## **INFLATION REPORT:**

## Recent trends and macroeconomic forecasts 2011-2013

### September 2011



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CENTRAL RESERVE BANK OF PERU

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#### CONTENT

#### Page

For	eword	5
Sur	nmary	6
I.	International environment	9
II.	Economic activity	41
III.	Balance of payments	57
IV.	Public finances	65
V.	Monetary policy	78
VI.	Inflation	96
VII.	Balance of risks	106

#### BOXES

1.	The worsening of the Eurozone debt crisis	23
2.	Macro-prudential policies in Latin America: objectives and tools	91
3.	The development of microfinance in Peru	94
4.	Monetary policy risk management	107

This *Inflation Report* was drawn up using data on gross domestic product, balance of payments, and operations of the non-financial public sector as of June 2011, and data on monetary accounts, inflation, financial markets and exchange rate as of August 2011.

## Foreword

- According to the Peruvian Constitution, the Central Reserve Bank of Peru (BCRP) is an autonomous public entity whose role is to preserve monetary stability.
- In order to consolidate this goal, monetary policy is implemented in the frame of an inflation targeting regime, with an inflation target of 2.0 percent, plus or minus one percentage point (between 1.0 percent 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 countries and reflects the BCRP's permanent commitment with monetary stability.
- The nature of monetary policy is preventive and therefore is 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 Central Bank considers the annual increase in the consumer price index recorded in each month and not only at year's 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 a high level 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 Central Bank will publish its next Inflation Report in December 2011.





## Summary

i. After implementing a sequence of monthly rises of 25 basis points in the policy interest rate between January and May, the Board of the Central Bank maintained the reference rate at 4.25 percent between June and September of this year. This preventive pause in the rate rises has been adopted in view of the current scenario of global economic slowdown.

Given that risks of an increased global economic deceleration and a drop in commodity prices persist, the BCRP will continue to constantly oversee the implications of these factors on the evolution of inflation and its determinants in order that actions may be taken on a timely basis if required.

ii. With an expansion of 7.7 and 9.3 percent, respectively, during the first semester, GDP and domestic demand registered lower rates than the ones observed in the same period in 2010. This result is explained mainly by lower public expenditure, since private expenditure grew even at a higher rate than the one recorded in the same period last year. In terms of private expenditure components, different dynamics were observed in consumption and investment. While the latter showed a slight slowdown, the pace of growth of private consumption accelerated to 6.4 percent (vs. 5.6 percent in the first semester of 2010).

Considering the uncertainty regarding the international environment, the forecast on GDP growth in 2011 has been revised downwards from 6.5 percent (Inflation Report of June) to 6.3 percent. Moreover, the growth forecasts for 2012 and 2013 have also been revised downwards from 6.5 percent to 5.7 and 6.3 percent, respectively.

iii. In recent months, global economic activity has shown a lower growth than projected in June. In the second quarter, global growth was approximately 2.4 percent, a lower rate than the one observed in the first quarter (3.8 percent). Most developed economies continue to grow below their potential levels, affected by the scarce dynamism of consumption and by lack of confidence about the sustainability of the public debt in some Eurozone economies. Meanwhile, growth in emerging economies has been also slowing down amid rising inflationary pressures and central banks' withdrawal of monetary stimulus. A downward correction in the price of most commodities has also been observed in recent months.

The forecasts on global growth in 2011 and 2012 have been revised downwards from 3.9 to 3.7 percent for both years.

iv. In the first semester of 2011 the operations of the non financial public sector (NFPS) recorded an economic surplus of 5.6 percent of GDP. This result, which is 3 percentage points higher than the one recorded in the same period in 2010, reflects both the increase registered in the current revenues of the general government and the reduction of non financial expenditure, especially in sub national governments (capital expenditure mainly).

A fiscal surplus of 1.0 percent is projected for 2011. This improvement relative to the result foreseen in our June Report (0.2 percent of GDP) is consistent with the favorable evolution of government revenues and with the lower growth of expenditure. A growing fiscal surplus that would reach 1.2 percent of GDP in 2012 and 1.4 percent of GDP in 2013 is also forecast.

- v. The deficit in the current account of the balance of payments in 2011 has been revised from 3.0 percent of GDP (June IR) to 2.8 percent herein due to the improvement recorded in the terms of trade. This deficit has also been revised from 3.3 to 2.6 percent of GDP in 2012 and from 3.0 to 2.3 percent of GDP in 2013 relative to our last report due to the lower growth foreseen in economic activity and its impact on the demand for imports, as well as due to a lower factor income associated with lower export prices.
- vi. Between December 2010 and August 2011 annual inflation rose from 2.08 to 3.35 percent –above the Central Bank's target range (between 1 and 3 percent)–, mainly due to the impact of the higher international prices of food inputs and fuels on domestic prices.

Nonetheless, inflation is foreseen to gradually converge to the target range during 2012 as the pressures associated with the rises in the prices of food commodities and fuels subside in the first half of the year. This scenario is consistent with an evolution of economic activity without demand inflationary pressures in the forecast horizon.

- vii. The main risks that could divert the inflation rate from the baseline scenario in the forecast horizon include the following:
  - **a. Uncertainty about the evolution of global economic activity**. The baseline scenario considers a lower growth rate in global economic activity than the one considered in our Inflation Report of June (3.7 percent versus 3.9 percent in 2011 and 2012). However, this growth rate could be even lower because of uncertainty in international markets as a result of the fiscal situation of some Eurozone economies, among other factors. This would imply a lower demand for our products from our main trading partners as well as lower export prices, both of which are factors that would have a negative effect on aggregate demand.



Should this risk materialize, monetary policy would respond by easing monetary conditions. If necessary, that is, if this greater economic slowdown were coupled by increased volatility in financial markets, the Central Bank would use its high level of international reserves and the various liquidity injection mechanisms it has to provide the financial system with liquidity in both domestic currency and foreign currency to minimize in this way the impact of this shock on domestic financial conditions.

- b. Evolution of domestic demand. In a scenario of increased uncertainty, there is the risk that domestic agents' expectations, particularly expectations about investment, may deteriorate. If expectations about investment are affected, this could generate a lower dynamism in aggregate demand and a pace of growth below potential growth which would generate downward pressures on core inflation. In such a scenario, the Central Bank would increase monetary stimulus to lead inflation to fall within the inflation target range.
- **c. Imported inflation.** Although the pace of increases in the prices of food commodities and fuels has stabilized, it is likely that higher price increases may be observed in the future if the central banks of developed countries respond to the weakening of the global economy with more expansionary quantitative monetary policies. If the shocks are persistent, they could affect the dynamics of domestic inflation through higher imported costs and lower margins for local firms, which could generate inflationary pressures. In this scenario, the Central Bank would adjust its monetary stance only if imported inflation translates into economic agents' expectations of inflation.

Weighing the impact and the probability of these risks results in a downward bias in the inflation forecast.





## I. International environment

#### **Economic activity**

1. Global growth in Q2 (2.4 percent) was lower than in Q1 (3.8 percent). Most developed countries continue growing below their potential levels with contained inflationary pressures, while emerging economies, on the other hand, show lower growth, although with significantly higher growth and inflation rates.





2. Even though some of the transitory factors affecting global economic growth, such as the supply constraints associated with the earthquake in Japan and the rise in commodity prices, would have started to stabilize, the economic recovery foreseen



to take place in Q3 has been weaker than estimated in our previous Report and also subject to increased risks.

Recent indicators of activity, such as the purchasing managers' index (PMI<sup>1</sup>), confirm this trend. The global manufacturing index and the services index have reversed their upward trend since March 2011. The global **manufacturing** index not only moderated for the sixth consecutive month in August, but also reached its lowest value since June 2009 with a level close to 50 (threshold below which there is a contraction in economic activity). The global PMI for services also showed moderation between May and August 2011 (with an index level around 52), although this moderation was lower than in the case of manufacturing.

An increased moderation in economic activity was also observed in terms of countries. For example, in August the manufacturing index was below 50 in Brazil (for the third consecutive month), China (for the second consecutive month), the Eurozone (for the first time and recording its lowest level since August 2009), and the UK (for the second consecutive month, registering its lowest level since August 2009). On the other hand, the manufacturing index in Japan has been recovering since May after having fallen below 50 in March and April. As regards the services index, the indices by countries have reflected moderation of activity, but with a lower magnitude than the one observed in manufacturing.



<sup>1</sup> The Global PMI indicator developed by JP Morgan is based on the indices of entrepreneurial activity in each country according to data on production, new orders, exports, inventories, employment, delivery time, producer prices, among the more important information considered. This indicator is compiled by ISM and Markit for several countries (USA, Japan, China, Germany, UK, France, Italy, Brazil, india, Korea, Spain, Australia, Holland, Russia, Turkey, Taiwan, Switzerland, Poland, Austria, South Africa, Denmark, Greece, Israel, Singapore, Ireland, Czech Republic, New Zealand, and Hungary).





- 3. A series of factors which have influenced a lower outlook for growth have added onto the signals evidencing a moderation of growth:
  - · Increased uncertainty due to:
    - (i) The downward revision of growth data in USA.
    - (ii) The worsening of fiscal and debt problems in some European countries (from Greece to Italy).
    - (iii) Political uncertainty about whether the debt limit would be raised in USA and Standard & Poor's (S&P) subsequent downgrade of the US sovereign debt rating.
  - The sluggish recovery of consumption in developed countries due in part to the high levels of unemployment and debt and to the decline of house prices in USA.





- Adjustments in emerging economies -e.g. China- to moderate inflationary pressures and reduce risks of bubbles in their asset markets.
- Higher risk aversion and strong volatility in financial markets, particularly during the month of August, which is increasing the probability that greater fiscal adjustments will be implemented in some developed countries and has been deteriorating consumers and investors' confidence even further.
- 4. In this context, the forecast on global growth in 2011 and 2012 has been revised downwards to 3.7 percent, maintaining a high difference between the growth rates expected in developed countries, on the one hand, and emerging economies, on the other hand. The forecast on the growth of Peru's trading partners has been revised to 3.2 percent for both years.

	Table 1WORLD GDP GROWTH: 2009 - 2013 (Annual % change)												
	% share of Peruvian exports to 2010	2009	2010	IR Jun.11	2011 IR Sep.11	2 IR Jun.11	012 IR Sep.11	IR Jun.11	2013 IR Sep.11				
Developed countries	63.6	-3.7	3.0	2.1	1.6	2.3	1.9	2.3	2.2				
1. United States	17.0	-3.5	3.0	2.5	1.5	2.7	2.0	2.7	2.4				
2. Eurozone	15.7	-4.1	1.8	1.4	1.5	1.3	1.0	1.3	1.3				
Germany	4.3	-4.7	3.6	2.6	2.8	1.6	1.3	1.6	1.6				
France	0.7	-2.7	1.5	1.4	1.6	1.4	1.1	1.4	1.4				
3. Japan	5.1	-6.2	3.9	0.1	-0.6	2.0	2.2	1.6	1.9				
4. United Kingdom	0.8	-4.9	1.4	1.6	1.0	1.9	1.5	2.0	1.9				
5. Canada	9.4	-2.8	3.2	2.8	2.3	2.4	2.2	2.4	2.4				
6. Other developed countries	15.6	-1.1	5.8	3.8	3.6	3.7	3.5	3.7	3.8				
Developing countries	36.4	2.8	7.3	6.1	6.0	5.9	5.8	5.9	5.9				
1. Sub-Saharan Africa	0.7	2.8	5.1	5.5	5.5	5.1	4.6	5.5	5.4				
2. Central and Eastern Europe	1.2	-3.6	4.5	3.7	3.8	3.9	3.6	3.7	3.7				
3. Community of Independent Countries	0.2	-6.4	4.6	4.7	4.6	4.4	4.3	4.3	4.3				
Russia	0.2	-7.8	4.0	4.4	4.3	4.2	4.2	4.0	4.0				
4. Developing Asia	17.0	7.2	9.5	7.8	7.8	7.7	7.7	7.7	7.7				
China	15.4	9.2	10.3	8.8	8.8	8.6	8.6	8.6	8.6				
India	0.6	6.8	10.1	7.9	7.9	7.7	7.7	7.7	7.7				
5. Middle East and Northern Africa	0.3	2.6	4.4	3.8	3.8	3.8	3.5	4.2	4.0				
6. Latin America and the Caribbean	17.0	-1.7	6.1	4.4	4.2	3.8	3.8	3.8	3.8				
Brazil	2.7	-0.6	7.5	4.5	4.2	3.9	3.8	4.0	4.0				
World Economy	<u>100.0</u>	<u>-0.7</u>	<u>5.0</u>	<u>3.9</u>	<u>3.7</u>	<u>3.9</u>	<u>3.7</u>	<u>3.9</u>	<u>3.9</u>				
Memo:													
BRICs 1/	18.8	5.4	9.1	7.5	7.5	7.2	7.3	7.2	7.3				
Peru's trading partners 2/	89.8	-1.4	4.4	3.5	3.2	3.4	3.2	3.4	3.3				

Source: Bloomberg, IMF, and Consensus Forecast.

1/ Brazil, Russia, India, and China.

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



5. This forecast is not only lower than the one estimated in our previous Report, but also includes higher risks on the downside given that the factors explaining the recent slowdown could intensify. More particularly, financial and debt problems in Europe and USA have become more complex. On the one hand, there is a higher probability that the crisis might spread to other larger economies in a context where there are failures in the implementation of bailout programs as well as a lack of consensus about them. On the other hand, a slow recovery of consumption and the real estate sector continues to be observed in USA. Together with the deterioration of the financial and banking systems in these regions, all of this increases the probability that the slowdown will be more severe and of a global nature.



6. In terms of countries, **United States** shows a slow recovery, which becomes more evident with the revision of the historical series of growth data. GDP in the first semester grew 0.7 percent –below the long term rate (between 2.0 and 2.5 percent)–, while the average growth rate of consumption in the same period was 1.3 percent.

USA: SE	Table 2           USA: SEASONALLY ADJUSTED GDP GROWTH (Q1 2009 - Q2 2011)           Quarterly annualized rates													
Q1.09 Q2.09 Q3.09 Q4.09 Q1.10 Q2.10 Q3.10 Q4.10 Q1.11 Q2.11														
GDP	6.7	<b>-0.7</b>	1.7	3.8	3.9	3.8	2.5	2.3	0.4	1.0				
2. Gross investment	-46.7	-22.8	2.3	36.8	31.5	2.9 26.4	2.0 9.2	-7.1	3.8	6.4 8.7				
3. Government expenditure	-32.2 e -1.7	-17.0 5.9	0.7 1.3	-3.0 -0.9	-1.2	19.5 3.7	2.3 1.0	7.5 -2.8	-5.9	-0.9				
5. Imports	-29.0 -34.0	-0.5	16.3	23.5 17.4	12.5	21.6	12.3	-2.3	7.9 8.3	3.1 1.9				

Source: Bureau of Economic Analysis (BEA).



Consumption in USA, which represents 70 percent of GDP, has been affected by:

- The slow recovery of employment. The pace of job creation has been declining over the year, which has contributed to the maintenance of high rates of unemployment. The creation of jobs in August was nil and unemployment reached 9.1 percent.
- Households' still high level of indebtedness. Since the beginning of the crisis, this level has declined 9 percent, which indicates that the deleveraging process continues.

- The continuous contraction of property prices. According to S&P/Case-Shiller (CS), in June property prices fell by an annual 4.5 percent, increasing the negative effect of households' deleveraging. It is estimated that about 20 percent of mortgage borrowers have negative equity positions.
- The reduction of consumer confidence, affected by volatility in financial markets and by problems in Congress negotiations to reduce the deficit and raise the government's debt limit. In August, the consumer confidence index of the University of Michigan fell to minimum levels unheard of since May 1980.





Other spending components show an irregular evolution. Non residential investment has been recovering consistently, but the residential sector is still at low levels and without showing signs of stabilization. Exports, on the other hand, have grown significantly, but the simultaneous increase of imports has implied a lower contribution of the former to GDP. Government expenditure has



had a negative impact on growth which would not be reversed given the fiscal adjustment programs adopted recently.

This evolution of economic activity takes place in a context of still low, yet rising, inflationary pressures. The leading indicators (consumer prices, producer prices, and the price deflator of personal consumption expenditure) show an increase of inflationary pressures since December 2010, whose rapid increase has constrained monetary policy actions. In August, the FED announced that it would maintain low rates at least until mid-2013 and so far has not announced an additional monetary stimulus program (or QE3).



Along with the slow evolution of growth so far this year, monetary and fiscal policy's little margin of action –due to the high fiscal deficit and the need for adjustments– has brought about a significant reduction in growth expectations for the rest of 2011 and 2012 to levels below the long-term rates. In this context, the growth of the United States has been revised downwards from 2.5 to 1.5 percent in 2011, from 2.7 to 2.0 percent in 2012, and from 2.7 to 2.4 percent in 2013 compared to our last Inflation Report.



16

7. In **Europe**, growth prospects have also moderated due mostly to the debt problems and their impact on confidence. In Q2, the Eurozone grew 0.1 percent and even larger and better performing economies, such as Germany and France, registered little growth due to a lower-than-expected recovery of consumption and to the slowdown of manufacturing.

At the same time, growth prospects for the economies with debt problems have deteriorated due to tighter financing conditions and the implementation of fiscal adjustment measures, which have also been adopted in Spain and Italy. These two countries have had to resort to more stringent austerity programs to avoid debt moratorium problems. The region is estimated to grow 1.5 and 1.0 percent in 2011 and 2012, respectively. The growth forecast for 2012 is lower than the one estimated in our previous Report.







In a context of moderate inflationary pressures, the low growth rates recorded in most European countries led the ECB to moderate the rise in policy interest rates in recent months. The last rise was carried out in July when the policy rate was raised by 25 bps. (from 1.25 percent to 1.5 percent). Moreover, the ECB has also intensified its asset purchase program to relieve the financial stress faced by the economies in the region.

Table 3 FISCAL DEFICIT AND PUBLIC DEBT: 2009 - 2011												
	Fi	scal Deficit (% G	DP)	Pu	blic debt (% GD	P)						
	2009	2010	2011*	2009	2010	2011*						
Spain	11.1	9.2	6.5	53.3	60.1	70.0						
Greece	15.4	10.5	9.8	126.8	142.8	151.8						
Italy	5.4	4.6	4.0	116.1	119.0	120.3						
Ireland	14.3	32.4	10.5	65.6	96.2	112.0						
Portugal	10.1	9.1	5.9	83.0	93.0	101.7						

(\*) Forecast.

Source: Bloomberg, Eurostat, and Moody's.

8. **Japan** experienced a contraction of 1.2 percent in Q2 which stemmed from the earthquake that hit this country in March. This contraction was lower than expected due to the increase of government investment, which grew 3 percent (consumption dropped 0.1 percent and private investment 1.9 percent). Growth is expected to return to the positive path in Q3 and Q4, when it would be driven by increased government investment associated with the reconstruction process as well as by a slight rebound of consumption and private investment. No major improvements are foreseen in terms of exports due to the lower outlook for global trade.

Other Asian developed countries registered a slowdown in Q2 compared to Q1-2011 due to the low performance of their exports as a result of the moderation of demand in Japan and USA.

9. The emerging economies continued growing at high rates, with an estimated expansion of 4.2 percent in Q2, even though this rate is lower than the one recorded in Q1 (7.2 percent). Growth in these economies continues to be driven by the largest emerging economies (i.e. China and India).

After growing at a rate of 9.8 percent in Q4-2010 and 9.7 percent in Q1-2011, **China** grew 9.5 percent in Q2. The economy shows signals of a slowdown due to the measures implemented by the government to prevent an overheating of the economy and the increase of inflation. Several indicators of activity show



a similar downward trend: the sustained drop in the manufacturing PMI, the volatility of exports and imports, and the drop of bank loans in July are worth pointing out.

Despite the measures implemented by the government, inflation has continued to increase since April, so it is possible that new adjustments will be adopted. To combat inflation, the government has raised the interest rate on 3 occasions (from 5.81 to 6.56 percent) and the rate of reserve requirements on 6 occasions (from 18.5 to 21.5 percent) so far this year and has announced limits to bank loans, rate rises and quotas for mortgage loans, among other measures.

Due to the adjustments made to control inflation and due to the lower dynamism observed in global economic activity, it is estimated that China's growth will continue slowing down in Q3 and Q4-2011, stabilizing thereafter around 9 percent during 2012. A similar growth rate is expected in 2013.

CHINA: INDI	Table 4 CHINA: INDICATORS OF ACTIVITY (2010 - 2011)												
	2010				2011								
	December	January	February	March	April	Мау	June	July					
Manufacturing PMI	53.9	52.9	52.2	53.4	52.9	52.0	50.9	50.7					
Industrial Production(12 month % change)	13.5%		14.9%	14.8%	13.4%	13.3%	15.1%	14.0%					
Retail sales (12 month % change)	19.1%	19.9%	11.6%	17.4%	17.1%	16.9%	17.7%	17.2%					
Exports (12 month % change)	17.9%	37.7%	2.4%	35.8%	29.9%	19.4%	17.9%	20.4%					
Imports (12 month % change)	25.6%	51.0%	19.5%	27.3%	21.8%	28.4%	19.3%	22.9%					
New loans (Billions of yuan)	481	1,042	536	679	740	552	634	493					
CPI (12 month % change)	4.6%	4.9%	4.9%	5.4%	5.3%	5.5%	6.4%	6.5%					
Food prices (12 month % change)	9.6%	10.3%	11.0%	11.7%	11.5%	11.7%	14.4%	14.8%					
Source: Bloomberg.													







10. Latin American economies recorded high growth rates until Q2, even though these rates were lower than the ones observed in Q1. Private consumption and domestic demand led the recovery, which was also favored by still high commodity prices and increased exports.

The countries in the region faced upward inflationary pressures which, in some cases, led inflation to fall above the target range despite the partial correction of the international prices of food commodities. In recent months, however, signals of deceleration and some moderation have been observed in inflationary pressures. Together with global economic risks, these factors have led some countries to make a pause in the withdrawal of monetary stimulus. In August, for example, Chile, Colombia and Peru maintained their interest rates and Brazil unexpectedly reduced its policy rate. The region is expected to grow 4.2 percent this year and 3.8 percent in 2012.



#### **Financial markets**

- 11. Since the publication of our last Inflation Report, financial markets have been affected by developments that have generated increased volatility or risk aversion:
  - The worsening of the debt crisis in the Eurozone. Greece's debt crisis and fears of contagion of the crisis to other economies like Spain and Italy, the lack of consensus between political leaders, and the little credibility about the effectiveness of the measures adopted have prevented the crisis from being resolved more rapidly.
  - The temporary crisis of US payments, fears of a default of the US sovereign debt, and S&P's subsequent downgrade of the US sovereign debt from AAA to AA+ (with a negative outlook).
  - Fears of a global slowdown, particularly during the month of August, after growth data in some developed countries (mainly USA and the Eurozone) in Q2-2011 revealed a weak evolution below market expectations in this quarter.



All these factors affected the Eurozone sovereign debt markets, the major bourses and foreign exchange markets, as well as credit spreads. In contrast with what happened in Europe, money markets in the United States showed no significant variations. The events generating greater volatility took place mostly in August.

#### Stock markets

12. So far this year, stock markets have recorded drops due to events of increased risk aversion associated with fears of global economic slowdown, the Eurozone sovereign debt crisis, and the temporary payments crisis in USA.





The drop of stock markets in the Eurozone stands out, particularly in the case of the Greece stock exchange which dropped by over 35 percent. In Asian bourses, these drops ranged between 5 (Malaysia) and 19 percent (India). It is worth mentioning that the stock markets of Hong Kong, Taiwan, and Korea fell between 8 and 14 percent, affected both by Japan's sluggish recovery and by the country's downgrade. In Latin America, Brazil's stock exchange market fell 19 percent.

#### **Developed sovereign debt markets**

13. Conditions worsened significantly in the Eurozone sovereign debt markets after Greece's credit default swaps (CDS) started increasing since June and reached a maximum of 2,568 bps on July 18. Ireland and Portugal's CDS showed the same trend, recording peaks of 1,214 and 1,196 bps, respectively. Since July, with the announcement of Greece's new program, the spreads of the three economies began to correct downwards, but rose again since August due to the greater risks generated by the approval of the Greek program by European national parliaments.

#### BOX 1 THE WORSENING OF THE EUROZONE DEBT CRISIS

Since our last report was published in June, the financial situation of some economies in the Eurozone has been worsening in a context of deteriorating growth prospects in the region. The events marking this period included the new request of financial aid for Greece, fears of contagion to Spain and Italy, concerns about the European banking sector's exposure in countries with debt problems, and the slow resolution of the crisis which has undermined credibility in the measures proposed by the Eurozone leaders.



#### 1. New rescue program for Greece

The sharp rise recorded since June in the spreads of credit default swaps as a result of the situation of insolvency perceived forced Greece to request a new financial aid program on June 23. In this new program, which includes the participation of the European Stability Fund (ESF) and the voluntary participation of the private sector, the ESF would provide  $\in$  109 billion until mid-2014 and extend the maturities of loans to Greece from 7.5 years to between 15 and 30 years. Private sector participation (PSP) would include swaps of maturing debt for new debt (at 15 or 30 years) and 30-year debt refinance when the debt is due. It is estimated that these operations involve a debt reduction of 20 percent in terms of its net current value.

Sovereign *spreads* began to show a downward correction after the approval of the package was announced in the leaders' summit of July 21. However, the positive impact of this announcement was only temporary because the participation of the private sector covered barely 50 percent of the total 90 percent of the debt it was expected it would cover. Because of this precedent, investors' uncertainty about the private participation for eventual debt restructuring programs which could be required by countries with debt problems (with or without support programs) added onto this.

Issues were also observed in connection with the ratification of the agreement by the parliaments of Eurozone countries, many of which demanded a similar treatment after Finland and Greece made





an agreement for the provision of collaterals. Other countries opposed such a requirement as this would reduce liquidity for Greece and increase the risk of a new aid package.

#### 2. Fears of contagion to Spain and Italy

Speculations about Italy and Spain's likely request of financial aid added onto Greece's debt crisis given that the rates on 10-year bonds of these two countries surpassed 6 percent (level at which Greece, Ireland, and Portugal requested financial assistance), leading the ECB to intervene by purchasing bonds from these economies in the first two weeks of August. As a result of these purchases of bonds, which reached record levels since the asset purchase program was implemented ( $\in$  22 billion in one week), rates remained stable at around 5 percent.



This period of stress generated different problems in each of these economies. On the one hand, in Italy the debt levels surpassed 110 percent of the country's GDP in a context of not very promising prospects for growth, while in Spain, on the other hand, the fiscal deficit was close to 10 percent and unemployment in the region continued rising to rates of over 20 percent. Even though tightness in the labor market is a common feature of these two economies, Spain has been adopting policies aimed at easing this market.

In this context, both Italy and Spain announced austerity programs aimed at closing the deficit gaps and reducing the debt levels. Italy approved a package which foresaw savings for a total of  $\in$  47 billion (3 percent of GDP) and consisted in the liberalization of the labor market, reducing expenditure, and increasing some taxes. In Spain, the government proposed constitutional reforms to include fiscal rules in the constitution, complementing in this way the reform of the pension system implemented some time ago which increased the age for retirement.

#### 3. European banking system

These two developments –Greece's request for a new aid package and speculations regarding Italy and Spain– aggravated the problems of the European financial sector. After S&P downgraded USA's sovereign rating, concerns arose in the sense that France would be the next economy to

lose its AAA rating. These speculations intensified when French banks' exposure in the countries of the region was known: The exposure of French banks in countries with debt problems was over 17 percent of total assets and German banks' exposure exceeded 16 percent. In this context, the stocks of the European banking sector dropped significantly.

B/	ANKS' EX	(POSURE T	O COUNTRI (% of tota	<b>ES WITH F</b> I assets)	INANCIAL I	PROBLEMS	
	Spain	Greece	Ireland	Italy	Portugal	Total (PIIGS)	Total assets* (US\$ trillions)
Germany	5.2	0.9	3.7	5.0	1.2	16.1	4.3
USA	2.2	0.5	1.3	3.2	0.6	7.7	8.3
France	3.8	1.4	1.2	10.1	0.7	17.2	4.7
Japan	1.0	0.1	0.8	1.6	0.1	3.5	2.8
United Kingdom	2.3	0.3	3.2	1.7	0.5	8.0	6.0
Switzerland	1.0	0.2	0.8	1.3	0.1	3.5	2.6

\* Includes foreign assets and other potential exposures (derivatives, guarantees, etc.). Source: BIS.

#### 4. Seeking long-term solutions, but increased uncertainty observed

In this context, new mechanisms to solve the Eurozone debt crisis began to be discussed. On the one hand, it was suggested that the ESF capacity should be increased so that this fund could be used to deal with future aid requests. According to the Royal Bank of Scotland, this fund should be increased to an effective fund of  $\in$  2 trillion in order that it may be able to address possible requests for financial assistance from Italy and Spain (the fund's effective capacity is currently  $\in$  440 billion).

On the other hand, the issuance of bonds guaranteed by all countries of the region (Eurobonds) is being discussed to reduce borrowing costs for countries with debt problems. However, Germany and France have opposed both initiatives on the grounds that they would generate higher costs for bond issuances in both countries.

The slow resolution of the crisis has been undermining investors and consumers' confidence and has been reducing the outlook for growth in the Eurozone –including growth prospects in the major economies–, which can worsen the situation of countries with debt problems and increase the negative impact of the crisis due to the deterioration of the banking system and its contagion effect.

14. With the intensification of fears of contagion to Italy and Spain, the CDS of these countries reached peak levels on August 4 (390 and 430 bps, respectively). Record levels of ECB interventions of purchases of sovereign bonds (€ 36 billion in two weeks) were able to reverse this trend, although the premiums in these economies stabilized at still higher levels.

The rise in European sovereign spreads affected the European corporate banking sector (due to its significant exposure to troubled economies of the Eurozone),



which reflected in higher corporate banking spreads in Europe, in the value reduction of bank shares in the main developed stock markets and in the worsening of conditions in European money markets.

	Table 5         CREDIT DEFAULT SWAPS         (In basis points)														
	End of period data Variation														
	Dec.07 Dec.08 Dec.09 Dec.10 Jun.11 Aug.11 Jun.11/Aug.11 Dec.10/Aug.11 Dec.09/Aug.11 Dec.08/Aug.11														
Greece	22	232	286	1,010	1,911	2,233	322	1,223	1,946	2,001					
Portugal	18	96	92	501	753	914	161	413	822	817					
Ireland	n.d.	181	158	609	744	768	24	160	610	587					
Spain	18	101	114	350	261	357	96	7	244	256					
Belgium	11	80	54	222	143	228	85	6	174	148					
Italy	20	157	109	240	172	361	189	121	251	204					
France	10	54	32	108	81	153	72	45	121	99					
Germany	7	46	26	59	41	75	34	16	49	29					
Source: Bloc	ombera.														

Sovereign debt markets in **USA** were favored by increased risk aversion. Yields remained low even in late July and early August, period during which fears of a temporary default intensified. Recently, after the FED's communiqué and because of fears of slower global growth, the yield on 10-year bonds has dropped to historical record levels (below 2 percent and reached record lows in 60 years) and the yield curve of Treasury bonds has been consecutively flattening.

Table 6 US TREASURY NOMINAL YIELDS (%)											
	Dec.07	Dec.08	Dec.09	Dec.10	Jun.11	Aug.11					
3 month	3.24	0.08	0.05	0.12	0.02	0.01					
1 year		0.34	0.44	0.26	0.18	0.10					
2 year	3.05	0.76	1.14	0.59	0.46	0.20					
10 year	4.02	2.21	3.84	3.29	3.16	2.22					
30 year	4.45	2.68	4.64	4.33	4.37	3.60					

Source: Bloomberg.





26

In contrast with the yields on Treasury bonds, sovereign credit spreads did reflect the temporary shock of the crisis of payments in the United States. Since the end of May, and after the Treasury announced a possible default around August 2, the spreads of credit default swaps (CDS) increased consecutively. At the close of July and in early August, the spreads of CDS rose significantly and the 2 year-spread for the first time reached even higher levels than the 5 year-spread.

However, after the debt limit was raised and the long-term fiscal plan announced, CDS spreads declined. Standard&Poor's subsequent rating cut had no major impact on spreads.

	Table 7           USA: 2-YEAR AND 5-YEAR CREDIT DEFAULT SWAPS (IN BPS)												
			End	of period	data				Varia	ation			
	Dec.07	Dec.08	Dec.09	Dec.10	Jun.11	Jul.11	Aug.11	Jun.11/Aug.11	Dec.10/Aug.11	Dec.09/Aug.11	Dec.08/Aug.11		
CDS-5	8	67	38	42	51	62	50	0	9	13	-17		
CDS-2	8	56	31	29	44	73	41	-3	11	9	-16		
Source: Blog	omberg												

#### **Money markets**

15. The 3-month Libor remained almost stable in U.S. money markets. Only in August was a slight rise observed in this rate from the low levels recorded in July (from 0.25 percent to 0.34 percent).



In European markets, on the other hand, financing conditions in dollars have tightened significantly, reflecting European banks' reduced access to financing, particularly from American funds. The spreads of swap rates (euro-





dollar swaps), which reflect the cost of financing in dollars, have widened. Moreover, although interbank rates in euros remain low reflecting expectations that the ECB will maintain its rates at low levels, longer-term rates in euros remain high.

In this context, the FED reopened its swap lines with the European Central Bank (ECB) and Swiss National Bank (SNB). In August, the ECB and the SNB injected liquidity in dollars (US\$ 500 million and 200 million, respectively). Although they represent a small fraction of the financing in dollars the FED gave central banks in early 2009 (US\$ 466 billion), these swap lines were a symptom of systemic stress.

#### **Emerging debt markets**

16. Debt markets in Latin American countries were affected by global risk aversion and by volatility in the financial markets of advanced economies. In general, the debt spreads of Latin American countries were relatively stable during the year until July. However, since August the sovereign credit spreads and credit default swaps spreads have risen to their highest levels this year, boosted by the U.S. credit rating cut, fears of contagion of the European debt crisis, and the slowdown in global growth. Global funds' withdrawals of portfolio investments in emerging markets (particularly Asian emerging markets) have also been observed since August.

		EMER	GING MA	Tal ARKETS	ble 8 SOVEF	REIGN S	PREAD	S						
	End of period data Variation													
	Dec.07	Dec.08	Dec.09	Dec.10	Jun.11	Aug.11	Jun.11/Aug.11	Dec.10/Aug.11	Dec.09/Aug.11	Dec.08/Aug.11				
				EMBI	G (pbs.)									
Peru	178	509	165	165	169	186	17	21	21	-323				
Brazil	220	429	189	189	150	197	47	8	8	-232				
Chile	151	343	95	115	131	151	20	36	56	-192				
Colombia	195	498	203	172	121	165	44	-7	-38	-333				
Emerging	255	724	294	289	288	354	66	65	60	-370				
				CDS	(pbs.)									
Peru	116	303	124	113	131	156	25	43	32	-147				
Brazil	103	299	123	111	110	143	33	32	20	-156				
Chile	30	203	69	84	74	88	14	4	19	-115				
Colombia	130	308	144	113	108	147	39	34	3	-161				
Mexico	70	292	134	113	107	141	34	28	7	-151				
Source: Bloomberg.														





#### **Evolution of the US dollar**

17. The evolution of the dollar was influenced by the low interest rates maintained in the United States, a factor that offset the increased risk aversion observed. Based on the basket elaborated by the FED (which considers the currencies of the main trading partners), year-to-date the dollar has depreciated 4 percent.



As regards the currencies used for funding carry-trade operations, the appreciation of these currencies against the dollar is basically explained by increased risk aversion. The most affected currencies were the yen and the Swiss franc, which led the Japanese and Swiss governments and central banks to adopt measures to reverse the appreciations of their currencies.



On the other hand, the evolution of the dollar against the euro was more erratic. Whereas the Eurozone crisis influenced an appreciation of the dollar, the slowdown in the pace of growth in USA and the prospects of low interest rates influenced a higher depreciation of the US currency (especially after the FED announced that low rates would be maintained until at least mid-2013). In average terms, the dollar maintained its value against the euro between June and August, but depreciated relative to the levels observed in December 2010.

In general, most of the currencies in the Latin American region have appreciated against the dollar. In spite of the measures implemented by Colombia and Brazil, the appreciation of the Colombian peso and the Brazilian real stands out. The appreciatory pressures are explained by the high prices of commodities and by the capital inflows which, except for the month of August, the region continued to experience over the year in line with the interest rate differential and the better outlook for growth in the region. In this context, several economies in the region implemented measures, including interventions in the foreign exchange market, administrative measures, and the creation of sovereign funds, among others.

	(Currency	units per	<b>EX</b> US\$; End c	<b>Graph</b> CHANG of period; <sup>0</sup>	<b>23</b> E <b>RATE</b> % chg Aug	s.11 comp	pared to De	ec.10)	
-2	5% -2	20% -	15% -1	0%	-5%	0%	5%	10%	15%
			APPRECIATION	I			DEPRECIATI	ON	
CANADA JAPAN HONG KONG TAINAN KOREA EUROZONE NORWAY SWITZERLAND UNITED KINGDOM BRAZIL COLOMBIA MEXICO ARGENTINA PERU CZECH REP. HUNGARY POLAND ROMANIA RUSSIA TURKEY UKRAINE CHINA INDONESIA PHILIPINES SINGAPORE MALAYSIA									
ISRAEL Source: Reu	ters.	1	1	1	1	-	1	1	1



Table 9 EXCHANGE RATES (end of period)										
	c.u. per US\$							% Chg. compared to:		
	Dec.07	Dec.08	Dec.09	Dec.10	Jun.11	Aug.11	Jun.11	Dec.10		
Canada	0.996	1.217	1.052	0.997	0.963	0.978	1.5	-1.9		
Japan	111.33	90.60	92.90	81.15	80.52	76.59	-4.9	-5.6		
United Kingdom (US\$/c.u.)	1.985	1.463	1.616	1.560	1.605	1.626	1.3	4.2		
Eurozone (US\$/c.u.)	1.459	1.398	1.432	1.338	1.451	1.438	-0.9	7.5		
Switzerland	-	1.0669	1.0355	0.9335	0.8401	0.8057	-4.1	-13.7		
Brazil	1.779	2.313	1.743	1.659	1.562	1.589	1.7	-4.3		
Chile	497.7	635.5	507.2	467.8	467.2	461.1	-1.3	-1.4		
Colombia	2,017	2,246	2,040	1,915	1,768	1,777	0.5	-7.2		
Mexico	10.89	13.65	13.06	12.36	11.71	12.34	5.4	-0.2		
Argentina	3.170	3.530	3.855	4.103	4.268	4.425	3.7	7.9		
Peru	2.999	3.136	2.890	2.808	2.750	2.732	-0.7	-2.7		
Hungary	172.83	188.30	187.96	207.72	183.00	188.42	3.0	-9.3		
Poland	2.47	2.96	2.86	2.96	2.74	2.87	4.8	-2.8		
Russia	24.57	30.53	30.31	30.57	27.92	28.83	3.2	-5.7		
Turkey	1.17	1.54	1.50	1.54	1.62	1.71	5.8	11.6		
China	7.30	6.82	6.83	6.59	6.46	6.38	-1.3	-3.2		
India	39.38	48.58	46.40	44.70	44.69	45.79	2.5	2.4		
Israel	3.85	3.78	3.79	3.52	3.40	3.56	4.8	1.0		
Courses Disambarg and D	outoro									

#### Interest rate decisions

18. Central banks in developed countries have maintained their benchmark interest rates at low levels after the monetary stimulus measures displayed in response to the global crisis in 2008. USA and the UK have maintained their rates at 0.25 and 0.50 percent since 2009 due to the scarce growth of consumption and the persistence of high unemployment levels. Low rates were maintained in USA in a context of controlled inflationary pressures, while in the UK this took place amid rising inflationary pressures due to temporary or one-time shocks (i.e. rise in commodity prices, increase of the value added tax, and depreciation of the pound). On the other hand, the monetary policy implemented by the ECB has reflected the need of anchoring inflation expectations in the Eurozone: the benchmark rate was raised by 50 bps between May and August to 1.5 percent. This withdrawal of monetary stimulus has been quite gradual in view of the slowdown of growth in recent months and in view of the constant tensions in the region's financial markets.

Monetary normalization has been considerably greater in the **emerging economies**. The countries which have raised their policy rates the most since 2009 have been Chile and Brazil, with rate rises of 475 and 375 bps, respectively. Demand in the emerging economies has maintained its upward trend, exports have increased



(despite the low rates of growth registered in developed countries) and a significant expansion has been observed in domestic demand, all of which in many cases has led to a close in the output gap and to the risk of bubbles in the asset markets. In this context, several of these economies are experiencing significant inflationary pressures, intensified by the high prices of food and crude.

Table 10 MONETARY POLICY INTEREST RATE								
	2010 Dec.	2011 ( Mar. Jun. Aug. J		Change Jun.11	(bps.) Dec.10	Inflation 1/ Aug.11		
Chile India	3.25 6.25	4.00 6.75	5.25 7.50	5.25 8.00	0 50	200 175	3.2 8.5	
Thailand Brazil Peru	2.00 10.75 3.00	2.50 11.75 3.75	3.00 12.25 4.25	3.50 12.00 4.25	50 -25 0	150 125 125	4.1 2 7.2 3.4	2/
Israel Uruguay	2.00 6.50	3.00 7.50	3.25 7.50	3.25 7.50	0	125 100	3.4 2 7.6	2/
Poland Colombia Sweden	3.50 3.00 1.25	3.75 3.50 1.50	4.50 4.00 1.75	4.50 4.00 2.00	0 0 25	100 100 75	4.1 2 3.3 1.6 2	<u>2/</u>
China South Korea ECB	5.81 2.50 1.00	6.06 3.00 1.00	6.31 3.25 1.25	6.56 3.25 1.50	25 0 25	75 75 50	6.2 5.3 2.5 2	2/
Philippines Malaysia	4.00	4.25	4.50 3.00	4.50	0	50 25	4.7 3.4 2	2/
Norway Indonesia	2.00 6.50	2.00 6.75	2.25 6.75	2.25 6.75	0 0	25 25 25	1.3 1.3 4.8	
Hungary Pakistan Australia	5.75 14.00 4.75	6.00 14.00 4.75	6.00 14.00 4.75	6.00 14.00 4.75	0 0 0	25 0 0	3.1 2 13.8 2 3.6 3	2/ 2/ 3/
Canada United States Japan	1.00 0.25 0.10	1.00 0.25 0.10	1.00 0.25 0.10	1.00 0.25 0.10	0 0 0 0	0 0 0 0	2.7 2 3.6 2 0.2 2	<u>2/</u> 2/ 2/
United Kingdom Czech Republic South Africa	4.50 0.50 0.75 5.50	4.50 0.50 0.75 5.50	4.50 0.50 0.75 5.50 4.25	4.50 0.50 0.75 5.50	0 0 0 0	0 0 0	4.5 2 4.5 2 5.3 2	2/ 2/ 2/
Switzerland New Zealand Turkey	4.50 0.25 3.00 6.50	4.25 0.25 2.50 6.25	4.25 0.25 2.50 6.25	4.50 0.00 2.50 5.75	-25 0 -50	-25 -50 -75	0.2 5.3 3 6.7	3/

1/ CPI inflation, last 12 month % change.

2/ Inflation: data as of July 2011.

3/ Inflation: data as of June 2011.

Source: Reuters and Bloomberg.

At the same time, in the last few months this group of economies has slowed the pace of monetary tightening in the current context of strong global economic slowdown and, in many cases, declining inflationary pressures. As the table shows, the pace of interest rate increases between June and August has been significantly lower than in previous months. Most other emerging economies (including the ones that led the monetary normalization in recent months, such as Chile and Peru) adjusted their rates by 25 points or maintained them unchanged.

#### Commodity prices and terms of trade

19. Year-to-date, the terms of trade continued showing an upward trend. In this sense, it is worth pointing out the sustained rise in the price of gold due to its higher demand as a hedge and as an investment asset. The rise in the prices of basic metals, on the other hand, was supported by the demand of emerging economies and by supply problems in producing countries.

A downward correction has been observed in most prices since August as fears of a global slowdown and risk aversion intensified and increased, with the exception of the price of gold which continued showing an upward trend and reached a level of over US\$ 1,800/troy ounce in the first two weeks of August.

20. Considering these developments, the terms of trade are expected to increase by 3.9 percent in 2011 –a slightly higher rate than the one foreseen in our previous report– and it is estimated that in average terms prices would show a downward correction thereafter given that in 2012 prices would stabilize at their current levels.

This projection of terms of trade is made in a context of high uncertainty, which could be affected by different factors. On the one hand, the demand for commodities as investment assets could increase due to a further easing of monetary policy by the FED; on the other hand, the demand for commodities could decline due to a higher-than-expected economic slowdown, while the worsening of debt problems in Europe could increase risk aversion and lead to a liquidation of speculative positions.

Table 11           TERMS OF TRADE: 2009 - 2013           (Annual average data)								
	Executed		2011		2012		2013	
	2009	2010	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11
Terms of trade 1/	-2.8	17.9	3.2	3.9	-3.3	-3.2	0.2	0.4
Price of exports 1/	-10.0	29.9	16.1	17.2	-2.1	-2.0	-0.3	0.1
Copper (US\$ cents per pound)	234	342	415	419	408	408	407	407
Zinc (US\$ cents per pound)	75	98	101	103	100	100	101	101
Lead (US\$ cents per pound)	78	98	113	114	109	109	108	108
Gold (US\$ per ounce)	974	1,225	1,475	1,565	1,517	1,700	1,511	1,700
Price of imports 1/	-7.4	10.1	12.5	12.8	1.2	1.3	-0.5	-0.3
Oil (US\$ per barrel)	62	79	99	94	99	90	99	92
Wheat (US\$ per ton)	193	195	311	304	325	332	325	329
Maize (US\$ per ton)	139	157	274	280	258	293	235	259
Soybean oil (US\$ per ton)	729	859	1,251	1,231	1,290	1,284	1,290	1,279
Rice (US\$ per ton)	561	503	504	571	500	629	500	629
Sugar (US\$ per ton)	412	597	578	679	483	594	481	551

1/ Average annual % change.







#### Copper

21. Year-to-date, the price of copper has fallen 0.3 percent to an average of US\$ 4.1 per pound. This evolution in the price of copper was strongly affected by the drop recorded in the month of August due to the downward revision of the outlook on global growth, Europe and USA's financial problems, and the economic slowdown of China, the main consumer of this metal. These factors offset the supply problems observed in the main producing countries.

The price of copper is foreseen to register a level of US\$ 4.0/pound at the close of 2011 and to remain around this level during the forecast horizon due to supply constraints in several producing countries.



#### Zinc

22. Between January and August 2011 the price of zinc dropped 2 percent to a monthly average level of US\$ 1.0 per pound. A higher production of zinc and a lower consumption in Japan was reported in this period, but the downward trend was offset by supply constraints in China (due to environmental regulations) and in Australia and USA (due to technical problems).

It is estimated that the price of zinc will stabilize around its current price given that supply constraints in producing countries like China will be compensated by the lower demand for metals in the current context. One factor that could affect the price of zinc downwards is the onset of new mining projects in Australia, Canada, and India.





#### Gold

23. At August 2011, the price of gold has risen 23 percent compared to the close of 2010, reaching an average level of US\$ 1,708 per troy ounce in August and a new historical record of US\$ 1,885 per troy ounce in mid-September. Continuous uncertainty about the financial situation in Europe and its likely spread to the region, the downgrade of USA's debt rating, and fears of a new global slowdown have encouraged the demand for gold as a hedge and investment asset.

Considering these developments, the forecast on the price of gold in 2011 is revised upwards from US\$ 1,475 per troy ounce (previous Inflation Report) to an average price of US\$ 1,565 per troy ounce. The average price of gold in 2012 would be US\$ 1,700/troy ounce (vs. US\$ 1,517/troy ounce estimated previously).



The recent evolution of the price of gold has been reflecting increased uncertainty about future inflation, governments' inability to act to boost economic activity in developed countries, and the potential negative events that highly indebted economies in Europe could generate.

#### Oil

24. Oil prices declined 3 percent between January and August 2011. After increasing until April due to supply problems in Arab countries (the Middle East and North Africa), the price of oil has been highly volatile. After the OPEC decided to maintain its production quotas in June, OECD countries responded by releasing its oil reserves. Then, in early August, when the price of oil seemed to stabilize around US\$ 100, the commodities market experienced a sharp downward correction on fears of a slowdown of economic activity in USA and Europe, and oil closed August at an average price of US\$ 87 per barrel.
Supply constraints are expected to continue in the medium-term, providing some support to the price of crude which would remain close to US\$ 90 per barrel –a lower price level than the one foreseen in our previous report– in the forecast horizon.



## Food

25. Like other commodity prices, the prices of food commodities were affected by the worsening of the global risk balance which led investors to liquidate their positions in risky assets. Prices were also affected by downward pressures due to the weakness of the price of crude and the strength of the dollar. Between June and August, FAO's real food prices index fell 0.9 percent.

However, in contrast with what happened with other commodities, a reversal in the downward trend of the two previous months was observed in food commodities in August due to unfavorable weather conditions in important producing areas.





#### Wheat

26. The international price of wheat rose 5 percent since December 2010 to an average price of US\$ 288 per ton at the close of August. The upward correction in this price started in May and continued until July, when Russia resumed its exports of wheat and a significant advance was observed in the winter harvest of wheat in USA. Then, in August, the recovery of the average price of wheat was in line with the slow advance observed in the spring harvest and with expectations of lower yields in USA.

An average price of US\$ 304 per ton is estimated in 2011. This lower price level than the one estimated in our June report would be associated with the higher supply expected from China, Russia, and India for the 2011/12 season, which would imply a looser global market, although this higher supply would be in part offset by the upward trend in maize (substitute good).



## Maize

27. Reflecting mainly adverse climate conditions in USA –a damp weather during the growing period and dry weather conditions with high temperatures in the pollen season–, the average price of maize increased 30 percent between January and August, closing the period with an average price of US\$ 287 per ton. Moreover,

according to the USDA, the ratio of end-use inventories estimated for the season 2011/2012 would be 12 percent, the lowest level since 1975. Therefore, tight markets are expected.

In line with these estimates, the projections of the international price of maize have been revised on the upside compared with our June Inflation Report.



#### Soybean oil

28. The price of soybean oil showed an increase of 5 percent during the first eight months of the year, closing August at an average price of US\$ 1,199 per ton. This increase is associated with tightness in the global market given that soybean oil, like maize, shows its lowest ratio of year-end inventories since the 1970s. However, the increase was limited by the weakness of crude.

The price of soybean oil is expected to remain at similar levels to the ones observed today, but lower than the ones considered in our previous report due to the lower prices projected for oil, to the downward revision of China's growth forecast – since China is the main producer and the main consumer in the world–, and to current market tightness.





# **II. Economic Activity**

29. In Q2-2011, GDP grew 6.7 percent, a lower rate than the one recorded in Q1 (8.7 percent). This slowdown in the country's pace of growth –foreseen in the previous Inflation Reports– would be reflecting the economy's convergence to rates closer to the economy's potential growth.

If we compare the economy's performance in Q2-2011 with the projection provided in our Inflation Report of December 2010, we can see that the slowdown is stronger in the components of consumption and government investment, especially in the case of sub national governments. This lower spending had an impact on construction and hence on the demand for construction inputs. This effect extended to other branches of private sector economic activity, as reflected in the lower than expected growth rates recorded in construction and non-primary manufacturing in Q2.



Graph 35 GDP GROWTH BY SECTORS: Q2 2011 CONTRIBUTION TO GROWTH GAP RELATIVE TO PROJECTED GROWTH IN IR DEC.2010 (% points)





In contrast, the higher than expected growth of private consumption in Q2 was coupled by a process of accumulation of inventories and resulted in a higher-than-expected GDP growth rate.

30. The analysis of seasonally adjusted series shows a lower GDP growth. The seasonally adjusted annualized GDP rate fell from 8.0 percent in Q4-2010 to 6.6 percent in Q1-2011 and to 5.3 percent in Q2-2011. This evolution is also observed in non-primary activities, whose rate increased from 9.1 percent in Q4-2010 to 7.0 and 6.6 percent in Q1 and Q2 of 2011, respectively. A sharp slowdown was observed in the case of non-primary manufacturing in seasonally adjusted terms in Q1 since this rate dropped from 11.1 percent in the previous quarter to a rate of 2.7 percent. In Q2 it fell by 3.3 percent, as a result of which this sub sector maintains the level it recorded at end 2010.



31. In addition to the lower public spending of sub national governments, a climate of uncertainty that affected investment expectations was observed in Q2 as a result of the election period and the risks in the international environment. Therefore, a more pronounced slowdown is foreseen in the second half of the year. GDP is projected to grow 5.0 percent between July and December 2011, with a slowdown of private expenditure, offset by a higher dynamism of public expenditure.

Private consumption in the second half of the year would grow 5.7 percent (vs. 6.4 percent in the first half of the year), while private investment would grow 6.2 percent (vs. 15.6 percent in the first half of 2011). Moreover, after falling 6.4 percent in the first semester, government expenditure would grow by 8.5 percent in the second semester.

32. Considering these projections for the second semester, the forecast on GDP growth in **2011** has been revised downwards from 6.5 percent (Inflation Report of June) to 6.3 percent in this Report. Likewise, the forecast on GDP growth in 2012 and 2013

has also been revised downwards from 6.5 percent in both years to 5.7 percent in **2012** and 6.3 percent in **2013**.

33. This baseline scenario assumes that consumer and business expectations will remain unchanged and that no further deterioration will be observed in terms of the international environment. In a risk scenario, households and businesses' expectations could deteriorate, causing a negative effect on the growth of consumption and investment. In the international environment, lower global growth would affect both traditional and nontraditional exports, which would generate a negative impact on economic activity. Moreover, lower terms of trade would also have a negative impact on the economy's growth due to the decline of the national disposable income.



34. **Potential output** is the level of production that prevails in a situation in which inflation is consistent with price stability. The growth of potential GDP is associated with the expansion of the economy's productive capacities (aggregate supply) which are expressed through two sources: the accumulation of physical production factors, such as capital stock and the economically active population (EAP), and total factor productivity (TFP). The evolution of these factors over time generates variations in the rate of growth of potential GDP.

On the side of the physical production factors, capital stock is associated with fluctuations in the gross fixed investment made in the previous year, while the economically active population measures the availability of labor in the economy. Finally, TFP summarizes the effect of additional productive factors such as technological improvements, trade integration, macroeconomic stability, and the solvency of the financial system.

In the period of 2003 – 2008, the growth of the potential GDP registered a rising trend that reached a peak of 7.7 percent in 2008. This growth would be explained



by the contribution of the accumulation of physical capital (2.6 percentage points), the contribution of the growth of the economically active population (1.4 percentage points), and by the growth of TFP (3.7 percentage points). More recently, in the period of 2009-2011, potential GDP is estimated to have grown at an annual rate of between 6.0 and 7.0 percent.

A sustained increase of productivity is required to achieve the growth of the potential output in the long term. Productivity requires not only macroeconomic stability, but also that trade openness and financial deepening continue increasing and that they are coupled by structural reforms to improve the efficiency with which productive factors are combined in order to improve competitiveness in the economy.



35. The rate of GDP growth in the next years is consistent with the economy's convergence towards its level of potential growth. In this scenario, domestic demand would also show lower variation rates than the ones recorded in the 2004 – 2010 period.





## Projected evolution of spending components

36. In 2011 domestic demand would show a growth rate of 7.5 percent, a rate slightly lower than the 7.7 percent rate estimated in June. A lower pace of growth would be observed mainly in private spending in the second half of the year. In line with the results of the surveys on business expectations, private investment is expected to moderate its pace of growth in 2012 and 2013, which would bring the pace of growth of domestic demand closer to the growth of GDP around rates closer to those of the potential output.

	Table 12           GDP AND DOMESTIC DEMAND           (Real % change)													
		201	2010 2011* 2012* 2013*											
		Semester I	emester I Year Semester I IR Jun.11 IR Sep.11 IR Jun.11 IR Sep.11 IR Jun.11											
1	. Domestic demand	11.5	12.8	9.3	7.7	7.5	6.6	5.6	6.2	6.0				
	a. Private consumption	5.6	6.0	6.4	5.7	6.0	5.7	5.6	5.9	5.8				
	b. Public consumption	13.3	10.6	3.1	4.4	5.7	4.1	4.4	4.0	4.9				
	c. Private investment	17.7	22.1	15.6	10.4	10.7	11.6	9.0	8.3	8.3				
	d. Public investment	37.9	27.3	-24.5	3.3	-2.9	6.1	11.4	6.1	10.0				
2	. Exports	0.0	2.5	8.3	3.8	6.0	7.8	7.5	9.0	9.0				
3	. Imports	17.9	23.8	16.8	10.4	11.7	8.1	6.7	7.3	7.2				
4	. GDP	8.2	8.8	7.7	6.5	6.3	6.5	5.7	6.5	6.3				
N C	lemo Government expenditure	20.6	16.7	-6.4	3.9	2.3	4.9	7.0	4.8	6.9				
IF	R: Inflation Report.													

\* Care a set

\* Forecast.

Table 13           GDP AND DOMESTIC DEMAND           (Contributions to the real % change)												
		Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11		
1. Domestic dem	and	11.4	12.8	9.6	8.0	7.8	7.0	5.8	6.6	6.3		
a. Private consu	umption	3.9	4.1	4.4	3.8	4.0	3.8	3.7	3.9	3.8		
b. Public consu	mption	1.1	1.0	0.3	0.4	0.5	0.4	0.4	0.4	0.5		
c. Private invest	tment	3.4	4.2	3.3	2.2	2.3	2.6	2.0	1.9	1.9		
d. Public invest	ment	1.4	1.5	-1.1	0.2	-0.2	0.4	0.6	0.4	0.6		
e. Inventory var	iation	1.6	2.1	2.8	1.4	1.1	-0.2	-1.0	0.0	-0.5		
2. Exports		0.0	0.5	1.4	0.7	1.1	1.4	1.3	1.6	1.6		
3. Imports		3.3	4.5	3.3	2.2	2.5	1.8	1.5	1.7	1.6		
4. GDP		8.2	8.8	7.7	6.5	6.3	6.5	5.7	6.5	6.3		
Memo												
Government exper	nditure	2.5	2.5	-0.9	0.6	0.4	0.8	1.1	0.7	1.1		

IR: Inflation Report.

\* Forecast.



37. Different dynamics are observed in consumption and investment when we analyze private expenditure by components. Although investment showed a slight slowdown in the first semester, private consumption adopted a faster pace and grew at a rate of 6.4 percent in the first semester of 2011 due to the growth of income and employment, and to the subsequent increase of consumer confidence. Thus, private consumption is expected to grow 6.0



percent in 2011 and to show growth rates of 5.6 and 5.8 percent in 2012 and 2013, respectively.

## Several indicators reflect the evolution of consumption:

a. Consumers have a prudent attitude vis-à-vis the future of their economic situation. The consumer confidence index remains in the optimistic tranche at a similar level to the average level in the year.



b. The volume of imports of durable consumer goods maintains a high pace of growth and recorded a rate of 17 percent in Q2.





38. Taking into account the episode of domestic uncertainty experienced in the country, the trend of private investment has been revised slightly downwards. Although private investment is expected to show in 2012 a higher slowdown than the one estimated in the Inflation Report of June, the growth rate estimated for 2013 remains at 8.3 percent, in line with the pace of advance of scheduled investment projects.

Investment projects announced to be implemented in 2011 - 2013 amount to a total of US\$ 47.7 billion –a similar figure to the one announced in our previous Report–, which would be indicating that private investment will continue showing a growing trend until it reaches a level equivalent to 20.9 percent of GDP in 2013.





	ANNOUNCED MAIN INVESTMENT PROJECTS: 2011-2013									
Sector	COMPANY	PROJECT NAME								
Mining	Xstrata Perú S.A. Minería Yanacocha S.R.L. China Minmetals Corporation and Jiangxi Copper Company Limited Jinzhao Minig Perú S.A. Xstrata Perú S.A. Southern Perú Copper Corp. Sociedad Minera Cerro Verde S.A.A. Candente Copper Perú S.A. Compañía Minera Antamina S.A. HudBay Minerals Inc. Minera Chinalco Perú S.A. Marcobre S.A.C. Shougang Hierro Perú S.A.A. Southern Perú Copper Corp. Minera Barrick Misquichlica S.A. Volcan Compañía Minera S.A.A Mitsui Mining & Smelting Co. Compañía Minera Milpo S.A.A. Minera Yanacocha S.R.L. La Arena S.A.	Las Bambas Minas Conga El Galeno Pampa del Pongo Antapaccay Los Chancas Cerro Verde Cariariaco Norte Expansion of Antamina Constancia Toromocho Mina Justa Marcona Toquepala Expansion of Lagunas Norte mine Expansion of mine Quechua Magistral Chaquicocha La Arena								
Hydrocarbons	Savia Peru (Petro-Iecn) Petrobas Energía Perú S.A. Perenco Perú Limited Kuntur Transportadora of Gas S.A.C. Pluspetrol Perú Corp. S.A. Transportadora of Gas of Perú S.A. Cálidda Gas Natural of Perú SK Energy Pluspetrol Perú Corp. S.A. Repsol YPF S.A. Cálidda Gas Natural of Perú	Lot 2-25: Perforation, exploration and others Lot 58 and Lot X Exploration Lot 67 and pipeline South Andin pipeline Expansion of Malvinas, new wells Lot 88 and Lot 56 Expansion of gas and capacity of transportation Exploration Lot Z 46 Expansion of Pisco plant Lot 57 - Kinteroni Expansion of main grid								
Electricity	Generación Huallaga S.A. Kallpa Generación S.A. Fénix Power Perú S.A. Norwind Enersur S.A. Kallpa Generation S.A. Empresa Administradora Chungar S.A. SN Power Perú S.A. Asa Iberoamérica Energía Eólica S.A. Luz of Sur S.A.	Hydroelectric plant of Cerro de Chagila Hydroelectric plant of Cerro del Aguila Combined cycle thermal power plant (natural gas) Wind energy park Cerro Chocan Expansion of Chilca 1 Kallpa IV Hydroelectric plant of Belo Horizonte Hydroelectric plant of Cheves Transmission line of Chilca-Marcona-Montalvo Wind energy plant of Cupisnique Grid and infraestructure expansion								
Industrial projects	Nitratos del Perú S.A. Corporación Aceros Arequipa S.A. Cementos Interoceánicos Corporación JR Lindley PepsiCo Americas Potash Perú Cementos Otrongo Cementos Lima Yura S.A. Cemento Andino	Petrochemical plant Expansion of lamination plant (N°2) Cement plant Puno Expansion and new plants: Trujillo. Pucusana. Cusco. Iquitos Consolidation and expansion of operations in the local market Phosphates plant Construction of cement plant Expansion of installed capacity Expansion of cement plant Expansion of Tarma plant								
Infrastructure	Línea Amarilla S.A.C. Tren Lima Línea 1 Terminal Internacional of Sur Concesionaria Vial del Sol S.A. Autopista del Norte S.A.C. Terminales Portuarios Euroandinos Consorcio APM Terminals Callao Desarrollo Vial de los Andes S.A.C. Consorcio La Chira (Acciona Agua/Graña y Montero) Transportadora del Callao Covi Perú	Parque Rimac express way (former Yellow Line express way) Tren Eléctrico – operation and maintenance Expansion of Port of Matarani Trujillo-Sullana Sol Highway Pativlica – Port of Salaverry Road Network No. 4 Expansion of Port Paita Modernization of North Pier IIRSA Centro-Eje Amazonas: Section 2 La Chira Residual Waters Treatment Plant Mineral Peer Pucusana-Cerro Azul-Ica Road Network No. 6								
Other sectors	Telefónica del Perú S.A. América Móvil Perú S.A.C. NDG Perú Graña y Montero Vivienda Corporación Miraflores Grupo Posadas Cencosud Crystal Lagoons Besalco S.A. Coinsa Constructores e Inmobiliaria E.I.R.L.	Optical fiber project at Los Andes Expansion of infrastructure, capacity and technological innovation Real estate projects Housing projects Ethanol plant Three hotels 15 supermarkets and 2 malls La Jolla de Asia project Real estate Real estate Real estate project in Rímac								



#### Several indicators reflect the evolution of private investment:

a. Business expectations about the state of the economy in three months moved from negative to positive in July and remained positive in August. These expectations are currently in a level close to neutral.



b. Economic agents have revised downwards their expectations on GDP growth in 2011 and 2012. The survey on macroeconomic expectations carried out in August shows that a lower growth rate is expected for 2012 and a recovery of dynamism is expected for 2013.



Table 15 SURVEY ON MACROECONOMIC EXPECTATIONS: GDP GROWTH (%)											
Survey carried out:											
	June 30	July 31	August 31								
FINANCIAL ENTITIES											
2011	6.5	6.5	6.3								
2012	6.0	6.3	5.8								
2013	6.0	6.0	6.0								
ECONOMIC ANALYSTS											
2011	6.5	6.5	6.1								
2012	6.0	6.0	5.6								
2013	6.0	6.0	5.9								
NON-FINANCIAL FIRMS											
2011	6.5	6.5	6.0								
2012	6.0	6.0	6.0								
2013	6.0	6.0	6.0								

c. The production of electricity continues showing a high dynamism, with growth rates of over 8 percent between July and September.



d. The volume of imports of capital goods continues showing a high growth. However, the rates of change have gone from an average of 35 percent in the first semester of the year to 16 percent in July.





e. The drop in domestic consumption reversed in August.



39. Due mainly to the lower sub national governments' spending, government investment declined by 35.2 percent in Q2 and accumulated a drop of 24.5 percent in the first semester. A recovery in projected for the second semester of 2011 and growth rates of 11 and 10 percent are estimated for 2012 and 2013, with government investment representing 5.9 percent of GDP in 2013.



40. Considering the onset of operations of some investment projects by 2013, **exports** are expected to continue showing an upward trend. However, the rates projected for 2012 in this Report imply a downward revision of the growth of exports in line with the expected evolution of global demand. Nonetheless, in 2012 exports would grow at a higher rate than the average growth rate observed in 2004 – 2010. On the other hand, the lower growth projected in terms of economic activity would translate into a lower demand for **imports**, especially imports of capital goods, in line with the revision of the evolution of investment.





## **GDP** by sectors

41. In Q2-2011, GDP grew 6.7 percent given that non primary sectors grew 7.6 percent and primary sectors grew 2.9 percent. This evolution reflects the slowdown observed in non primary activities relative to the pace of growth recorded in Q1 (9.7 percent). A lower dynamism was observed in the production of capital goods and construction inputs since April in non primary manufacturing,



while the evolution of construction reflected the completion of large construction projects.

**Primary sectors** continued registering a drop in mining due mainly to the low mineral content found in gold and copper. On the other hand, growth in agricultural production was associated with export crops, such as coffee, grape, and avocado, while fishing experienced a strong growth. Primary sectors are expected to grow 4.9 percent in 2011, with rising rates towards the end of the forecast horizon associated mainly with the onset of operations of mining projects.



**Non primary sectors** would show growth rates in line with the evolution of domestic demand, with slightly lower growth rates than the ones foreseen in our previous report being estimated for the sectors of non primary manufacturing and construction.



GROSS DOMESTIC PRODUCT BY ECONOMIC SECTORS (Real % change)											
	20	)10		2011*			12*	20	13*		
	Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11		
Agriculture and livestock	4.2	4.3	2.7	3.5	3.2	5.2	5.2	4.3	4.3		
Agriculture	4.1	4.2	0.5	2.1	2.4	5.8	5.8	3.7	3.7		
Livestock	4.3	4.4	6.5	5.2	5.2	4.8	4.8	4.8	4.8		
Fishing	-9.1	-16.4	17.6	26.0	29.8	1.4	-2.0	2.8	2.8		
Mining and hydrocarbons	1.4	-0.1	-1.4	1.4	0.5	7.5	7.2	11.8	12.5		
Metallic mining	-1.7	-4.9	-6.8	-1.6	-2.8	7.7	6.9	11.8	12.9		
Hydrocarbons	16.6	29.5	33.0	17.6	18.0	6.6	8.6	11.9	10.9		
Manufacturing	12.1	13.6	8.7	7.6	7.6	6.2	5.2	6.5	6.2		
Raw materials	-3.6	-2.3	11.6	14.6	15.4	4.3	2.9	6.3	6.3		
Non-primary industries	15.7	16.9	8.2	6.4	6.2	6.5	5.6	6.5	6.2		
Electricity and water	7.5	7.7	7.2	6.5	6.6	5.6	5.5	5.6	5.6		
Construction	19.2	17.4	4.1	6.6	3.4	10.5	8.7	7.6	7.6		
Commerce	9.6	9.7	9.4	6.8	7.4	6.0	5.4	5.6	5.3		
Other services	6.9	8.0	9.1	6.8	7.0	6.4	5.4	6.5	6.2		
GDP	8.2	8.8	7.7	6.5	6.3	6.5	5.7	6.5	6.3		
Memo:											
Primary GDP	1.6	1.1	3.2	5.1	4.9	5.7	5.3	7.1	7.3		
Non-Primary GDP	9.6	10.3	8.6	6.7	6.6	6.6	5.7	6.4	6.1		

IR: Inflation Report. \* Forecast.





42. In spite of the lower growth of non primary manufacturing, its evolution is consistent with a process in which industry converges to its long term trend, estimated through statistical filters. Thus, we can see, for example, that after the international financial crisis, manufacturing activity rebounded to levels above its trend level. The slowdown experienced in recent months allows this sector to grow at levels consistent with its long term evolution. We can also see that non primary manufacturing would have reached its trend level in Q2. In terms of branches, only the branches oriented to construction show an evolution below their trend level.

## **III.** Balance of Payments

43. In Q2-2011, the deficit in the current account of the balance of payments was higher than in previous quarters and amounted to US\$ 1,290 billion (2.9 percent of GDP). The trade surplus was associated with better terms of trade and with a higher volume of exports, which also favored the generation of profits in firms with foreign shareholding.

Exports grew 41.6 percent compared to Q2-2010 due to the increase in the volume of exports of both traditional products (12.0 percent) and non traditional products (15.2 percent), as well as due to the higher prices of the main mining commodities. On the other hand, imports grew 45.2 percent compared to imports in Q2-2010. The volume of imports grew 23.6 percent due mainly to the increase observed in terms of imports of capital goods and inputs, while average prices grew 17.5 percent.

44. The deficit in the current account in **2011** is now estimated at 2.8 percent of GDP. The deficit would be lower than the one foreseen in our Report of June (3.0 percent) due to an improvement in the terms of trade. The central forecast scenario considers a higher level of prices for several export commodities, especially gold, in this year.

The current account deficit would decline to 2.6 percent of GDP in 2012 and to 2.3 percent of GDP in 2013 (vs. 3.3 percent of GDP in 2012 and 3.0 percent of GDP in 2013 estimated in the Inflation Report of June) as a result of the expected lower growth of economic activity and its impact on the demand for imports, as well as of a lower factor income associated with lower export prices.

45. These forecasts are in accordance with the baseline scenario, but there are risks that could imply deviations from this scenario should they materialize. The main risks observed today are mainly associated with the international environment, particularly with terms of trade, with the demand of our main trading partners, and with capital flows due to the negative effects of a deterioration of the global economy.





В	ALANC (Mill	Table 1 E OF P lions of	7 AYME US\$)	NTS						
	2	010		2011*		20	12*	20	2013*	
	Semester	r I Year	Semester	I IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	
I. CURRENT ACCOUNT BALANCE	-895	-2.315	-1.991	-5.173	-4.915	-6.217	-5.140	-6.135	-4.960	
% of GDP	-1.2	-1.5	-2.3	-3.0	-2.8	-3.3	-2.6	-3.0	-2.3	
1. Trade Balance	3,143	6,750	3,872	6,751	7,725	6,056	7,350	7,349	8,982	
a. Exports	16,088	35,565	21,663	42,924	44,785	45,525	46,964	49,859	51,607	
b. Imports	-12,946	-28,815	-17,791	-36,173	-37,060	-39,469	-39,614	-42,510	-42,625	
2. Services	-932	-2,037	-1,036	-2,563	-2,502	-2,624	-2,639	-2,712	-2,773	
<ol><li>Investment Income</li></ol>	-4,548	-10,053	-6,385	-12,539	-13,353	-13,097	-13,298	-14,338	-14,683	
4. Current transfers	1,443	3,026	1,558	3,178	3,216	3,447	3,447	3,567	3,515	
of which: Remittances	1,197	2,534	1,309	2,731	2,752	3,001	3,001	3,120	3,068	
II. FINANCIAL ACCOUNT	3,101	13,285	5,038	8,473	10,414	7,717	7,640	8,135	7,459	
of which:										
<ol> <li>Private Sector (long and short term)</li> </ol>	4,230	13,925	4,923	8,439	9,981	8,103	7,368	8,263	7,590	
2. Public Sector	-579	-1,022	-84	27	142	-485	710	-167	-48	
III. BALANCE OF PAYMENTS (=I+II)	2,206	10,970	3,047	3,300	5,500	1,500	2,500	2,000	2,500	
Memo:										
Gross long-term external private financing										
Millions of US\$	3,944	12,053	4,878	11,757	10,754	11,850	10,772	12,471	11,810	
% of GDP	5.3	7.8	5.7	6.8	6.1	6.2	5.6	6.0	5.6	
Balance of NIRs										
Millions of US\$	35,341	44,105	47,152	47,405	49,605	48,905	52,105	50,905	54,604	
% of GDP	25.0	28.6	28.5	27.5	28.3	25.6	26.9	24.5	25.9	
IR: Inflation Report.										

- \* Forecast.
- 46. In the first semester of 2011, the **trade balance** recorded a surplus US\$ 3.9 billion, higher than the one registered in the same period in 2010 (US\$ 3.1 billion).
- 47. **Exports**, which amounted to US\$ 21.7 billion, were 34.7 percent higher than in the first semester of 2010, reflecting the increase of exported volumes and higher average prices. Exports of traditional products grew 3.9 percent due to the increased availability of fishmeal –given the higher extraction quota approved for this year–, while the exported volume of non traditional products grew 20.0 percent, mainly as a result of increased shipments of agricultural products (mangos and fresh grapes, paprika, shrimp feed, and organic bananas), fishing products (scallops, frozen fish and shrimp tails), and chemicals (flexible laminates, carminic acid, zinc oxide, and sulfuric acid).

Moreover, average prices rose 25.0 percent compared with the previous year as a result of the higher prices of mining commodities –copper, gold, and zinc– associated with increasing uncertainty about global economic growth; the higher price of coffee, due to increased demand and the lower supply from the main producing countries, and the higher prices of non traditional products.

Peruvian exports have increasingly diversified over the past few years and Latin American countries have become the main destination of non traditional exports. Furthermore, the share of agricultural products, textiles, and chemicals has also increased substantially in terms of total exports.





48. In the first half of 2011, **imports** amounted to US\$ 17,791 million (a figure 37.4 percent higher than the one recorded in the same period of 2010). The volume of imports grew 19.1 percent, with noteworthy higher volumes of capital goods which, excluding construction materials, increased by 30.4 percent.

The average price of imports rose 15.2 percent, due mainly to the higher prices of food inputs (45.4 percent) and oil and derivative products (38 percent).

49. The projected surplus in the **trade balance** in 2011 has been revised on the upside given the higher growth estimated today in the terms of trade. Thus, the trade



surplus would amount to US\$ 7.7 billion (vs. US\$ 6.8 billion estimated in our Inflation Report of June).



The trade balance would continue showing a surplus, which would amount to US\$ 7.35 billion in 2012. The surplus in the trade balance would increase to US\$ 9.0 billion in 2013 due to an improvement in terms of trade and to an increased volume of exports as a result of the onset of some investment projects in the mining sector.

Table 18 TRADE BALANCE (% change)												
	2010 2011* 2012* 2013*											
		Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11				
1. Value:												
Exports	31.9	34.6	20.7	25.9	6.1	4.9	9.5	9.9				
Traditional products	34.2	34.9	20.5	25.6	4.3	2.9	9.1	9.5				
Non-traditional products	23.5	34.2	21.3	27.4	12.0	11.5	11.2	11.5				
Imports	37.1	34.7	25.5	28.6	9.1	6.9	7.7	7.6				
2. Volume:												
Exports	1.6	7.5	4.0	7.5	8.3	7.0	9.8	9.8				
Traditional products	-2.7	3.9	1.8	5.1	8.2	6.9	9.9	9.9				
Non-traditional products	15.3	20.0	11.6	15.8	9.0	7.4	9.3	9.3				
Imports	24.1	19.1	11.6	13.0	8.2	6.2	8.2	8.0				
3. Precio:												
Exports	29.9	25.0	16 1	17.2	-21	-20	-0.3	01				
Traditional products	37.8	29.8	18.3	19.5	-3.6	-3.8	-0.8	-0.4				
Non-traditional products	7 1	11.8	87	10.0	2.8	3.8	17	2.0				
Imports	10.1	15.2	12.5	12.8	1.2	1.3	-0.5	-0.3				
IR: Inflation Report. * Forecast												

Table 19 TRADE BALANCE (Millions of US\$)												
2010 2011* 2012* 2013*												
	Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11			
EXPORTS	16,088	35,565	21,663	42,924	44,785	45,525	46,964	49,859	51,607			
Traditional products	12.548	27.669	16.923	33.335	34.750	34.766	35.741	37.921	39.120			
Non-traditional products	3,413	7,641	4,581	9,271	9,735	10,382	10,850	11,550	12,103			
IMPORTS	12,946	28,815	17,791	36,173	37,060	39,469	39,614	42,510	42,625			
Consumer goods	2.375	5,489	2.980	6.473	6.529	7.348	7.115	7.922	7.800			
Inputs	6,428	14.023	8.905	18.005	18,786	18,492	18.435	19,407	19,133			
Capital goods	4,027	9,074	5,730	11,524	11,574	13,426	13,857	14,970	15,477			
TRADE BALANCE	3,143	6,750	3,872	6,751	7,725	6,056	7,350	7,349	8,982			
IR: Inflation Report. * Forecast.												

50. **Exports** in 2011 have been revised upwards and would amount to US\$ 44.8 billion. This outcome would result mainly from a price effect due to the higher rise in the prices of commodities than the one foreseen in our previous Report.

Exports in 2012 would amount to US\$ 47.0 billion and would reach US\$ 51.6 billion in 2013 due to increased mining exports –especially exports of copper and zinc– as a result of the onset of operations in the mining projects of Toromocho, Los Chancas, Hilarión, as well as a result of the expansion of Southern.



The volume of non traditional exports is expected to grow at an average rate of 11 percent in the forecast horizon as a result of the global economic recovery and the country's greater access to international markets due to the trade agreements that



have been already established or that are in the process of being negotiated. With this, the volume of exports in 2013 would be equivalent to 2.7 times the volume of exports recorded in 2003.



51. **Imports** would grow 29 percent to US\$ 37.1 billion in 2011, recording a higher value than the one projected in our June Report. However, the growth of imports in the forecast horizon would be lower than estimated in our previous Report in line with the more moderate pace of growth expected in economic activity.



## **Financial account**

52. Recording an increase of US\$ 170 million in assets abroad and an increase of US\$ 1.78 billion in liabilities, the long term financial account of the private sector amounted to US\$ 1.6 billion in Q2-2011. Moreover, short-term capitals increased

by US\$ 1.24 billion due mainly to banks' reduction of their assets abroad and to the increase of their liabilities.

**The long term financial account of the private sector** totaled US\$ 4.62 billion in the first semester of 2011. Foreign direct investment for a total of US\$ 3.58 billion, loan disbursements for a total of US\$ 1.27 billion, and non residents' acquisition of securities issued in the domestic market for a total of US\$ 85 million stand out in terms of liabilities. On the other hand, institutional investors' reduction of foreign securities (US\$ 202 million) stands out in terms of assets.

Lower flows than those recorded in 2010 are foreseen in 2011-2013 in the financial account of the private sector since disbursements for long-term loans to the financial system are estimated to be lower. In this scenario, the purchases of domestic securities by non-residents would be lower and long term disbursements to finance investment projects would also be lower given that some of these projects would be funded by institutional investors.

Thus, long-term external financing (net foreign direct investment plus disbursements) for 2011 and 2012 would amount to US\$ 10.8 billion and to 11.8 billion in 2013 (amounts slightly lower than those expected in our June Report).

Table 20         PRIVATE SECTOR FINANCIAL ACCOUNT         (Millions of US\$)													
	<u>2010</u> <u>2011*</u> <u>2012*</u> <u>2013*</u>												
	Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11				
1. ASSETS	400	-1,041	-54	-1,640	-519	-2,064	-2,759	-2,695	-3,594				
Direct investment abroad	-87	-215	31	34	31	0	0	0	0				
Portfolio investment abroad	487	-826	-85	-1,673	-550	-2,064	-2,759	-2,695	-3,594				
2. LIABILITIES	3,710	14,365	4,676	10,408	10,216	10,167	10,127	10,958	11,184				
Foreign direct investment in the country	3,512	7,328	3,578	8,512	8,578	8,950	8,610	9,512	9,472				
Foreign portfolio investment in the country	480	3,284	85	48	230	124	362	300	462				
Capital participation	3	87	5	30	5	0	0	0	0				
Other liabilities	477	3,198	79	82	225	82	362	82	462				
Long-term loans	-282	3,752	1,013	1,849	1,408	1,093	1,155	1,146	1,250				
Disbursements	519	4,940	1,269	3,211	2,145	2,900	2,162	2,959	2,338				
Amortization	Amortization -801 -1,187 -257 -1,362 -737 -1,807 -1,006 -1,813 -1,089												
3. Total 4,110 13,324 4,622 8,769 9,697 8,103 7,368 8,263 7,590													
*Forecast.													



53. Private financial flows, which include portfolio investments in the domestic economy and abroad as well as foreign net lending to banks, amounted to US\$ 199 million in Q2-2011. In contrast with what happened in the financial crisis of 2008 – 2009, no capital outflows are observed.



54. At August 31, 2011, net international reserves (**NIRs**) amounted to US\$ 48.5 billion. This level of reserves, which guarantees the soundness of the Peruvian economy to face potential financial and real shocks, is equal to 29.4 percent of the country's GDP, backs up 90.9 percent of total liquidity in depository institutions, and is equivalent to 5.3 times the short term liabilities of the external public and private debt. The coverage levels of Peru's net international reserves are among the highest in the region.

Table 21 NIR INDICATO	RS		
	2006	2010	Aug.11
Net International Reserves (NIR, millions of US\$) NIR/GDP* (%) NIR/Short term debt* (# of times)	17,275 18.7 2.9 80.2	44,105 28.7 5.2	48,515 29.4 5.3
* Accumulated at the previous quarter.	00.2		



## **IV. Public Finances**

55. In **Q2-2011** the non financial public sector (NFPS) recorded an **economic surplus** of 5.5 percent of GDP. This surplus, higher by 3.4 percentage points than the one registered in the same period of 2010, reflects both the increase in the current revenues of the general government by a real 16.9 percent and the decline of non financial expenditures by 2.1 percent resulting mainly from the reduction of capital expenditure (down 15.9 percent), particularly in sub national government levels. Because of this evolution, in the **first semester of 2011** the NFPS recorded an **economic surplus** of 5.6 percent of GDP, a result 3.0 percentage points higher than the one registered in the same period of 2010.

In terms of government levels, the higher surplus was mainly associated with sub national governments: the balance of local governments increased from a surplus of 0.2 percent of GDP in the first semester of 2010 to a surplus of 2.4 percent of GDP in the same period of 2011, while the balance of regional governments increased from a nil balance in 2010 to a surplus of 0.6 percent in 2011. The national government maintained a surplus of 2.7 percent of GDP, while state enterprises showed an improvement recording a nil balance this year after having registered a deficit of 0.4 percent in the first semester of 2010.

	Table 22           GENERAL GOVERNMENT NON FINANCIAL EXPENDITURE           (Real % change)												
			2010			2011							
		Q1	Q2	Semester I	Q1	Q2	Semester I						
I. CURRENT	EXPENDITURE	5.4	8.6	7.0	5.8	4.3	5.1						
National go	vernment	2.6	8.7	5.6	10.5	4.4	7.4						
Regional go	overnments	6.0	3.7	4.8	-0.2	2.2	1.0						
Local gover	nments	24.2	16.1	19.8	-11.8	6.9	-1.7						
II. CAPITAL E	XPENDITURE	25.6	49.0	39.6	-22.3	-15.9	-18.2						
National go	vernment	31.2	85.8	63.3	7.3	3.6	5.0						
Regional go	overnments	50.9	45.1	47.2	-10.4	-26.4	-20.6						
Local gover	nments	11.7	17.0	14.8	-59.7	-38.7	-47.1						
III. TOTAL EXI	PENDITURE	9.2	18.8	14.2	-0.2	-2.1	-1.2						
National go	vernment	5.9	21.2	13.6	10.0	4.2	6.9						
Regional go	overnments	12.9	13.7	13.4	-2.3	-6.7	-4.6						
Local gover	nments	17.9	16.6	17.2	-34.7	-17.7	-24.9						



Table 23           GENERAL GOVERNMENT NON FINANCIAL EXPENDITURE           (Contribution to the real % change)												
		2010			2011							
	Q1	Q2	Semester I	Q1	Q2	Semester I						
I. CORRIENTE EXPENDITURE	4.4	6.4	5.5	4.5	3.0	3.7						
National government	1.5	4.4	3.0	5.7	2.1	3.7						
Regional governments	0.9	0.5	0.7	0.0	0.3	0.1						
Local governments	2.0	1.5	1.7	-1.1	0.6	-0.2						
II. CAPITAL EXPENDITURE	4.8	12.4	8.8	-4.8	-5.0	-4.9						
National government	2.4	8.4	5.5	0.7	0.6	0.6						
Regional governments	1.4	2.1	1.8	-0.4	-1.5	-1.0						
Local governments	1.0	1.8	1.4	-5.1	-4.1	-4.5						
III. TOTAL EXPENDITURE	9.2	18.8	14.2	-0.2	-2.1	-1.2						
National government	3.9	12.8	8.6	6.3	2.6	4.3						
Regional governments	2.4	2.7	2.5	-0.4	-1.3	-0.9						
Local governments	2.9	3.3	3.1	-6.1	-3.4	-4.7						

56. Local governments and regional governments registered a reduction in non financial expenditure in the first semester of 2011. This reduction, which reached 24.9 percent in the case of the former and 4.6 percent in the case of the latter, was associated in both cases mainly with lower capital expenditure and, to a lesser extent, with lower current expenditure in Q1. A higher dynamism of public expenditure is expected in the second semester, especially in local and regional governments. In this scenario, a **surplus of 1.0 percent of GDP** is projected in NFPS in **2011**, in line with the favorable evolution of government revenues and the evolution of government expenditure described above. This balance, which represents an improvement compared to the surplus projected in our June Report (0.2 percent of GDP), contributes to recover the fiscal space required for the implementation of countercyclical fiscal policies.

Fiscal surpluses of 1.2 percent of GDP and 1.4 percent of GDP are projected for 2012 and 2013, respectively. These estimates reflect the growth of the revenues of the general government in GDP terms and a declining trend of expenditure in GDP terms towards 2013. However, these projections which correspond to the baseline scenario, could be affected if some of the risks associated mainly with the international environment should materialize and affect the prices of our commodities and the demand for our exports. In such a case, lower than expected results could be obtained given that revenues would be lower, on the one hand, and government expenditure should be increased to offset the possible negative effects of an eventual deterioration of the global economy, on the other hand.



Table 24           NON FINANCIAL PUBLIC SECTOR           (% of GDP)											
	2010		2011 *			2012 *		2013*			
	Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11		
1. General government current revenues 1/	20.7	19.8	21.9	20.3	20.7	20.2	20.9	20.2	20.9		
Real % change	18.9	18.4	16.1	9.4	12.4	5.4	6.0	6.8	6.5		
2. Non financial expenditure											
of the general government 2/	16.8	19.2	15.2	18.9	18.6	18.7	18.6	18.4	18.4		
Real % change	14.2	10.7	-1.2	5.5	3.8	4.6	4.9	4.7	5.4		
Del cual:											
a. Current	12.3	13.2	11.8	13.3	13.0	13.1	12.5	12.8	12.2		
Real % change	7.0	6.9	5.1	8.3	6.1	4.0	1.0	4.0	3.9		
<li>b. Gross capital formation 3/</li>	4.1	5.5	3.1	5.3	5.2	5.3	5.7	5.3	5.8		
Real % change	39.4	20.8	-17.1	2.3	1.3	6.0	14.0	6.0	9.3		
3. Other	-0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0		
4. Primary balance (1-2+3)	3.8	0.7	6.8	1.5	2.2	1.5	2.4	1.9	2.6		
5. Interests	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.1		
6. Overall Balance	2.6	-0.5	5.6	0.2	1.0	0.4	1.2	0.8	1.4		
Momo											
1 Central government current revenues (billions of S/	) 137	86.1	52.1	07 1	00.8	105 /	108.6	11/ 8	117 0		
2 Central government non-financial expenditure (billions of S/	) 45.7	83 E	36.1	97.1	80.3	07.0	06.3	104.5	103.5		
	.) 55.5	05.5	50.1	50.0	09.5	51.9	90.3	104.5	105.5		

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 the compensation payment to the Fuel Price Stabilization Fund (FPSF)

3/ Government investment comprises gross capital formation plus the investment of state enterprises.

IR: Inflation report.

\* Forecast.

## **Evolution of fiscal revenues**

57. In the first semester of 2011 the **current revenues of the general government** amounted to 21.9 percent of GDP. Tax revenues grew 15.8 percent, a noteworthy



increase being observed in revenues from the income tax in both advanced payments (23 percent) and in the regularization of the income tax of fiscal year 2010 (33 percent). Companies operating in the mining and financial sectors recorded the highest increase in income tax payments in a favorable context of high prices for commodities.

Revenues from the value added tax (VAT) grew by a real 13.7 percent in the first half of 2011, even though the rate of this tax was lowered from 19 to 18 percent since March 1. Moreover, a noteworthy increase was also observed in revenues from the oil canon, and oil and mining royalties on the side of non tax revenues since they grew by a real 47 percent due to the high international prices of crude and main mineral exports.



58. The current revenues of the general government in 2011 (20.7 percent of GDP) would be higher than estimated in the June Inflation Report (20.3 percent of GDP) due to increased revenues from the income tax, the VAT, and non tax revenues. The forecast considers a moderation in the pace of growth of revenues in the last months of the year, in line with the expected evolution of domestic demand. Tax revenues have increased over the year in spite of the rate reductions of the VAT, the tax on financial transactions or ITF (from 0.05 percent to 0.005 percent), and the reduction of rates of the excise tax on fuels in the month of June. Non tax revenues also increased due to increased revenues from the oil canon and oil royalties, which would show an overall increase of 42 percent. Thus, in 2011 the revenues of the general government are estimated to grow 12.4 percent (vs. 9.4 percent estimated in the June report).



Table 25           GENERAL GOVERNMENT CURRENT REVENUES           (% of GDP)											
	20	2010		2011 *			2012 *		2013 *		
	Semester I	Year	Semester	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11		
TAX REVENUES	15.9	15.2	16.8	15.4	15.8	15.3	15.7	15.3	15.7		
Income tax	6.8	5.9	7.8	6.6	7.0	6.6	6.9	6.6	6.8		
Value added tax	8.0	8.2	8.3	8.2	8.3	8.2	8.4	8.2	8.4		
Excise tax	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Import duties	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Other tax revenues	1.4	1.4	1.4	1.3	1.3	1.2	1.3	1.2	1.3		
Tax returns	-1.7	-1.8	-2.0	-1.9	-2.1	-2.0	-2.1	-2.0	-2.1		
NON TAX REVENUES	3.2	3.0	3.4	3.1	3.2	3.1	3.6	3.2	3.6		
CONTRIBUTIONS	1.6	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.6		
TOTAL	20.7	19.8	21.9	20.3	20.7	20.2	20.9	20.2	20.9		

\* Forecast.



59. Showing a substantial growth in GDP terms in comparison with 2010, revenues from the **income tax** would be equivalent to 7.0 percentage points of GDP in 2011 (5.9 percent of GDP in 2010) as a result of the dynamism of economic activity and the persistence of high price levels for mineral exports. It is worth mentioning that, in accordance with current legislation<sup>2</sup>, the ratios used to determine the advanced payments of this tax were raised on average in the month of April, which reinforces the positive effect of the higher prices obtained for our minerals.

<sup>2</sup> The monthly payments that companies make as payments on account of the income tax are determined on the basis of a ratio applied to the net income in the month. The ratio, in this case, is obtained by dividing the tax for fiscal year 2010 by the company's total net income in the same period.





60. Revenues from the **value added tax (VAT)** –the main source of tax revenues– would grow slightly in GDP terms in 2011 despite the fact that the rate has been reduced by one percentage point, given that economic activity continues to grow and that a series of administrative measures have been taken to offset the impact of the reduction of this tax rate. These measures are associated with the expansion of the tax withholding system to construction contracts, gold, paprika, asparagus, and non-gold metallic minerals.



61. Revenues from **import duties** would amount to 0.3 percent of GDP at end 2011. The collection of these taxes has been influenced by the reduction of tariffs implemented at end 2010<sup>3</sup> and in April of this year<sup>4</sup>. The average nominal tariff has been gradually lowered to 3.2 percent.

<sup>3</sup> S.D. 279-2010-EF dated December 31, 2010.

<sup>4</sup> S.D. 055-2011-EF dated April 10, 2011.





62. In **2012** the current revenues of the general government would grow 6.0 percent, as a result of which the revenue to GDP ratio would be 20.9 percent, slightly higher than in 2011 (20.7 percent). The general government current revenues would show some growth in 2012 even though the full effect of the tax measures adopted in the first semester of 2011 would only be observed in the revenues of 2012. Additionally, higher revenues are also estimated due to revenues from the new levy established for mining companies. The revenues to GDP ratio in **2013** would remain at 20.9 percent.

## **Evolution of government expenditure**

63. Declining by 1.2 percent, the non financial expenditure of the general government in the **first semester of 2011** represented 15.2 percent of GDP. The variation observed in non financial expenditure resulted from a growth of 5.1 percent in



current expenditures and a decline of 17.1 percent in gross capital formation in this period. While sub national governments reduced investments in the latter – local governments, by 47 percent, and regional governments, by 22 percent–, the national government registered a positive variation of 12 percent.

64. Another factor that affected expenditure in the first semester was the passage of Emergency Decree 012-2011 (dated March 31, 2011), which was enacted to ensure compliance with the fiscal rule established for this year in the Financial Equilibrium Law, according to which an annual surplus of 2 percent of GDP (about 4 percent of GDP in the first semester) should be generated in the first semester of this year. Among other measures, this regulation, which was repealed on June 12, established the suspension of additional spending to be funded through supplementary credits to ordinary resources, set a limit of 40 percent for the use of contingent reserves, established limits for expenditure in goods, services, and capital expenditures, and allowed transfers of resources only for projects that were in the implementation stage.



65. It is estimated that the nominal level of expenditure established in the MEF's revised Multiannual Macroeconomic Framework (MMF) would be reached in **2011**. This implies a real growth of non-financial expenditure of 3.8 percent in the general government expenditure in the year. By expenditure group, current expenditure would increase 6.1 percent and expenditure in gross capital formation would increase 1.3 percent (total capital spending would decline 1.3 percent). In this scenario, sub national governments' spending is expected to grow in the last months of the year, especially in terms of capital expenditure. It is worth pointing out that payments made to the Fuel Price Stabilization Fund (FPSF) so far this year amount to S/. 1.87 billion (S/. 600 million in March, S/. 664 million in May, and S/. 605 million in July).


- 66. The Fiscal Stabilization Fund (FSF) was reinforced with an extraordinary contribution of S/. 2 billion from the Treasury and with the transfer of 50 percent of the balances of 2010 fiscal balance corresponding to funding source "Directly collected resources" of agencies attached to the executive branch, as well as the balance of the public funds affected by the rationalization established in the Financial Balance Act of 2011. With these contributions and with ordinary transfers, the balance of the FSF at end June amounted to US\$ 5.63 billion.
- 67. The budget bill for 2012 submitted to Congress considers a total amount of funds of S/. 95.54 billion, a figure that represents a nominal increase of 8 percent compared to the original budget of 2011. The non-financial expenditure of the draft budget amounts to S/. 86.04 billion, a sum 8.8 percent higher than the one considered in the original budget for 2011. It is worth mentioning that the proposed budget differs from the fiscal accounts mainly due to methodological differences in terms of the institutional coverage. Thus, the budget does not include the operations of Essalud and public charities, among other organizations.
- 68. Non financial public expenditure in 2012 and 2013 would correspond with the levels of expenditure projected in the MMF, which considers a growth of expenditure of 4.9 percent in 2012 and one of 5.4 percent in 2013. Fewer resources are expected to be allocated to the FPSF in 2012, which would free resources that may be used for other purposes.

The forecasts on public expenditure are consistent with the annual fiscal rules on the government deficit and the growth of government spending contained in the Fiscal Responsibility and Transparency Act, which have been fully restored since 2011 after the exceptions made in 2009 and 2010.







#### Structural economic balance and fiscal impulse

69. The **structural economic balance** is an indicator that shows the evolution of fiscal policy decisions given that the effects of the business cycle and of the prices of the main mineral exports are deducted from the conventional economic balance. This indicator would be negative by 1.2 percent of GDP in 2011 and is projected to improve to 0.5 percent of GDP and 0.2 percent of GDP in 2012 and 2013, respectively.

The **fiscal impulse**, which shows the net expansionary effect of fiscal policy on domestic demand, would be -0.8 percent of GDP in 2011, which indicates that fiscal policy is contractive. In 2012 and 2013 fiscal policy would converge towards a more neutral stance.



Memo: The structural balance includes adjustments in the output gap and the terms of trade considering a period of 10 years for the reference price, as in *Nota de Estudios No. 51* (2008). Moreover, the structural economic balance discounts the payments made to the Fuel Price Stabilization Fund and includes accruals (net compensation) for this expenditure.



# **Financial requirements**

70. In line with the positive fiscal results projected for the next years, the **public sector's financial requirements** would be negative in 2011-2013. Financial requirements would be negative by US\$ 326 million in 2011 and are estimated to be negative by US\$ 652 million and US\$ 1.48 billion in 2012 and 2013, respectively.

Table 26           FINANCIAL REQUIREMENTS OF THE NON-FINANCIAL PUBLIC SECTOR 1/ (Millions of US\$)											
	2	010		2011 *			12 *	2013 *			
	Semester I	Year	Semester I	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11		
I. Uses	-1,093	2,310	-4,205	1,014	-326	1,086	-652	-308	-1,480		
1. Amortization	803	1,496	622	1,422	1,352	1,742	1,673	1,382	1,567		
a. External debt	465	952	432	880	815	1,182	1,170	956	946		
b. Domestic debt	338	543	189	543	538	560	503	426	620		
Of which: Recognition bond	ls 94	263	93	234	217	292	255	170	210		
<ol> <li>Overall balance (negative sign indicates surplus)</li> </ol>	-1,897	814	-4,827	-408	-1,678	-656	-2,325	-1,690	-3,047		
II. Sources	-1.093	2.310	-4.205	1.014	-326	1.086	-652	-308	-1.480		
1. External	469	1.532	449	1.168	1.153	747	1.323	860	1.130		
2. Bonds 2/	2.392	835	43	404	647	0	1,488	0	577		
3. Internal 3/	-3,955	-56	-4,697	-558	-2,125	339	-3,463	-1,168	-3,187		
Memo: Balance of gross public debt											
Billion of US\$	33.6	36.2	35.9	37.2	37.5	36.9	39.2	36.6	39.3		
% of GDP	23.7	23.5	21.8	21.5	21.4	19.3	20.2	17.6	18.6		
Balance of gross public debt 4/											
Billion of US\$	15.7	17.9	12.9	17.7	16.5	17.1	14.1	15.2	10.4		
% of GDP	11.1	11.7	7.8	10.2	9.4	9.0	7.3	7.3	4.9		

IR: Inflation report. \* Forecast.

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.

Source: BCRP, MEF.



Two auctions of sovereign bonds amounting to a total of S/. 525 million have been carried out so far this year: the first one, whereby a reopening of 2015 bonds for a total of S/. 100 million were placed at a rate of 5.5 percent, took place in March. The demand for this bond reached S/. 316 million. The second auction of bonds for a total of S/. 425 million was held in August. A new point was inserted in this case in the sovereign bonds curve since bonds for a total of S/. 125 million with maturity in 2013 were issued. The demand for this debt paper, which was placed at a rate of 4.4 percent, reached S/. 659 million. Moreover, a reopening of bond 2042 for a total of S/. 300 million was placed in the market at a rate of 6.5 percent and the demand for this bond reached S/. 629 million. Investors' confidence in sovereign bonds in a context of high risk in international markets is worth highlighting.

The indicator about the risk of Peru's debt shows that the average life of the public debt portfolio at June 2011 is 13 years. The domestic debt shows a longer maturity period of 15 years, while the external debt has a maturity period of 12 years.

As a result of the debt management in recent years, the external debt has been reduced from 79 percent of the total debt in 2000 to 56 percent in Q2-2011, while the level of domestic debt has increased from 21 percent in 2000 to 44 percent in June 2011.

As regards the gross debt/net debt ratio, a significant reduction is projected by 2013. This reduction would stem both from the improvement of fiscal accounts, which will result in a higher level of assets, and from the expected growth of economic activity. The gross debt would decline from a level of 23.5 percent of GDP in 2010 to a level of 18.6 percent in 2013 and the net debt would reach 4.9 percent in the same year.





71. It is worth pointing out that the risk rating agency Standard & Poor's raised the rating of Peru's long term sovereign debt in foreign currency from "BBB-" to "BBB" at end August, thus reaching the same level assigned to the debt of countries like Mexico. According to S&P's, this upgrading reflects expectations that the continuity of fiscal and monetary policies will provide support to greater flexibility in economic policy and to growth. Additionally, Moody's has indicated the possibility of upgrading the rating of Peru's sovereign debt before the end of the year.







# V. Monetary policy

- 72. After rising the reference rate by 25 basis points each month during the first five months of the year, the Board of the Central Bank has maintained this rate at 4.25 percent. This continuous pause in monetary adjustment is preventive in a context of lower global economic growth and worsening of the debt problems observed in Europe over the past months.
- 73. Since the recent evolution of the world economy shows that there are still risks that could affect global economic recovery, the BCRP will continue to oversee the implications of these risks on the evolution of inflation, expectations of inflation, and economic activity. The BCRP stands ready to take actions on a timely basis, should this be required.



# RECENT MEASURES IN THE REFERENCE INTEREST RATE: June – September, 2011

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

This measure takes into account the moderation of increases in consumer prices and in some indicators of activity. Future adjustments in the reference rate will depend on new information on the evolution of inflation and its determinants.

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

This pause in the rise of the reference rate takes into account the moderation of inflation and some indicators of activity, as well as increased uncertainty regarding the global economy. Future adjustments in the reference rate will depend on new information on the evolution of inflation and its determinants.

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

This decision takes into account the slowdown observed in global economic activity. Future adjustments in the reference rate will depend on new information on the evolution of inflation and its determinants.

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

This decision takes into account the slowdown observed in global economic activity and the intensification of international financial risks. Should these trends continue, the Central Bank will change its monetary policy stance.

74. The rates of reserve requirements have not been modified since May 2011, even though these rates are above the levels they reached in the period prior to the bankruptcy of Lehman Brothers in September 2008. Because of the liquidity levels accumulated with higher reserve requirements in both local currency and in foreign currency, should a contingency arise –for example, due to a sudden reversal of capital flows–, reserve requirements could be reduced to provide liquidity in domestic and foreign currency to the financial system and thus prevent that credit supply be affected in the economy.



76. Short term interest rates in domestic currency showed a declining trend both in the bank system and in the capital market in the last quarter, after the Central Bank



made a pause in the withdrawal of monetary stimulus since June. This trend would be reflecting lower expectations of future interest rate rises.



The decline in expectations of future interest rate adjustments, observed since May, became more marked in August with the flattening of the yield curve of the Central Bank securities. This also reflected in longer-term rates, such as the rate on the 2-year sovereign bond (BTP 2013) issued on August 23 which reached a yield rate of 4.42 percent, just 12 bps above the rate on the 1-year CDBCRP. These rates would be reflecting that the market expects the interest reference rate to remain relatively stable in the next two years.

Table 27 BLOOMBERG SURVEY BEFORE THE ANNOUNCEMENT OF THE CENTRAL BANK REFERENCE RATE										
Announcement date Reference rate before Expected rate										
	the announcement	Average	Median	Higher	Lower					
06-Jan-11	3.00%	3.04%	3.00%	3.25%	3.00%					
10-Feb-11	3.25%	3.46%	3.50%	3.50%	3.25%					
10-Mar-11	3.50%	3.75%	3.75%	3.75%	3.75%					
07-Apr-11	3.75%	4.05%	4.00%	4.25%	4.00%					
12-May-11	4.00%	4.25%	4.25%	4.50%	4.00%					
09-Jun-11	4.25%	4.43%	4.50%	4.50%	4.25%					
07-Jul-11	4.25%	4.26%	4.25%	4.50%	4.25%					
11-Aug-11	4.25%	4.26%	4.25%	4.50%	4.25%					
08-Sep-11	4.25%	4.25%	4.25%	4.25%	4.25%					

Source: Bloomberg.

These lower market expectations regarding the reference rate are also reflected in Bloomberg's survey to the main economic analysts before the Central Bank announces its reference rate. Since February, this survey shows increasingly lower expectations of monetary policy adjustments together with a lower range of the rates expected. In the policy meeting held in September, there was a consensus among the surveyed analysts that the Central Bank would maintain its policy rate unchanged at 4.25 percent.

76. Banks' 90-day prime lending rate declined from a peak of 5.75 percent in early June to 5.33 percent in August as a result of the pause made in the increase of the benchmark rate and the flattening of the yield curve mentioned above. On the other hand, prime rates in foreign currency increased from 2.29 to 2.55 percent between July and August.





78. By type of loans, the interest rates on corporate loans and consumer loans in local currency showed a downward trend in the quarter. Thus, interest rates on loans for large corporations fell from 8.1 to 7.9 percent, the rates on loans for companies fell from 6.4 to 6.3 percent, and the rates on loans for small businesses fell from



23.6 to 23.3 percent. Furthermore, the rates on consumer loans dropped from 39.9 to 37.4 percent in the same period. On the other hand, the rates on loans for micro businesses increased from 31.9 percent in June to 33.5 percent in August, while the rates on loans for midsize companies rose from 10.9 to 11.2 percent. After increasing slightly to 9.8 percent in July, the rates on mortgages recorded 9.7 percent in August, the same level observed in June.

Table 28 INTEREST RATE BY TYPE OF CREDIT IN DOMESTIC CURRENCY 1/ (%)											
	Domestic currency 2/										
	Corporate	Large enterprises	Medium-size firms	Small businesses	Microbusinesses	Consumption	Mortgages				
Dec-10	4.6	5.9	10.3	23.3	27.2	40.7	9.3				
Mar-11	5.4	7.5	11.1	24.6	32.5	38.4	9.4				
Jun-11	6.4	8.1	10.9	23.6	31.9	39.9	9.7				
Jul-11	6.4	8.0	11.0	23.3	33.8	40.1	9.8				
Aug-11	6.3	7.9	11.2	23.3	33.5	37.4	9.7				

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

2/ Firms' reports to the SBS include more segmented information about the average interest rates on corporate loans, credits to large, mediumsize, small and micro businesses, according to the definitions included in SBS Resolution 11356-2008 and complementary regulations. The information of corporate credits to large, medium-size, and small businesses is reported since September 2010. Source: SBS.

78. The interest rates for loans in foreign currency to large, midsize, and small companies increased between June and August 2011. The interest rates on loans to micro businesses increased the most (from 16.3 to 19.4 percent in this period), while the rates on loans to small businesses declined by 0.4 percentage points. On the other hand, the rates on consumer loans rose from 21.3 to 22.0 percent.

Table 29 INTEREST RATE BY TYPE OF CREDIT IN FOREIGN CURRENCY <sup>1/</sup> (%)												
	Foreign currency <sup>2/</sup>											
	Corporate	Large enterprises	Medium-size firms	Small businesses	Microbusinesses	Consumption	Mortgages					
Dec-10	3.3	5.5	8.6	14.2	14.8	19.4	8.1					
Mar-11	3.6	5.6	9.3	16.3	16.7	20.9	8.3					
Jun-11	3.6	5.3	9.3	15.6	16.3	21.3	8.5					
Jul-11	3.2	5.6	9.0	15.3	18.2	21.7	8.4					
Aug-11	3.2	5.5	9.4	15.2	19.4	22.0	8.4					

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

2/ Firms' reports to the SBS include more segmented information about the average interest rates on corporate loans, credits to large, mediumsize, small and micro businesses, according to the definitions included in SBS Resolution 11356-2008 and complementary regulations. The information of corporate credits to large, medium-size, and small businesses is reported since September 2010. Source: SBS.



79. Between June and August the interest rates on 30-day deposits in domestic currency declined from 4.3 to 4.1 percent, while the rates on 30-day deposits in foreign currency rose from 0.5 to 0.7 percent.

Table 30 INTEREST RATES IN NUEVOS SOLES AND US DOLLARS (%)										
Nuevos Soles US Dollars Difference (bps) (A										
	Jun.11	Aug.11	Jun.11	Aug.11	Nuevos Soles	US Dollars				
1. Deposits up to 30 days	4.3	4.1	0.5	0.7	-20	20				
2. Rate on 31 to 180-day term deposits	3.6	4.2	1.1	1.0	60	-10				
3. Rate on 181 to 360-day term deposits	4.3	4.6	1.7	1.6	30	-10				
4. Corporate prime rate	5.6	5.4	2.3	2.4	-20	10				
5. TAMN / TAMEX	18.6	18.7	7.8	7.9	10	10				

80. Lower expectations of adjustments in the reference rate are reflected in the flattening of the maturity structure of interest rates (lower premiums for longer maturities relative to the benchmark rate), which would be indicating that the market expects a more flexible monetary policy stance. Moreover, an increase is observed in the amounts of sovereign bonds traded with a higher participation of non resident investors. In fact, the strong demand of non-resident investors has led the rate of 2013 bond in the secondary market to decline to a value below the reference rate (the bond was traded at a rate of 4 percent at the end of August and at 3.90 percent on September 9).

Table 31         SOVEREIGN BONDS (BTP): MATURITY SPREAD,         VOLUME AND NON RESIDENTS' HOLDINGS1         (Amount in millions,rates in %)									
Month	Reference	Spread	relative to the reference	e rate	Volume of	Non residents'			
	rate	BTP 2015	BTP 2020	BTP 2037	BTP traded 2/	holdings of BTP			
Dec.10	3.00	1.5	2.9	3.7	1,736	10,663			
Jan.11	3.25	1.4	2.6	3.4	2,847	10,944			
Feb.11	3.50	1.3	2.8	3.4	1,193	10,809			
Mar.11	3.75	1.9	3.0	3.5	1,419	10,690			
Apr.11	4.00	1.7	3.0	3.7	1,616	10,694			
May.11	4.25	1.6	2.4	3.1	2,160	10,521			
Jun.11	4.25	1.2	2.1	3.0	3,401	10,642			
Jul.11	4.25	1.1	1.9	2.6	2,048	11,058			
Aug.11	4.25	0.3	1.3	2.1	4,332	11,476			
12 Sep.11	4.25	0.1	1.2	1.9	n.d.	11,600			

1/ End of period data. On August 30, 2011 S&P raised the sovereign debt rating of Peruvian debt in foreign currency to BBB.

2/ Monthly total. Includes VAC bonds and the transfer of primary issuance of market makers in the secondary market.



# **Monetary operations**

81. Between June and August 2011, the Central Bank made net placements of its sterilization instruments for a total of S/. 3.9 billion. This amount comprised mainly net placements of CDBCRP (S/. 3.73 billion) and term deposits (S/. 2.75 billion) and was offset by net maturities of CDR BCRP (S/. 2.08 billion) and CDV BCRP (S/. 500 million). Moreover, public sector's net deposits in domestic currency at the Central Bank increased by S/. 383 million in the same period.

Table 32           SIMPLIFIED BALANCE SHEET OF THE BCRP           (As % of Net International Reserves)								
Net Assets	30-Jun-11	31-Aug-11						
I. Net International Reserves	<b>100%</b> (US\$ 47.15 billion)	<b>100%</b> (US\$ 48.51 billion)						
Net Liabilities II. Total public sector deposits In domestic currency In foreign currency	<b>37.7%</b> 22.8% 14.9%	<b>37.1%</b> 22.7% 14.4%						
III. Total reserve requirements In domestic currency In foreign currency 1/	<b>28.0%</b> 7.1% 21.0%	<b>24.7%</b> 6.2% 18.5%						
IV. BCRP Instruments CD BCRP CDV BCRP CDR BCRP CDLD BCRP Term deposits V. Currency VI. Other	12.9% 1.9% 6.8% 1.6% 0.0% 2.6% 18.1% 3.3%	<b>15.6%</b> 4.7% 6.3% 0.0% 0.0% 4.6% <b>18.7%</b> <b>3.9%</b>						

Thus, the share of public sector deposits in terms of net international reserves (NIRS) declined from 37.7 percent in June to 37.1 percent in August; the share of Central Bank instruments increased from 12.9 to 15.6 percent in the same period, and the share of reserve requirements declined from 28.0 to 24.7 percent.

82. The Central Bank continued making periodical placements of 6-month and 1-year CD BCRP for a fixed amount of S/. 50 and S/. 30 million, respectively, per auction, as well as placements of 3-month CD BCRP, thus reaching a balance of S/. 6.23 billion in August. As a result of this, the BCRP's total balance of Certificates of Deposit, including CDV BCRP, was S/. 14.54 billion.



83. Seasonally adjusted average currency in circulation showed a monthly growth rate of 2.6 percent in August (vs. 0.4 percent in July) and a rate of 19.6 percent in the last 12 months, a higher than in the previous month. Moreover, in terms of the quarterly moving average, currency in circulation continues to grow in August.



# Credit

85. In seasonally adjusted terms, credit to the private sector grew 0.9 percent in July –a slightly higher rate than in June (0.7 percent)– and 20.5 percent in the last 12



months (vs. 22.0 percent in April). This lower growth of credit is mainly explained by the moderation observed in credit for foreign trade operations, whose annual growth rate declined from 58.4 to 31.8 percent between April and July 2011. Comparing the evolution of credit to the private sector by currencies, credit in nuevos soles recorded an annual growth rate of 19.4 percent; while credit in dollars grew 21.8 percent.



85. By types of credit, commercial credit and mortgages showed a noteworthy dynamism with annual growth rates of 19.5 and 28 percent, respectively, even though these rates were lower than the ones observed in April 2011. Consumer loans, on the other hand, showed a higher annual growth rate (19.4 percent) than the one registered in April (18.7 percent).



86. The evolution of credit is reflected in the reduction of the dollarization ratio which reached a level of 44.1 percent in July, in line with the trends observed in the ratio of dollarization of liquidity which declined by 0.9 percentage points between April and July.



# **Exchange rate**

87. After the period of uncertainty associated with the elections, the exchange rate returned to its appreciatory trend until the third week of July. Thus, the exchange rate appreciated 0.8 percent between the end of June and August,.



Between July and August, the main supply of dollars in the foreign exchange market came from nonresident and private investors (US\$ 774 million and US\$ 1.8 billion, respectively), and from banks' reduction of their foreign exchange position (down by US\$ 330 million). This was offset by pension funds' demand for dollars (US\$ 461 million). Excess supply was covered by the BCRP operations in the foreign exchange market (US\$ 2.48 billion).





88. Expectations of an exchange rate appreciation were reflected in the rise of banks' balance of net forward purchases associated with the maturities of sale contracts and the higher sales contracts agreed, which is how banks' clients try to ensure a selling exchange rate for their operations. Between June and late August 2011, banks' balance of net forward purchases increased from US\$ 572 million to US\$ 1.19 billion.



In this context of downward volatility in the exchange rate and of a rise in the supply of dollars in the foreign exchange market, the Central Bank intervened in this market in July buying US\$ 1.05 billion in the spot market, which added onto the maturity of US\$ 530 million in CDR BCRP (on July 12,14, 25 and 26). In August the BCRP continued its interventions in the foreign exchange market, with purchases of FC amounting to US\$ 686 million.

89. The survey on expectations about the exchange rate in the period of 2011-2013 shows that both the financial system and economic analysts project declining levels in the exchange rate.

Table 33         SURVEY ON MACROECONOMIC EXPECTATIONS: EXCHANGE RATE 1/ (S/. per US\$)									
		Survey as of:	A						
	June 30	July 31	August 31						
Financial entities									
2011	2.75	2.74	2.72						
2012	2.76	2.72	2.70						
2013	2.77	2.71	2.70						
Economic analysts									
2011	2.79	2.75	2.72						
2012	2.75	2.72	2.71						
2013	2.75	2.74	2.70						
Non-financial firms									
2011	2.80	2.78	2.75						
2012	2.80	2.80	2.80						
2013	2.85	2.85	2.80						

1/ Expected of exchange rate at December of each year.

90. In real terms, the exchange rate in recent months has been slightly lower than the average level of the exchange rate in the last 15 years (100.6). Compared to August 2010, the multilateral real exchange rate has risen 4.0 percent due to the higher external inflation (4.5 percent) observed relative to domestic inflation (3.35 percent) and due to the increased depreciation of the nuevo sol against the currency basket of our main trading partners (2.87 percent).



The evolution of the multilateral real exchange rate is consistent with the evolution of its fundamentals. Estimates of the equilibrium real exchange rate show no significant misalignments in the real exchange rate with the current levels of a real exchange rate of 98.7.





91. Between June and August net international reserves (NIRs) increased by US\$ 1.36 billion and reached a balance of US\$ 48.5 billion at August 31, 2011. This high level of NIRs provides the Peruvian economy with appropriate levels of international liquidity to face eventual contexts of turbulence in international markets. In terms of sources, the increase observed in NIRs is mainly explained by the BCRP purchases of foreign currency. As regards the composition of NIRs, the BCRP foreign exchange position accounts for 67 percent of NIRs, while banks and public sector's deposits account for 19 percent and 14 percent of NIRs, respectively.



<sup>5 &</sup>quot;¿Qué explica la evolución del tipo de cambio real de equilibrio in el Perú? 1992-2009". Revista Moneda, Banco Central de Reserva del Perú, No. 147, pp. 9-14.

## BOX 2

#### MACRO-PRUDENTIAL POLICIES IN LATIN AMERICA: OBJECTIVES AND TOOLS

The recent international financial crisis has prompted discussion about the importance of macroprudential policies and their regulation as a mechanism to preserve financial stability.

Gertler, Kiyotaki and Queralto (2011), Lorenzoni (2009), Korinek (2009), Bianchi (2009), and Stein (2010) have explained in theoretical terms the need for macro-prudential policies that allow agents to internalize the risks that an increase in their debt levels poses to the system. The application of these policies, however, can generate significant costs for the financial system in terms of efficiency and of its impact in the real sector.

Macro-prudential policies in developed countries have been entrusted to the Financial Stability Committees or Councils (FSC). In the emerging economies, regulatory measures of a macroprudential nature have preceded the establishment of FSCs and have been implemented since the 90s in response to the Asian and Russian crises of the late 90s and the Argentinean crisis of 2001.

In most emerging economies, the implementation of macro-prudential policies has been an initiative of central banks aimed at reducing the risks associated with exchange rate mismatches and, to a lesser extent, at limiting businesses and households' excessive deleveraging.

The most important measures taken in the 90s by the economies analyzed were: high rates of reserve requirements in foreign currency in Uruguay and Peru; limits to the foreign exchange position in foreign currency in Uruguay and Peru; and limits on financial institutions' leverage levels, and provisions in accordance with debtors' levels of debt and income; limits to the foreign exchange position in foreign currency, and differentiated liquidity requirements by currency in Peru.

After Argentina's crisis of 2001, limits were set in Argentina to financial entities' foreign exchange position and net negative global position in foreign currency, and liquidity requirements and limits on derivatives position were established in Uruguay. In 2004, Peru established reserve requirements for banks' short term debts with foreign banks.

In 2007, Argentina set capital requirements for operations with derivatives, Brazil and Bolivia established limits to banks' foreign exchange position in foreign currency, and Chile set capital requirements, and in 2008 Peru and Bolivia established dynamic credit provisions. In 2009, Paraguay established limits to banks' foreign exchange position in foreign currency and Chile established loan-to-value ratios for mortgage loans with endorsable and non-endorsable mutual funds. In 2010, Argentina established requirements for the maintenance of bank capitals, and in 2011, Peru established position limits on banks' derivatives in foreign currency and Bolivia established the capitalization of a percentage of the profits generated.



Although there is no quantitative assessment of the effectiveness of the different macro-prudential instruments applied in the countries of the region, most central banks consider that these policies have contributed to make their financial systems more resilient to the recent global financial crisis.

MACROPRUDENTIAL MEASURES										
Measures/Cou	untries	Argentina	Bolivia	Brazil	Chile	Paraguay	Peru	Uruguay	Purpose	Rules
Limits to financial entities' foreign exchange	Limits to financial entities' foreign exchange position in foreign currency		Ń	Ń	√ 1 <i>1</i>	v	Ń	1	Reduce currency mismatch risks and prevent foreign exchange risks derived from speculative positions	-
Limits to positions in derivative products		Ń		Ń			Ń	4	Reduce excessive volatility in the exchange rate and thus reduce foreign exchange risk.	-
Reserve requirements in domestic currency and foreign currency		Ń	Ń	Ń	√ <sup>2i</sup>		Ń		Mitigate liquidity risk and maturity mismatches between lending and deposits rates. Limit capital inflows.	-
Liquidity requirements (Liquid assets ratio: liquid assets to short term liabilities)				vi a	Ń		Ń	1	Mitigate liquidity risk and currency exposure	-
Dynamic credit provisions			Ń		N 40		Ń	1	Accumulate additional provisions for credit risks and reduce the credit cycle.	Bolivia(2008) Perú(2008).
Cyclical capital requirements and/or	Additional requirements in accordance with the term and value of the loan.			Ń					Reduce pro-cyclicality in the financial system, strengthen the solvency of the financial system, and prevent	-
changes in risk weights	Capital increase in accordance with profits	Ń	Ń						excessive leveraging levels.	
	Limit to the LTV for mortgage loans granted through letters of credit, endorsable and non endorsable mutual funds.				ν <sup>167</sup>					-
Limits to the loan-to-value ratio (LTV) and/ or the debt-to-income ratio (DTI)	Limit to LTV for mortgage loans collateral to covered bonds.						√ e/		Reduce credit risk and private agents' leverage.	-
	Increase in weight of capital requirements and provision in accordance with LTV and DTI ratios.	√ <sup>171</sup>		Ń				18		-
Limits to leveraging sources					Ń		Ń	1	Set limits on financial firm's leverage.	

1/ Reserves required in accordance with market risk

Non remunerated reserve requirements.
 Even though no quantitative limits have been established, information on liquid assets and short term liabilities must be supplied.

Voluntary counter-cyclical provision scheme.
 Limit applied to mortgage loans granted with letters of credit, endorsable and non-endorsable mutual funds.

/ Limit for mortgage loans that serve as collaterals for covered bonds.
 // Increase in the weight of capital requirements in accordance with value of loans/assets to acquire.

8/ An additional provision of 20% is required for consumer loans and housing loans, when the borrower's income is not over 3.33 percent of the amount of the loan in domestic currency or not over 6.66 percent of the amount of the loan in foreign currency. Source: Web pages of Central banks and others publications.

Recently, following the experience of developed countries, some Latin American countries -i.e. Brazil, Chile, Mexico and Uruguay- have established FSCs in order to implement macroprudential policies given the importance of "institutionalizing" these policies to enhance their effectiveness.

In January 2006, Brazil created the Committee on Regulation and Supervision of Financial Markets, Capital Markets, Insurance and Pension System (COREMEC); in July 2010, Mexico established the Financial System Stability Council; in April 2011, the establishment of the Financial Stability Council was proposed in Chile, and in July 2011 the Financial Stability Committee (FSC) was created in Uruguay. The table below compares the different characteristics of the FSCs in the region.

	FII	NANCIAL STABILITY	COUNCILS	
	Brazil (COREMEC)	Chile (CEF)	Mexico (CESF)	Uruguay (CEF)
Objectives	Propose and adopt measures for the proper functioning of the financial system, capital market, pension and insurance system.	Monitor available information on financial activities subject to oversight and regulation in a consolidated manner to allow appropriate systemic risk management. Coordinate the integrated supervision of financial conglomerates for policy implementation.	Foster financial stability, prevent substantial disruptions or alterations in the functioning of the financial system, and offset the impact of disruptions if they arise.	Strengthen the role and coordination of the organizations integrating the financial safety network in terms of the proper functioning of the financial system as a whole.
Roles	<ul> <li>-Propose and implement measures aimed at improving the operation of markets subject to COREMEC regulation and oversight.</li> <li>- Facilitate and coordinate the exchange of information between participating institutions.</li> <li>- Propose coordinated regulation and oversight actions.</li> </ul>	<ul> <li>Identify and assess risks to financial stability and require the monitoring of these risks, reporting findings to the Council.</li> <li>Request relevant information to the different financial system agents.</li> <li>Recommend policies that contribute to macro financial stability.</li> <li>Recommend changes in regulations, information and transparency requirements, and the establishment of back-up and back office systems.</li> <li>In the case of financial crises, coordinate the actions and responses of the different superintendents and request action from other organizations.</li> <li>Formalize and strengthen coordination between the supervisory authorities for the oversight of financial conglomerates.</li> </ul>	-Identify potential risks to financial stability on a timely basis, and recommend and coordinate the policies to be implemented. -Serve as a consultative body of the Federal Executive branch in financial stability matters. -Prepare an annual report on the situation of financial stability.	Share information and outlooks on the financial system. - Promote studies to identify and measure systemic risks, as well as strategies to manage these risks. - Support instruments used for the effective prevention and management of crises with potentially systemic impacts. - Promote coordination with regional and international financial stability organizations.
Integrated by	Eight members: the presidents and one director of the Central Bank of Brazil and of Real Estate Securities Commission, the secretary and a director of the Secretariat of Supplemental Pension Plans of the Social Security Ministry, the superintendent and a director of the Superintendency of Private Insurance Companies.	Four members: the Minister of Finance, the superintendent of Securities and Insurances, and the Superintendent of Pension Funds. The Governor of the Central Bank is invited to attend to each of the Council sessions.	Nine members: the secretary and sub- secretary of Finance and Public Credit, the president of the National Banking and Securities Commission, the president of the National Saving System for Retirement, the governor and two vice governors of the Bank of Mexico.	Four members: the Minister of Finance, the Governor of the Central Bank, the Superintendent of Financial Services, and the President of the corporation for the Protection of Bank Savings.
Presidency of Committee	Rotating presidency	Minister of Finance	Secretary of Finance and Public Credit	
Supporting bodies	Executive Secretariat (Central Bank of Brazil)	Technical Secretariat (based in the Ministry of Finance)	Executive Secretariat (Central Bank of Mexico) and Technical Committee (the latter, which makes proposals and recommendations, is integrated by 14 members of the different entities of the FSC).	Technical committee (a representative is designated by each of the Committee members).





# BOX 3 THE DEVELOPMENT OF MICROFINANCE IN PERU

An increasing development of microfinance has been observed in Peru in the last 10 years. This is reflected in the growth of loans to this segment and in the significant reduction of the average interest rate on such loans (the latter fell from 55 percent in 2002 to 32 percent in 2010). The number of formal micro loans increased from 300 thousand in 2002 to 2.1 billion in 2010, with a turnover which rose from S/. 1.5 billion to S/. 20.2 billion (4.8 percent of GDP) in the same period, which represents a growth of over 10 times in real terms.

The good investment climate for microfinance has also attracted more international investors specialized in this credit segment. For example, "Triodos Microfinance Fund"<sup>6</sup> says in its Newsletter for investors of June 2011 that, after Cambodia (18.2 percent), Peru is the second most important destination of its global investments oriented to microfinance (17.4 percent). Because of the progress made in the field of micro enterprise credit in the country, The Economist Intelligence Unit has considered Peru as the country with the best business conditions for microfinance worldwide in two consecutive years (2009 and 2010).

Moreover, the study entitled "El árbol de la mostaza. Historia de las Microfinanzas en el Perú"<sup>7</sup> shows that the sustained growth of microfinance loans has also been coupled by a sustained reduction in the interest rates on these loans. The study concludes that the proper legal framework, the soundness of the economy, and the "culture" of repaying these loans are factors that attract private investment funds in a context of continuous competition.



<sup>6</sup> Triodos Microfinance Fund, a subsidiary of Amsterdam-based commercial bank Triodos, provides capital to microfinance institutions through its Triodos Investment Management since 1994. This organization, which has funded more than 100 microfinance institutions operating in 40 countries in Asia, Latin America, Africa, and Eastern Europe, promotes fair trade and uses microcredit as an effective tool to combat poverty. Triodos has received several international awards in recognition of its contributions to development.

<sup>7</sup> Webb, Richard; Conger, Lucy; Inga, Patricia. El Árbol de la Mostaza. Historia de la Microfinanzas en el Perú. Universidad San Martin de Porres, 2009.

Because of this competition, people who previously were not creditworthy were offered access to loans by microfinance institutions, which allowed them to have a credit history, a key element in obtaining credit. Borrowers' credit history gave them access to other lower-cost sources of funding and some of them migrated to larger financial institutions with better credit conditions.

Initially the micro credit market in Peru was highly fragmented<sup>8</sup>, with a predominance of leading companies being observed in regional markets. This structure initially involved lower competition pressures, with higher interest rates, lower efficiency levels and a large number of small-scale microfinance institutions (MFIs) prevailing. Today this fragmentation has declined greatly and a clear trend towards the consolidation of the main MFIs is observed with the establishment of municipal banks, rural banks, and finance companies in Lima, as well as with the expansion of the national network of banks. In view of the dynamism of this market, banks are establishing microfinance divisions all over the country, responding in this way to the successful performance of MFIs and to increasing competition in the rest of other lower-risk segments.

One of the key findings of the study carried out by Portocarrero is that interventions that may cause distortions in the micro credit market, such as setting interest rates caps, should be avoided since they discourage the development of micro credit, generate financial repression, and rationing in the supply of credits.

A recent study elaborated by CAF concluded that the main impact of interest rate caps is the reduction of the supply of micro credits<sup>9</sup>. The experience of other countries in terms of the benefits of establishing interest rate ceilings to improve families and micro-enterprises' conditions of access to credit has not been positive. Bangladesh and India<sup>10</sup> have had very bad experiences with the establishment of interest rate caps. In India, for example, this forced 82 percent of the poorest rural people to migrate to informal credit, as a result of which only 11 percent of this group has obtained credit from microfinance institutions. Similar evidence has been found in Nicaragua and West Africa<sup>11</sup>.



<sup>8</sup> Felipe Portocarrero, "Mercado y gestión del microcrédito en el Perú". IEP - CIES (2004).

<sup>9</sup> Servicios Financieros para el Desarrollo. Promoviendo el acceso en América Latina. CAF, April 2011

<sup>10</sup> The Economist, November 18, 2010.

<sup>11</sup> Consultative Group to Assist the Poor.



# **VI.** Inflation

92. Between December 2010 and August 2011 annual inflation rose from 2.08 to 3.35 percent, falling transitorily above the target range. This increase in inflation is mainly explained by the impact of the rise observed in the prices of fuels and food since late 2010 on domestic prices.

The international prices of food products increased mainly due to climate problems that affected crops such as maize, wheat, and soybean in a context of historical minimum levels of inventories of these crops.



- 93. Non-core inflation, indicator reflecting the most volatile and transitory components of the CPI, showed a fast pace of growth since early 2010 and rose from an annual rate of 2.0 percent in December 2010 to 3.6 percent in August 2011. This fast pace of growth was mainly driven by the effect of the rise in the prices of food products (from 1.2 to 4.7 percent), such as maize, wheat, and soybean oil.
- 94. Accumulated inflation between January and August recorded a rate of 3.33 percent, with the rise in the prices of non-core food (9.4 percent) and fuels (5.4 percent) accounting mostly for this. The rate of accumulated core inflation between January and August was 2.6 percent, with the increases observed in education (3.5 percent) and meals outside the home (4.7 percent) being noteworthy. The annual rate of core inflation rose from 2.1 percent in December 2010 to 3.2 percent in August (affected also by the food component), while the rate of inflation excluding food and energy rose from 1.4 to 2.1 percent in the same period.

		Tabl INFLA (% ch	le 34 ATION lange)					
	Weight 2009=100	2006	2007	2008	2009	2010	20 JanAug.	11 12 month
I. INFLATION	100.0	1.14	3.93	6.65	0.25	2.08	3.33	3.35
II. CORE INFLATION Goods Services	<b>65.2</b> 32.9 32.2	<b>1.37</b> 0.97 1.85	<b>3.11</b> 3.30 2.88	<b>5.56</b> 5.32 5.86	<b>2.35</b> 2.17 2.56	<b>2.12</b> 1.53 2.72	<b>2.59</b> 2.07 3.11	<b>3.19</b> 2.41 3.98
III. NON CORE INFLATION Food Fuels Transportation Utilities	<b>34.8</b> 14.8 2.8 8.9 8.4	<b>0.83</b> 2.06 -1.50 1.12 -3.22	<b>5.07</b> 7.25 6.45 0.82 0.24	<b>8.11</b> 10.97 -0.04 5.86 7.48	<b>-2.54</b> -1.41 -12.66 0.19 -4.56	<b>2.00</b> 1.18 12.21 1.94 0.01	<b>4.74</b> 9.39 5.42 0.09 1.19	<b>3.65</b> 4.67 8.65 2.25 1.34
Memo: CPI without food and energy	56.4	1.28	1.49	4.25	1.71	1.38	1.50	2.13

Table 35       INFLATION       (Weighed contribution)										
	Weight 2006 2007 2008 2009 2010									
	2009=100						JanAug.	12 month		
I. CPI	100.0	1.14	3.93	6.65	0.25	2.08	3.33	3.35		
II. CORE INFLATION	65.2	0.79	1.80	3.20	1.34	1.38	1.69	2.07		
Goods	32.9	0.31	1.05	1.69	0.68	0.50	0.68	0.79		
Services	32.2	0.48	0.75	1.52	0.66	0.88	1.01	1.28		
III. NON CORE INFLATION	34.8	0.35	2.13	3.44	-1.09	0.69	1.64	1.28		
Food	14.8	0.48	1.69	2.63	-0.35	0.17	1.37	0.71		
Fuels	2.8	-0.09	0.36	0.00	-0.68	0.34	0.17	0.26		
Transportation	8.9	0.10	0.07	0.51	0.03	0.17	0.01	0.20		
Utilities	8.4	-0.14	0.01	0.30	-0.09	0.00	0.10	0.11		
Memo:										
CPI without food and energy	56.4	0.58	0.67	1.88	0.74	0.78	0.84	1.19		







95. At August 2011, imported inflation recorded an annual growth of 5.2 percent associated mainly with the increase in food prices (0.8 percent in 2010 and 9.5 percent at August 2011). Imported inflation grew 3.9 percent between January and August, reflecting the evolution of food (8.3 percent) and fuel (5.4 percent) components.

The nominal appreciation of the exchange rate (2.2 percent in the last 12 months in August) contributed to some extent to offset the impact of the rise in the international prices of these products on prices in the domestic market.

Table 36           DOMESTIC AND IMPORTED INFLATION: 2006 - 2011           (Accumulated % change)									
	Weight 2009=100	2006	2007	2008	2009	2010	20 JanAug.	11 12 month	
I. IMPORTED CPI	10.8	0.27	10.46	2.20	-6.25	3.78	3.90	5.25	
Food Fuel Electric appliances Other	3.0 2.8 1.3 3.7	2.08 -1.50 -1.29 0.64	18.83 6.45 -1.50 0.47	4.75 -0.04 -0.06 0.46	-3.07 -12.66 -2.39 -0.34	0.76 12.21 -0.58 1.20	8.35 5.42 -1.13 0.72	9.51 8.65 -1.77 1.40	
II. DOMESTIC CPI	89.2	1.28	2.84	7.44	1.35	1.87	3.27	3.12	
III. CPI	100.0	1.14	3.93	6.65	0.25	2.08	3.33	3.35	
Exchange rate		-6.40	-7.00	4.47	-7.59	-2.15	-2.71	-2.23	



96. The items that contributed most to increase inflation between January and August were meals outside the home, chicken meat, education (tuition and fees), gasoline,

eggs, and bread, while the items that contributed most to reduce inflation were citrus fruits, telephone rates, potatoes, national transportation, avocado, olluco, and spices and seasonings.

Table 37 WEIGHED CONTRIBUTION TO INFLATION: JANUARY - AUGUST 2011										
Positive	Weight	% Chg.	Contribution	Negative	Weight	% Chg.	Contribution			
Meals outside the home	11.7	4.7	0.57	Citrus fruits	0.5	-17.1	-0.11			
Poultry	3.0	20.6	0.54	Telephone rates	2.9	-2.6	-0.07			
Education (fees and tuition)	8.8	3.6	0.32	Potatoes	0.9	-6.6	-0.06			
Rice	1.9	12.1	0.21	National transportation	0.3	-8.9	-0.04			
Gasoline and oil	1.3	10.0	0.15	Avocado	0.1	-19.6	-0.03			
Eggs	0.6	29.2	0.13	Olluco and similar	0.1	-27.6	-0.03			
Bread	1.9	7.1	0.13	Spices and seasonings	0.5	-4.0	-0.02			
Toiletries	4.9	2.5	0.12	Chilli pepper	0.1	-20.1	-0.02			
Рарауа	0.2	82.3	0.12	Peach	0.1	-15.4	-0.02			
Garment for men and kids										
aged 12 or older	1.5	6.9	0.11	Cleaning items	0.9	-1.7	-0.02			
Total			2.40	Total			-0.42			

# Table 38 WEIGHED CONTRIBUTION TO INFLATION: SEPTEMBER 2010 - AUGUST 2011

Positive	Weight	% Chg.	Contribution	Negative	Weight	% Chg.	Contribution
Meals outside the home	11.7	6.2	0.74	Potatoes	0.9	-18.5	-0.18
Education (fees and tuition)	8.8	4.1	0.37	Telephone rates	2.9	-4.1	-0.11
Rice	1.9	14.1	0.24	Spices and seasoners	0.5	-16.1	-0.11
Gasoline and oil	1.3	13.5	0.20	Onion	0.4	-21.1	-0.08
Pasaje urbano	8.5	2.0	0.17	Garlic	0.1	-40.2	-0.06
Bread	1.9	8.3	0.15	Corn	0.1	-13.5	-0.02
Garment for men and kids							
aged 12 or older	1.5	9.7	0.15	Chilli pepper	0.1	-23.5	-0.02
Electricity rates	2.9	4.7	0.13	Eggs	0.6	-2.7	-0.02
Toiletries	4.9	2.6	0.13	TV set	0.5	-3.0	-0.01
Рарауа	0.2	85.8	0.12	Cleaning items	0.9	-1.6	-0.01
Total			2.40	Total			-0.62

# Meals outside the home

Like in 2010, meals outside the home continued to grow driven by domestic demand. At August 2011, this item records a growth rate of 6.2 percent in the last 12 months, a higher rate than the one recorded by total food and beverages consumed at home (4.2 percent in the last 12 months) and the CPI (3.3 percent).





#### Chicken meat

In January-August the price of chicken increased by 20.6 percent, driven mainly by higher demand due to the irregular supply of fish, its main substitute. Another factor contributing to this price increase was the rise in production costs due to the higher international price of maize, which went from US\$ 147 in August 2010 to US\$ 221 in December 2010 and to US\$ 284 in August 2011.

Like in previous years, this price showed strong fluctuations due also to the possibility of adjusting the short term supply of chicken with higher or lower placements of baby chicken. Thus, between February and April the price rises were mainly associated with a lower supply of chicken meat. This generated a higher profitability in the poultry industry, which allowed increasing the supply again in the months of May and June, when prices fell. This situation was reversed since July, when the price of chicken registered its highest rise (15.1 percent) due to a new contraction of supply, which was coupled by increased seasonal demand.



# Education: tuition and fees

The 3.6 percent rise recorded in education costs (tuition and fees) in January-August reflects basically the rise of March (2.2 percent) associated with the beginning of the school year. Rises were registered in tuition in both private and public schools (2.7 and 2.3 percent, respectively) and in the education fees in private schools (5.0 percent). Additionally, education costs in higher education institutes and universities rose 0.4 percent in the months of June and August.

# Rice

In January – August 2011 the price of rice increased 12.1 percent. The international price of rice rose from US\$ 496 in September 2010 to US\$ 612.9 per ton in August 2011. A lower production due to the effects of a drought in the north coast, especially in March and April, added onto this. The lower participation of Lambayeque –Lima's main supplier of rice– was offset by a higher participation from San Martín, the reduction of inventories, and imported rice.

# Bread

At August 2011, the price of bread had risen 7.1 percent, affected by the higher price of the flour made with imported wheat, whose price increased 10.0 percent between December 2010 and August 2011. Until May the international price of wheat had increased 12.2 percent compared to December, but showed some decline thereafter due to the liquidation of non commercial positions.

# **Fuels**

The rise in fuel prices stemmed mainly from the price rises made by refineries in a context of the higher international prices of crude observed basically in the months of January, June, and July.

Emergency Decree N°083-2010 (dated December 23, 2010) extended the effectiveness of the Fuel Price Stabilization Fund (FPSF) and authorized an adjustment of 7 percent in the final prices of fuels if parity prices exceeded the upper or lower limit of the price band by 15 percent. An adjustment of 1.5 percent was approved for LPG in its final price to consumers, which resulted in an average rise of 3.0 percent in January.



The suspension of programmed updates in the price band until the month of June (Emergency Decrees N° 009-2011 and N° 017-2011) prevented new rises in the following months. The update of the fuel price band implemented in June was offset with the reduction of the excise tax.

The price of WTI oil rose from a minimum level of US\$ 73.6 in May 2010 to a maximum of US\$ 109.6 per barrel in April 2011, reaching a level of US\$ 86.2 in August.

Table 39 PRICE OF FUELS (Annual % change)							
	2008	2009	2010	20	011		
				JanAug.	12 month		
Fuels	0.0	-12.7	12.2	5.4	8.7		
Gasoline and oils	-6.1	-15.8	16.4	10.0	13.5		
Gas	2.7	-4.6	8.8	1.1	4.1		
WTI (US\$ per barrel) 1/	99.6	61.7	79.4	96.5	91.9		
1/ Period average.							
Source: INEL							

## **Expectations of inflation**

97. The results of recent surveys on macroeconomic expectations show that financial entities now expect slightly higher levels of inflation in 2012 and 2013 than the ones they projected some months ago (Inflation Report of June), while economic analysts, on the other hand, now expect inflation to show lower levels. Furthermore, non financial firms continue to expect a rate of inflation of 3 percent.

Table 40 SURVEY ON MACROECONOMIC EXPECTATIONS: INFLATION (%)							
	IR Mar.11	IR Jun.11	IR Sep.11				
FINANCIAL ENTITIES							
2011	3.0	3.5	3.5				
2012	2.5	2.6	2.7				
2013	-	2.5	2.6				
ECONOMIC ANALYSTS							
2011	3.0	3.8	3.6				
2012	2.5	2.7	2.6				
2013	-	2.5	2.5				
NON-FINANCIAL FIRMS							
2011	2.5	3.0	3.0				
2012	2.5	3.0	3.0				
2013	-	3.0	3.0				



# Inflation forecast

99. At end August, last 12-month inflation registered 3.35 percent, a rate above the upper band of the target range. Inflation is expected to gradually converge to the 2.0 percent target in 2012 as the cost pressures generated by significant rises in the prices of food and fuel subside in the first half of the year. Another factor that will contribute to slow down the pace of growth of inflation in the forecast horizon is a slightly negative output gap in late 2011 and in 2012. This evolution in the output gap is consistent with lower growth rates foreseen in our main trading partners and with a fiscal impulse of -0.8 in 2011 and -0.7 percent in 2012 which seeks to recover fiscal space. Therefore, no major demand pressures on inflation are foreseen in the forecast horizon.



Moreover, inflation expectations are expected to remain anchored to the target range and to converge from the levels of between 2.5 and 3.0 percent currently projected for 2012 and 2013 to a level of 2.0 percent.

In 2011 non core inflation would record a rate close to 4.0 percent –a lower rate than the one accumulated between January and August (4.7 percent)–, reflecting mainly the lower effect of the price increases in food commodities and fuels during the second half of 2011. Non core inflation in 2012 would fall very close to 2 percent as a result of the decline of the restrictive conditions observed in global food supply in 2011.

The central forecast scenario considers a more gradual withdrawal of monetary stimulus in response to the more balanced evolution between the output gap



and future inflation that is projected in this Report. An appropriate monetary policy stance will contribute to maintain inflation expectations anchored to the target range, especially in a context of persistent significant shocks affecting sensitive products of the CPI basket. However, the Central Bank will remain alert to developments in the global economy to adjust its policy stance if necessary in order to ensure inflation's convergence to the inflation target range.



		2040	2011,1/		2012,1/		2013,1/		
		2010	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	IR Jun.11	IR Sep.11	
Real % change									
1.	GDP	8.8	6.5	6.3	6.5	5.7	6.5	6.3	
2.	Domestic demand	12.8	7.7	7.5	6.6	5.6	6.2	6.0	
	a. Private consumption	6.0	5.7	6.0	5.7	5.6	5.9	5.8	
	b. Public consumption	10.6	4.4	5.7	4.1	4.4	4.0	4.9	
	c. Fixed private investment	22.1	10.4	10.7	11.6	9.0	8.3	8.3	
	d. Public investment	27.3	3.3	-2.9	6.1	11.4	6.1	10.0	
3.	Exports (goods and services)	2.5	3.8	6.0	7.8	7.5	9.0	9.0	
4.	Imports (goods and services)	23.8	10.4	11.7	8.1	6.7	7.3	7.2	
5.	Economic growth in main trading partners	4.4	3.5	3.2	3.4	3.2	3.4	3.3	
Mem	0:								
Ou	tput gap 2/ (%)	0.0	-0.5 ; +0.5	-1.0 ; 0.0	-0.5 ; +0.5	-1.0 ; 0.0	-0.5 ; +0.5	-0.5 ; +0.5	
% change									
6.	Forecast inflation	2.1	3.0 - 3.5	3.5 - 4.0	2.0 - 3.0	2.0 - 3.0	1.5 - 2.5	1.5 - 2.5	
7.	Average price of crude	28.7	24.7	17.8	0.0	-3.7	0.0	2.4	
8.	Nominal exchange rate 3/	-2.1	-1.3	-3.1	-0.4	-0.4	0.7	-0.4	
9.	Real multilateral exchange rate 3/	-2.1	1.4	1.1	-0.8	-1.0	0.7	0.4	
10.	Terms of trade	17.9	3.2	3.9	-3.3	-3.2	0.2	0.4	
	a Export price index	29.9	16.1	17.2	-21	-2.0	-0.3	0.1	
	b. Import price index	10.1	12.5	12.8	1.2	1.3	-0.5	-0.3	
		Nominal	% change	<u> </u>	<u> </u>				
11	Currency in circulation	25.4	18.0	17.5	16.0	15.5	13.0	12.5	
12.	Credit to the private sector 4/	21.0	17.0	16.5	15.0	14.5	12.0	11.5	
		% of	GDP	<u> </u>	<u> </u>	<u> </u>			
13	Gross fixed investment rate	25.1	25.6	25.0	26.6	26.2	27.0	26.7	
14	Current account of the balance of payments	_15	_3.0	-2.8	-3.3	-26	-3.0	-23	
15	Trade halance	4.4	30	4.4	3.2	3.8	3.6	4.3	
16	Gross external financing to the private sector 5/	7.9	6.8	6.1	6.2	5.6	6.0	5.6	
10.	Current revenue of the general government	10.8	20.3	20.7	20.2	20.0	20.2	20.0	
18	Non-financial expenditure of the general covernment	10.0	18.0	18.6	18.7	18.6	18.4	18 /	
10.	Overall balance of the neg financial public sector	0.5	0.9	1.0	0.4	10.0	0.4	1.4	
19.	Total public dobt	-0.5	21.5	21.4	10.2	20.2	17.6	1.4	
20.		23.5	21.0	21.4	19.5	20.2	17.0	10.0	

# SUMMARY OF INFLATION REPORT FORECASTS

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.



# VII. Balance of risks

- 99. The main risks that could divert the inflation rate from the baseline scenario in the forecast horizon are associated with uncertainty about the evolution of the global economy, the evolution of domestic demand, and the impact of the prices of imported food and fuels on inflation expectations. Weighing the impact and probability of these risks results in a downward bias in the inflation forecast.
- **Uncertainty about the evolution of global economic activity**. The baseline scenario considers a lower growth rate in global economic activity than the one considered in our Inflation Report of June (3.7 percent versus 3.9 percent in 2011 and 2012). However, this growth rate could be even lower because of uncertainty in international markets as a result of the fiscal situation of some Eurozone economies, among other factors. This would imply a lower demand for our products from our main trading partners as well as lower export prices, both of which are factors that would have a negative effect on aggregate demand.

Should this risk materialize, monetary policy would respond by easing monetary conditions. If necessary, that is, if this greater economic slowdown were coupled by increased volatility in financial markets, the Central Bank would use its high level of international reserves and the various liquidity injection mechanisms it has to provide the financial system with liquidity in both domestic currency and foreign currency to minimize in this way the impact of this shock on domestic financial conditions.

- **Evolution of domestic demand**. In a scenario of increased uncertainty, there is the risk that domestic agents' expectations, particularly expectations about investment, may deteriorate. If expectations about investment are affected, this could generate a lower dynamism in aggregate demand and a pace of growth below potential growth which would generate downward pressures on core inflation. In such a scenario, the Central Bank would increase monetary stimulus to lead inflation to fall within the inflation target range.
- Imported inflation. Although the pace of increases in the prices of food commodities and fuels has stabilized, it is likely that higher price increases may be observed in the future if the central banks of developed countries respond to the weakening of the global economy with more expansionary quantitative monetary policies. If the shocks are persistent, they could affect the dynamics of domestic inflation through higher imported costs and lower margins for local firms, which could generate inflationary pressures. In this scenario, the Central Bank would adjust its monetary

stance only if imported inflation translates into economic agents' expectations of inflation.



## BOX 4 MONETARY POLICY RISK MANAGEMENT

Monetary policy actions must be preventive against possible global macroeconomic and financial imbalances given that central banks' monetary decisions are usually made under conditions of uncertainty. In this sense, not only are the BCRP's policy decisions based on the current evolution of financial and macroeconomic variables, but also on assumptions about future trends should destabilizing events occur. Taking into account future risk scenarios is highly relevant for monetary policy since future events could temporarily impair the objective of price stability due to the lag with which monetary policy affects economic variables in the domestic economy.

Monetary policy decision-making in the BCRP is based on the processing and analysis of the latest data available, as well as on the guidance provided by macroeconomic forecasting models. The latter summarize the overall performance of a small open economy, e.g. Peru, and allow economists to provide a coherent representation of monetary policy transmission channels. Therefore, these models are an essential tool to make simulations and projections of the conduct of the main macroeconomic variables in different contingent scenarios, as well as to assess, at the same time, relevant policy actions in changing contexts.

The process involves building a base scenario, which is based on the projected path of relevant macroeconomic variables observed in the international environment, economic activity, public finance, monetary policy, financial sector, and inflation, as well as on qualitative information on



trends that have not yet been captured by statistics. This information, connected through models, establishes the central forecast for the variables relevant to the policy decision process. However, since the projection process necessarily involves uncertainty about future developments in the global and in the domestic economy, each baseline scenario includes a balance of likely risks that should be taken into account in forecasting inflation.

Thus, alternate scenarios based on different forecast assumptions are formulated to assess the impact that these risks would have if they materialized; in other words, to assess the role of monetary policy in stress contexts. The forecast scenarios, which consider exogenous variables' deviations from the central baseline, are analyzed to assess risk events, their impact on the Peruvian economy, and monetary policy actions in response to this impact. The simulations and modelling of these events allows the Central Bank to make a selection of monetary policy instruments or options of the instruments it can use to face periods of turbulence, as well as to determine the appropriate period of time during which specific policies should be applied.

Thus, for example, these counterfactual exercises may be used to assess and quantify the economic impacts of events considered in the balance of risks, such as a further deterioration of conditions in the international environment and/or a sharp increase in the prices of food and commodities.



The BCRP prepares policy responses to face each of these contingent scenarios taking into account the magnitude of shocks and the appropriate combination of policy instruments, as well as the proper dosage and timely implementation of these instruments. For example, to face scenarios of persistent capital inflows –which increase future risks of an abrupt reversal of capitals with negative effects on the financial system– like the ones experienced by the Peruvian economy in the first two
quarters of 2008, the BCRP policy responses involved both preventive actions, implemented since late 2007, and remedial actions that were taken since September 2008.

In addition to raising the reference rate from 4.5 percent in mid-2007 to 6.5 percent in September 2008, preventive actions included raising the rate of reserve requirements in domestic currency and foreign currency as well as increased interventions in the foreign exchange market in order to reduce excessive volatility in the exchange rate, which allowed the BCRP to accumulate net reserves preventively.

As regards remedial actions, on the other hand, the BCRP promptly reduced the rates of reserve requirements in domestic currency and foreign currency to their levels of end 2007 with the purpose of providing liquidity to the financial system, and sold US\$ 7.9 billion of its international reserves to provide liquidity in foreign currency and prevent an abrupt depreciation in the exchange rate. In this way, the BCRP prevented a collapse of liquidity in foreign currency which would have otherwise generated a significant credit contraction. Moreover, the Central Bank's intervention in the foreign exchange market prevented an abrupt depreciation in the exchange rate which in turn prevented negative effects on the financial soundness of businesses and households exposed to foreign exchange credit risks. Once the liquidity injection measures restored the appropriate operation of monetary policy transmission channels, the BCRP reduce its policy interest rate from 6.5 percent to a minimum of 1.25 percent.

It should be pointed out that in dollarized economies such as the Peruvian economy, higher rates of reserve requirements, particularly in foreign currency, allow generating high levels of international liquidity, which strengthens the financial system against bank runs and unexpected capital outflows, while at the same time reducing the pressure on the growth of bank credit that can be generated by low international interest rates or abundant and persistent short term capital inflows.

Furthermore, excessive exchange rate volatility in dollarized economies may have negative effects on the financial position of agents with debts in foreign currency debt, but which produce nontradable goods, negatively affecting through this channel the quality of the assets of financial institutions. The Central Bank intervenes in the foreign exchange market to limit the volatility of the exchange rate in order to minimize this risk.

In other risk scenarios, for example, a scenario of a higher than expected growth in aggregate demand that could lead to inflationary pressures, the Central Bank raises its benchmark rate preventively to prevent that these potential demand inflationary pressures may materialize.

In scenarios of high uncertainty as the ones observed today, it is essential that central banks use the appropriate combination of instruments at the right time and in the proper dosage. The continuous assessment of risk scenarios is crucial so that a timely monetary policy response be provided.





## CONCLUSION

100. The recent evolution of the output gap and inflation expectations indicate that the risks of demand pressures that generate inflation are subsiding. In the short term, however, the supply factors that have affected the prices of some food products would be indicating that inflation would fall above the upper band of the target range in the next months, converging thereafter towards the target range by mid-2012.

A vigilant monetary policy stance vis-à-vis the status of the domestic economy and uncertainty in the global economy, inflation expectations anchored to the target range, and the reversal of supply shocks will lead inflation to converge to the 2 percent target in the 2011-2013 forecast horizon.