.

However, in November, for the first time since it began to publish estimates for this year, the USDA revised upwards the projections of global final inventories for the 2012-2013 season due mainly to lower expected global consumption.

Graph 97 WHEAT: JANUARY 2007 - DECEMBER 2014 WHEAT USDA: ESTIMATES FOR 2012/2013 CROP YEAR (US\$/MT) (Millons of MT) Average 2002-2006 450 200 680 Produc 400 Final stocks (right axis) 2007-2012\* 244 670 180 350 300 160 660 250 200 140 650 150 l % cht 280 330 324 100 120 640 IR Sep. 12 Dec. 50 IR Dec. 12 100 630 Jan.07 Jan.08 Jan.09 Jan.10 Jan.11 Jan.12 Jan.13 May.12 Jun.12 Jul.12 Aug.12 Sep.12 Oct.12 Nov.12 lan.14 Source: USDA.

For all these reasons, the price of wheat is expected to continue showing high levels similar to those estimated in our previous report.



## Soybean oil

93. The price of soybean oil registers an accumulated decline of 8 percent so far this year, having closed with an average price of US\$ 1,021 per ton at end November after reaching a 11-month minimum low level of US\$ 990 per ton in mid-November. This decline reflects the price drops observed in the past two months.

The price corrections recorded in October (-9 percent) and November (-6 percent) are associated both with the behavior of the international price of oil and with the factors determining the supply of soybean. Like the price of maize, the price of soybean has declined over the past three months due to advanced harvests in the U.S. (new supply) and to the higher yields expected in this country. The USDA is revising the projections of global final inventories of soybean oil upwards since September due mainly to an expected recovery of production.

Based on this, the price of soybean oil is estimated to show lower levels than those considered in our previous report.



Climate anomalies affected the supply of perishable food products until the month of September in 2012, but corrected as from October. Normal climate conditions are expected in 2013.



## Potato

The rise in the price of potatoes in 2012 was influenced by lower cultivation in both the central Sierra and central Coast areas due mainly to adverse weather conditions, which have only subsided since November.

A moderate price increase is anticipated in 2013. In the first half of the year, a lower production is expected in Junín based on the information of cultivation at October 2012, although this would be partly offset by increased production in Huánuco since sowing has regularized in this region since October due to the improvement of weather conditions. Crops in the Coast region would recover in the second half of the year compared to the same semester in 2012, encouraged by the higher prices registered in that period. The price of Coast potatoes is usually higher than the price of potatoes cultivated in the Sierra, so no price decline is expected compared to the first half of the year.

## **Fresh legumes**

Although the supply of green peas –the main crop considered in this category– was affected by adverse weather conditions in Junín and Lima affected in 2012, the higher production of Huánuco offset the rise in the price of this product.

A price increase is foreseen mainly in the second half of 2013, which is when the crops cultivated in Lima get to the market. The price trend observed in recent years is being taken into account to substitute this crop by other more profitable products in the coastal valleys. Moreover, a production improvement is expected in Huánuco where improved varieties and certified seed are being used.

### Output gap and expectations

94. The central scenario in the forecast horizon considers a pace of growth close to the economy's potential output level, which implies a neutral economic cycle. Therefore, no major demand inflationary pressures are expected during this period.

The **output gap** reflects cyclical fluctuations in economic activity that become inflationary pressures on the side of demand. This gap is affected by various kinds of impulses: external impulse, fiscal impulse, private impulse, and monetary impulse.

A slower impulse is expected on the external front due to the downward revision of the growth estimated in our commercial partners and due to the decline of the terms of trade. In addition, this forecast scenario incorporates a positive fiscal impulse of 0.7 percent in 2013. Thus, the negative contribution of an external negative impulse on the output gap would be offset by the effect of the fiscal impulse.



Moreover, the forecast scenario also considers that the conditions of consumer and business confidence remain at positive levels, as reflected in the dynamism of private consumption and private investment.



The component of imported inflation is expected to show a moderation that would have a positive impact on inflation. The BCRP survey of expectations shows that financial entities and economic analysts expect the foreign exchange rate to decline gradually in the next two years, while non-financial firms expect the exchange rate to remain around S/. 2.60 per dollar.

Table 43   SURVEY ON MACROECONOMIC EXPECTATION: EXCHANGE RATE   (S/. per US\$)					
Expectations of:					
RI Jun.12	IR Sep.12	IR Dec.12*			
2.65	2.60	2.58			
2.61	2.59	2.55			
2.60	2.58	2.50			
2.65	2.61	2.58			
2.62	2.60	2.53			
2.60	2.60	2.50			
2.65	2.62	2.60			
2.70	2.65	2.60			
2.70	2.67	2.60			
2.65	2.61	2.59			
2.64	2.61	2.56			
2.63	2.62	2.53			
	RI Jun.12     2.65     2.61     2.60     2.65     2.60     2.65     2.60     2.65     2.60     2.65     2.60     2.65     2.60     2.65     2.60     2.65     2.60	Expectations of:     RI Jun.12   IR Sep.12     2.65   2.60     2.61   2.59     2.60   2.58     2.65   2.61     2.65   2.61     2.65   2.61     2.65   2.61     2.65   2.61     2.65   2.60     2.65   2.61     2.65   2.62     2.70   2.65     2.70   2.67     2.65   2.61     2.64   2.61     2.63   2.62			

\*Survey conducted during the second half of November 2012.

95. Economic agents' expectations of inflation in 2012 to 2014 have not varied compared to the survey results discussed in our September report. Thus, inflation is expected to show levels between 3.0 and 3.2 percent in 2012 and to decline thereafter to levels of between 2.5 and 3.0 percent –within the target range– in 2013 and 2014.

According to the BCRP survey of expectations, inflation expectations for the next year also show a downward behavior in recent months and fall within the target range.



The expected levels of inflation would continue declining towards a rate close to 2 percent in the next two years. The transitory increase observed in the levels of expected inflation reflected that the inflation rate was affected by supply shocks in the prices of food and energy. Towards the end of 2012, these shocks seem to have reversed and consequently corrections have been observed in inflation expectations.

Table 44     SURVEY ON MACROECONOMIC EXPECTATION: INFLATION END OF PERIOD     (%)					
		Expectations of:			
	RI Jun.12	IR Sep.12	IR Dec.12*		
Financial entities 2012 2013 2014 Economic analysts 2012 2013 2014	3.2 2.8 2.5 3.2 2.8 2.5	3.0 2.8 2.5 3.0 2.8 2.5	3.0 2.6 2.5 3.0 2.8 2.5		
Non-financial firms 2012 2013 2014	3.2 3.0 3.0	3.2 3.0 3.0	3.2 3.0 3.0		

\*Survey conducted during the second half of November 2012.



Finally, the baseline forecast scenario considers a monetary policy position which will not be substantially different in the short-term from the one implemented today. An adequate monetary policy position contributes to maintain inflation expectations anchored, especially in a context of persistent and important shocks that affect sensitive products of the CPI basket. The Central Bank keeps a close watch on developments in the global economy and the domestic economy and stands ready to adjust its monetary policy position should this be necessary to maintain inflation within the target range.

96. The evolution of the variables described above affects the trajectory of inflation in the baseline scenario. However, due to uncertainty about future developments in the domestic economy and in the global economy, other scenarios that incorporate alternative projection assumptions which divert inflation from its path in the baseline scenario are also evaluated.

This is illustrated in the following graph. The darker bands contain the path of inflation in the baseline scenario, which shows a probability of occurrence of about 70 percent. The alternative forecast scenarios, which are described in the section of balance of risks, have a total probability of occurrence of 30 percent.





# VII. Balance of Risks

97. The baseline scenario for the inflation forecast takes into account relevant data on macroeconomic and financial variables as well as information on the domestic and international environment that is complemented with qualitative information not considered in statistical data.

Because the forecast process is not free from uncertainty about future developments in the domestic and in the global economies, other scenarios based on alternative forecast assumptions are also evaluated in the balance of risks.

The balance of risks results from assessing the relative significance that each of the risk factors has on the inflation forecast. The expected impact of a risk factor on inflation depends on two components: first, the magnitude of deviation of the inflation forecast in the risk scenario compared to the baseline scenario, and second, the probability of occurrence assigned to each risk scenario. Together, these two factors determine the bias of the inflation forecast in the balance of risks.

The main risks that could divert the rate of inflation from the baseline scenario in the forecast horizon continue to be uncertainty about the evolution of the global economy and the international flow of capitals, the evolution of domestic demand and the impact of commodity prices in international markets, and adverse climate conditions.

Although the balance of these risks remains neutral like in our September report, the perception of the expected impact of each of these risks has changed. Graph 103 illustrates the expected impact of each of these risk factors on the inflation forecast in a two-year horizon.

- 98. The **downside risks** in the inflation forecast are, on the one hand, external factors associated with the contingency that an international financial crisis may unfold and, on the other hand, domestic factors associated with a context of a lower growth of the domestic demand due to delays in the implementation of investment projects.
  - a. Uncertainty about the evolution of the world economy.

Although showing lower levels than in our last Inflation Report, uncertainty in international markets remains high. Some of the most important risks include the fiscal cliff in the United States and a worsening of the debt problem in the Eurozone. The materialization of these contingencies would bring about a less severe scenario than the one observed at end 2008, with a drop of global economic activity coupled by a decline in the terms of trade. In addition, an



increase of global uncertainty could lead to a sudden and massive outflow of foreign capital.

In such a scenario, the Central Bank would use its wide availability of international reserves and various mechanisms to inject liquidity both in national currency and in foreign currency to lessen the impact of this shock on domestic financial conditions. If required, the Central Bank would respond easing monetary conditions.

## b. Lower growth of domestic demand.

This scenario considers the possibility that investment projects are postponed or cancelled. This would generate a lower growth of aggregate demand and imply, in the short term, a rate of economic growth below the economy's potential growth which would generate downward pressures on inflation.

In this scenario, the Central Bank would increase monetary stimulus seeking to lead inflation within the target range in the forecast horizon.

99. On the other hand, there are two **upside risks** in the inflation forecast associated mainly with the increase of capital inflows and the increase of commodity prices.

### c. Increased capital inflows.

The high availability of liquidity in international markets, together with few attractive investment options, in a context of high global uncertainty could bring about inflows of foreign capital to emerging economies with a good performance, such as Peru. A higher capital inflow would accelerate the expansion of credit, stimulating aggregate demand and inflation, on the one hand. On the other hand, it would generate appreciatory pressures on the Nuevo sol, which would translate into lower domestic inflation. It is estimated that an increased capital inflow would have a slightly positive net effect on inflation.

In such a scenario, the Central Bank would adjust its monetary position and adjust macro-prudential policy instruments, such as the rates of reserve requirements.

#### d. Imported inflation and adverse climate conditions.

Like in our Inflation Report of September but with a lower probability of occurrence, the risk of having higher international prices of crude and crude oil derivatives is also considered in this report given the possibility that the geopolitical tensions in the Middle East may worsen. Should this occur, global inflationary pressures would rise. In the domestic arena, the risk that weather conditions could affect the normal development of the production and supply of food products (especially agricultural products) remains. In addition to this, the risk of the limits of the electricity generation capacity is also considered as this could cause electricity rationing problems.

In a scenario like this one, the Central Bank would adjust its monetary position only if these inflationary shocks were to increase economic agents' expectations of inflation.

The balance of risks is **neutral** for the inflation forecast at end 2014. Based on the information available to date, the probability that inflation will be below the projected level of the baseline scenario is the same as the probability that it will be above this level.



**Memo**: The risk assessment describes how exogenous factors would affect the rate of inflation forecast for 2 years ahead if such risks materialized. Each bar in the graph illustrates the magnitude and direction of the effect of these factors, i.e., the expected impact in alternative forecast scenarios. This impact is calculated as the difference between the inflation forecast in the baseline scenario and inflation projections in several scenarios considering different assumptions, multiplying this difference by the probability of occurrence assigned to such alternative assumptions.

The sum of the bars -the risk balance- indicates how these risk factors as a whole would divert inflation from the baseline scenario in the medium term.

The balance of risks for the infl ation forecast is neutral in the forecast horizon. In other words, the probability that infl ation will fall below the projection in the baseline scenario is the same as the probability that it will fall above this projection. The sum of the bars in the graph is the same as zero.

### CONCLUSION

100. The recent evolution of economic activity and inflation expectations and the outlook for these variables indicate that the conditions are set for inflation to remain within the target range in the forecast horizon. Recent developments suggest that the





cost pressures generated by price increases in some commodities will decline in the short term. With this, inflation would converge to a level around 2 percent throughout 2013. The balance of risks is neutral and shows lower probabilities of downward and upward risks than the ones considered in our Inflation Report of September.

GDP will continue growing at rates close to its potential level, with a strong dynamism in domestic demand which has been offsetting the effects of the global economic slowdown on Peru's economy.

The Central Bank will continue to oversee inflation and inflation determinants to adjust, should this be necessary, its monetary stance to ensure that inflation remains within the target range.