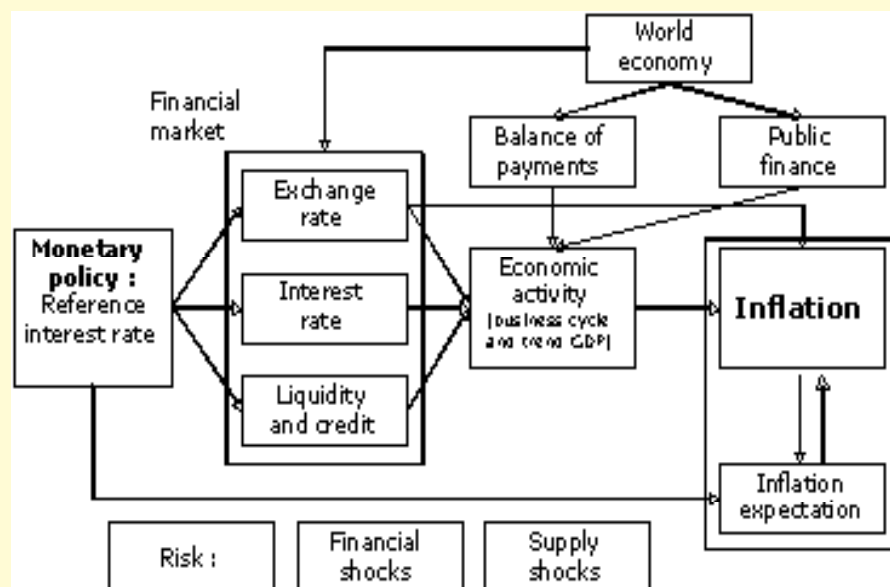# INFLATION REPORT:

Recent trends
and macroeconomic forecast

September 2006

CENTRAL RESERVE BANK OF PERU

INFLATION REPORT:

Recent trends and macroeconomic forecast

September 2006

CONTENTS

This *Inflation Report* was drawn up using II quarter information on gross domestic product, balance of payments and public sector non-financial operations, as well as data as of August on monetary accounts, and as of September on inflation and exchange rate.
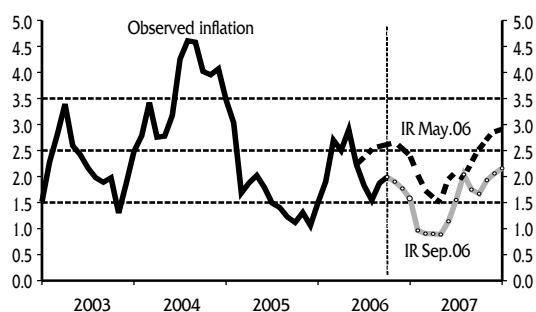
FOREWORD

- According to the Peruvian Constitution, the Central Reserve Bank of Peru is an autonomous public entity that has the constitutional mandate of preserving monetary stability. In order to accomplish this objective, the Central Bank designs and implements its monetary policy in order to induce inflation to a target range of 2.5 percent per year, plus or minus one percentage point.

- At the beginning of each month, according to a schedule published in January, the Board of the BCRP establishes the reference interest rate for the interbank market. As this rate generates impacts on the domestic economy and on the inflation rate through different channels, forecast studies and macroeconomic simulations are required to determine the level of the interbank reference rate.

- The economic studies on which monetary decisions are based are disseminated to generate the public's understanding of the consistency of the measures implemented, as well as to ensure that these forecasts and simulations are considered among the expectations of economic agents. In order to do so, the Central Bank has regularly published Inflation Reports since 2002.

- This third Inflation Report for the year 2006 describes the factors explaining the evolution of inflation so far this year, and also includes macroeconomic forecasts for 2006 and 2007. The BCRP will publish its next Inflation Report (Spanish version) in February 2007.

● This document is organized following the order in which the effects of economic variables are directly or indirectly transmitted to inflation. Section 1 describes monetary policy decisions regarding the reference interest rate and actions taken to accomplish them. Section 2 covers the impacts of monetary decisions and actions on the financial markets, particularly in terms of other interest rates, liquidity, credit and, finally, the exchange rate. Sections 3 and 4 analyze the current situation of and prospects for the global economy and our balance of payments. Peru's public finances and economic activity are evaluated in Section 5 and Section 6 respectively, while Section 7 covers inflation forecasts and inflationary expectations. Finally, Section 8 analyzes the balance of risks according to inflation forecasts.

Monetary Transmission Channels

SUMMARY

i.   As of September 2006, annual **inflation** is 2.0 percent –with a core inflation of 1.5 percent– in a context characterized by domestic demand growing at a faster pace than the gross domestic product (GDP). Factors explaining the absence of inflationary pressures include maintaining inflation expectations anchored to the inflation target, the appreciation of the nuevo sol, offsetting the impact of the higher prices of fuels through fiscal measures, the absence of wage pressures, and the increased productivity of production factors.

12 MONTH INFLATION FORECAST

ii. The central scenario covered by this **Inflation Report** shows a slower pace of inflation than the one analyzed in the May Report. As a result of this, during the 2006-2007 forecast horizon, inflation is expected to remain at the lower band of the target range (between 1.5 and 2.5 percent) and to gradually converge to 2.5 percent while the economy continues to grow at a sustained pace.

iii. After raising the reference interest rate in six consecutive months between December 2005 and May 2006 (with a total increase of 1.5 percentage points), the Board of Directors of the BCRP has maintained the **reference rate** at 4.5 percent since May 2006. This decision has been made taking into account the stabilization of core inflation and the appreciatory trend exhibited by the nuevo sol.

The stability of the reference interest rate and the culmination of the period of electoral uncertainty favored the reduction of interest rates in soles, particularly very short-term interest rates. Thus, the 90-day corporate prime rate –which had increased from 4.0 percent in November 2005 to 6.8 percent in April 2006– showed a decreasing trend since May, reaching a level of 5.4 percent in September.

iv. In July, once electoral uncertainty was over and in a context where new readjustments in international rates were not as

likely to occur as initially considered, downward trends were observed in the exchange rate. In the forward market, some agents decided not to renew their hedge options against depreciations risks, which generated a supply of foreign currency of approximately US$ 800 million.

In order to prevent a greater volatility of the exchange rate, the BCRP resumed purchases of foreign currency, buying a quarterly record of US$ 2,236 million in the July-September period. These purchases allowed first recovering and then strengthening the Central Bank's international position (US$ 9,139 million at the close of September, or 60 percent of international reserves), selling foreign currency to the public sector for a total of US$ 689 million, and replacing temporary injections of liquidity (auctions of repos) by permanent injection operations (purchases of dollars).

v. In the **international scenario**, market forecasts for this year (Consensus Forecast) point to an upward correction in the economic expansion of our trade partners –from 4.0 percent, as forecast in our previous Inflation Report, to 4.1 percent–, while a slight reduction is estimated for 2007 –from 3.6 to 3.5 percent.

The growth rate in the United States would slow down to 2.6 percent due to the lower dynamism of its real estate sector and to the delayed effects of the cycle of interest rate rises implemented by the Federal Reserve. On the other hand, economic activity in China would continue to be associated with its increasingly growing industrial production, which translates into a strong demand for raw materials.

A slight correction in the terms of trade is expected for 2007 due to the previously mentioned lower dynamism of the international economy.

vi. This favorable international environment in 2006 and 2007 would contribute to the maintenance of a surplus in the **balance of payments current account**. A surplus equivalent to 1.3 percent of GDP is forecast for 2006. This forecast is consistent with a positive trade balance of US$ 8.1 billion, resulting from the growth of exports and higher remittances from abroad. In 2007, the surplus would decrease to around US$ 7 billion, and the surplus in the balance of payments current account to 0.2 percentage points of GDP.

vii. A **fiscal surplus** equivalent to 0.8 percent of GDP is forecast for 2006 as a result of the greater dynamism of economic activity and the high prices of exports, both of which would increase

fiscal revenues from 15.7 percent of GDP in 2005 to 17.2 percent. In addition to this, public investment is also expected to grow. On the other hand, a deficit of 0.8 percent of GDP is estimated for 2007 according to reports of the Ministry of Economy and Finance (Marco Macroeconómico Multianual del Ministerio de Economía y Finanzas) as an important increase is foreseen in terms of central government's non-financial expenditure, mainly in connection to greater public investment.

viii. In 2006, **economic activity** would grow between 6.5 and 7.0 percent as a result of the acceleration of domestic demand, which would log a growth of 9.3 percent, reflecting important increases in all its components. Diverse indicators of demand, such as credit, imports of durable consumer goods and capital goods, as well as consumers' and entrepreneurs' increased confidence continued to show favorable signs in line with the current expansive cycle exhibited by economic activity.

Production forecasts for 2007 consider an important dynamism of private investment based on the increased access of our products to international markets. Expectations of this evolution would be reinforced should the U.S.-Peru Trade Promotion Agreement be implemented. However, a growth of between 5.5 and 6.0 percent is estimated for next year given that a less favorable international environment is expected in 2007.

ix. The main risks that may divert inflation from inflation forecasts according to this baseline scenario are:

Demand shock: An excess of aggregate expenditure. If demand grows at a faster pace –particularly, if it is not coupled by higher productivity in the economy–, upward pressures on inflation could be generated.

In the event of such a shock, the BCRP would react with an earlier withdrawal of monetary stimulus in order to contain inflationary pressures and maintain in this way expectations anchored to the inflation target with sustainable growth rates over time.

Supply shock: El Niño. The baseline forecast scenario considers the occurrence of a weak El Niño. The current evolution of economic activity could be affected and cause transitory price increases should the conditions of this phenomenon worsen.

In this case, the BCRP would take action only if a generalized price increase threatened to spread over the forecast horizon and thus affect inflation expectations.

External shock: Growth slowdown in the U.S. economy and deferment of the implementation of the U.S.-Peru Trade Promotion Agreement. The first situation could deepen U.S. external imbalances and bring about pressures on the dollar. This would generate two effects: first, a lower drive of economic activity; and second, a less favorable outlook for terms of trade that would negatively affect the fundamentals of the Peruvian economy and would, therefore, tend to depreciate the Nuevo sol. Depending on the magnitude and persistence of these effects, the BCRP would adjust its monetary policy to meet the inflation target. Moreover, should this scenario induce high upward volatility in the exchange rate, the Central Bank could intervene in the exchange market.
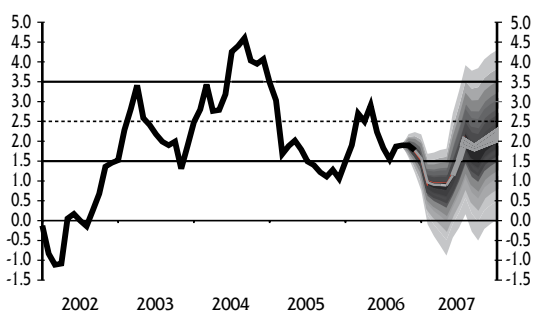
On the other hand, if the ratification of the U.S.-Peru Trade Promotion Agreement were postponed for a prolonged period of time and if the validity of the ATPDEA agreement were not extended, Peruvian exports to the U.S. would lose dynamism, generating a negative impact on economic activity and downward pressures on inflation. In such a case, the BCRP would maintain the monetary stimulus for a longer period of time.

Financial shock: Appreciation of the Nuevo sol. As mentioned in the previous Inflation Report (May 2006), the Nuevo sol began to appreciate after the elections. Given the factors determining the real exchange rate, the risk that appreciatory pressures might be stronger than those considered in the baseline scenario prevails.

INFLATION DENSITY FORECAST: 2006-2007
(Percentage change 12 month)

Note: The illustration shows the inflation prediction bands over the long forecast horizon. The darkest band around the central forecast represents a 10 percent probability of occurrence, while all the other bands represent a 90 percent of probability of occurrence.

In this event, the BCRP could maintain a position of monetary stimulus for a longer period of time. Likewise, the Central Bank might intervene in the exchange market to offset excessive downward volatility in the exchange rate.

x. The upward and downward weighing of the diverse risks considered in the baseline scenario results in a neutral balance. Therefore, it may be said that there are similar probabilities of occurrence of upward or downward impacts on the inflation forecasts. Furthermore, the forecast on the density of inflation points to the likelihood that inflation will settle temporarily below the target during the first half of 2007.

Statistical annex
INFLATION REPORT FORECAST (IR)

	2005	2006 1/			2007 1/	
		IR	IR	IR	IR	IR
		Jan 06	May 06	Sep 06	May 06	Sep 06
		Real % change				
1. Gross domestic product	6.4	5.0	5.5	6.6	5.3	5.7
2. Domestic demand	5.5	5.4	7.1	9.3	5.7	6.4
a. Private Consumption	*4.4*	*4.2*	*4.8*	*5.4*	*4.3*	*4.6*
b. Public Consumption	*9.8*	*3.5*	*6.2*	*8.3*	*4.2*	*8.3*
c. Fixed Private Investment	*13.9*	*10.6*	*13.5*	*19.4*	*12.0*	*12.0*
d. Public investment	*12.2*	*10.3*	*20.5*	*29.9*	*9.9*	*21.1*
3. Exports of goods and services	14.9	5.1	2.9	1.0	7.6	6.8
4. Imports of goods and services	10.6	7.5	11.3	14.0	10.0	10.0
5. Main trade partners' growth	4.0	3.8	4.0	4.1	3.6	3.5
		% change				
6. Consumer price index	1.5	1.5-2.5	1.5-2.5	1.5-2.5	2.5-3.5	1.5-2.5
7. Nominal exchange rate 2/	4.4	-0.7	-2.4	-5.0	1.5	1.2
8. Real exchange rate (multilateral)	3.8	0.7	1.7	-1.0	1.6	0.7
9. Terms of trade	5.2	0.5	16.5	23.8	-4.9	-5.3
a. Export price index	16.3	4.6	25.4	33.5	-0.6	-1.2
b. Import price index	10.6	4.1	7.7	7.8	4.6	4.4
		% of GDP				
10. Balance of Payments' current account	1.4	0.9	0.7	1.3	0.2	0.2
11. Trade balance	6.6	6.5	8.1	8.9	6.7	7.2
12. Gross external finance of the private sector 3/	4.0	3.4	4.0	4.3	3.6	2.8
13. Non-financial public sector overall balance	1.6	1.5	2.2	2.8	2.0	1.3
14. Non-financial public sector overall balance	-0.3	-0.7	0.2	0.8	0.0	-0.8
15. Tax revenues of the central government	13.6	13.7	14.5	15.0	14.2	14.3
16. Outstanding public debt	37.7	36.8	33.1	33.1	30.7	31.3
17. Outstanding external public debt	28.1	27.5	24.7	24.2	22.0	22.5
		Nominal % change				
18. Central government non-financial expenditures	12.6	5.5	10.8	14.8	4.6	10.4
19. Monetary base (annual average)	28.3	17.5	18.5	16.5	10.0	10.0
20. Banking system credit to the private sector	16.0	8.0	8.5	8.5	8.5	8.5

1/ Forecast.
2/ Exchange rate expectations survey to economic analist.
3/ Includes foreign direct investment and long-run disbursements of private sector.

1. MONETARY POLICY

Considering that annual core inflation has fluctuated between 1.3 and 1.5 percent and the appreciation of the nuevo sol in recent months in a context of economic dynamism, the BCRP has maintained its reference interest rate at 4.5 percent between June and September 2006. Prior to this, between December 2005 and May 2006, the Central Bank had gradually raised this rate (from a level of 3.0 percent).

1. The BCRP implements its monetary policy establishing a reference interest rate for the interbank market. Both the economy and inflation are affected by this rate through diverse channels and over different periods of time. Therefore, within the Inflation Targeting scheme, the focus is not a single determinant of inflation, but rather the main factors originating an inflationary process.

2. Every action taken in terms of the reference interest rate directly affects financial variables, such as the other interest rates, the exchange rate, and liquidity and credit, all of which have impacts on demand and, hence, on prices. Effects are also transmitted through a second channel constituted by the Central Bank's impact on the public's inflationary expectations, which is reflected in the rate of inflation. Finally, a third channel is the direct impact of the exchange rate on inflation, which is determined by other exogenous factors such as the terms of trade and international interest rates. All these channels are subject to unforeseen events, such as supply or financial shocks, which make forecasting a difficult task.

3. Ever since Inflation Targeting was first implemented in January 2002, the Central Bank has maintained a position of monetary stimulus, which has been gradually withdrawn. Furthermore, the BCRP has sought to set the reference interest rate at levels that are consistent with the inflation target, taking into account both the lags estimated to see the impact of monetary policy and the changing conditions of the economy.

Graph 1
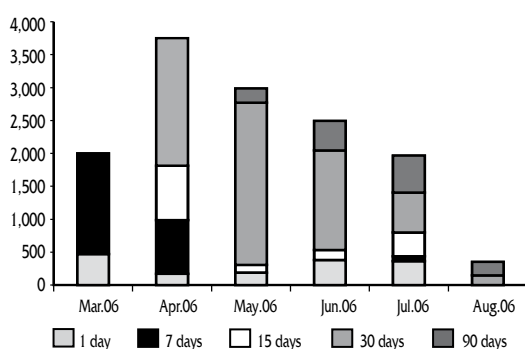**CENTRAL BANK REFERENCE INTEREST RATE 1/**
(In percentage)
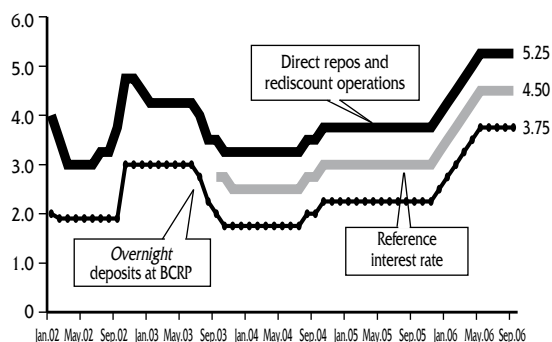
1/ Before September 2003, direct repos and rediscount operation rate and overnight deposits rate were indicated like reference interest rates of the monetary policy.

- During the first stage of implementation of the Inflation Targeting scheme, a higher degree of monetary stimulus was coupled by reference interest rates of up to 2.5 percent, given that inflation was below the inflation target, the four previous years had been marked by recession, and international interest rates were lower. The interbank interest rate was temporarily raised during the period of financial turbulence that the region experienced in September 2002, but then returned to the previous levels.

- In a second stage (since 2004), boosted by a favorable international environment and by a domestic climate marked by consumers' and investors' higher confidence, economic activity went through a cycle of greater dynamism. In this period, the reference interest rate was raised twice in 2004 (from 2.5 to 3.0 percent) and on six different occasions between December 2005 and May 2006 up to its current level of 4.5 percent.

    These adjustments reflected that a lower monetary stimulus was required in view of the more dynamic performance of economic activity, particularly in the case of domestic demand since the fourth quarter of 2005. The gradual withdrawal of monetary stimulus also contributed to prevent excessive upward volatility in the exchange rate in a context of electoral uncertainty and increasing international interest rates.

- From June 2006 on, the BCRP has decided to maintain the reference rate at 4.5 percent. This decision has been made taking into account that, despite the dynamism observed in domestic demand, inflation has settled close to the lower band of the inflation target (between 1.5 and 2.5 percent) and that even core inflation has remained below this range. This evolution has taken place in a context of appreciation of the nuevo sol, where the higher prices of fuels were not reflected domestically given that compensatory fiscal measures were implemented. The resulting new macroeconomic and financial information have led to revise inflation forecasts for 2006-2007 downward.

4. The management of BCRP monetary operations aims at maintaining the interbank interest rate at the reference rate that is announced each month. Thus, these operations take into account the impact of the public's demand for soles on banks' liquidity levels, public financial flows, and exchange operations carried out by the Central Bank. Partly reflecting the situation observed in the exchange market, monetary operations during the past year have been carried out in two different scenarios.

- During the period of electoral uncertainty and of regularization of income tax payments, the BCRP made repo operations for

Graph 2
MONTHLY AVERAGE REPOS
(Millions of nuevos soles)

Graph 3
END OF PERIOD BCRPCD BALANCE
(Millions of nuevos soles)
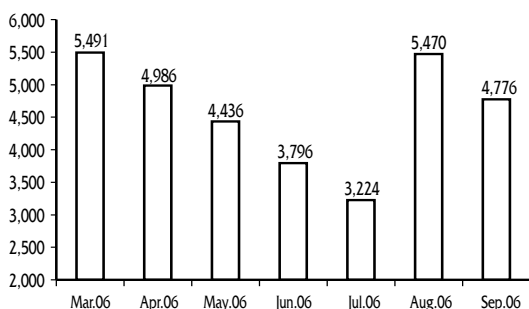
significant amounts, as a result of which a maximum total of S/. 4,527 million on account of repo operations was reached in April. These transactions mean that the Central Bank temporarily purchases BCRP Certificates of Deposit (BCRPCD), Readjustable Certificates of Deposit (BCRPRCD) and/or Public Treasury securities from financial entities.

The extent to which these operations were made was due to banks' greater requirements of liquidity, since they had purchased foreign currency during the period when the highest exchange volatility was recorded (between October 2005 and January 2006). In addition, requirements of liquidity were further increased by requirements associated with the regularization of Income Tax payments in April 2006, which totaled an unprecedented amount of S/. 2.2 billion.

Given banks' increased requirements of liquidity, during this period the Central Bank refrained from placing Certificates of Deposit (BCRPCDs) and amortized existing balances. Additional liquidity for a total of S/. 4,452 million was thus injected into the system until July.

In addition to this, the BCRP increased the maturity term on repo operations from between 1-day and 1-week to 3 months. These measures contributed to reduce pressures on the interbank market and also the pressure on interest rates in the short tranche of the yield curve in nuevos soles.
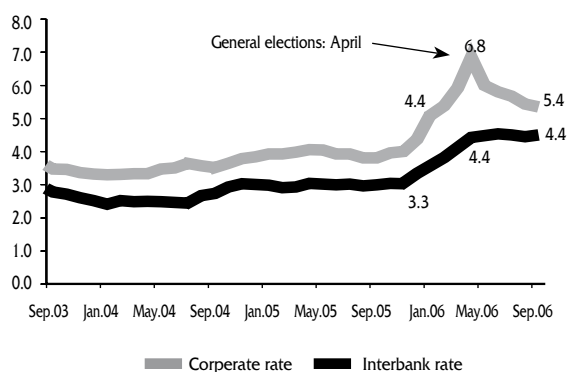
- Once the period of uncertainty affecting the exchange and financial markets was over, the BCRP replaced transitory operations aimed at injecting liquidity (auctions of security repos) by permanent operations (purchases of foreign currency) and reinitiated primary placements of Certificates of Deposit (BCRPCDs) to sterilize the monetary impact of its exchange operations. BCRP's purchases of foreign currency between July and September amounted to US$ 2,236 million, while a total of US$ 682 million were sold to the public sector in this period.

These purchases of dollars significantly reduced banks' requirements of liquidity, which in turn reduced the balance of repo operations to very low levels (S/. 154 million as of end-September). The monetary impact of purchases of foreign currency was sterilized through placements of BCRPCDs in August, following a period of nine months when these operations were interrupted. As a result, the balance of these certificates increased from S/. 3,224 million at the close of July to S/. 4,776 million at the close of September. These sterilization operations have not implied negative effects on the BCRP financial outcome, since the interest rates on BCRPCDs have not been higher than the yield obtained on account of international reserves.
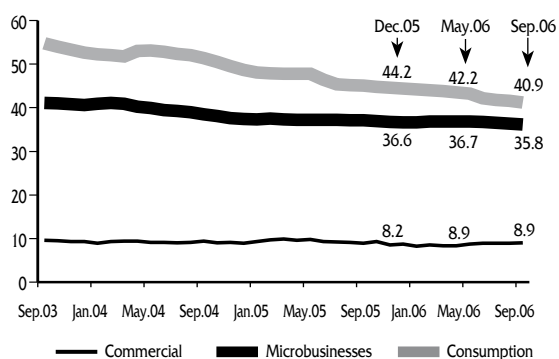
2. FINANCIAL MARKETS

Interest rates in soles, on both active and passive operations and for different maturity terms, either decreased or remained unchanged over the past few months. Short-term interest rates, which had experienced higher increases during the first months of the year, declined the most. Medium-term and long-term interest rates continued to decline reflecting the better prospects for the economy in the near future.
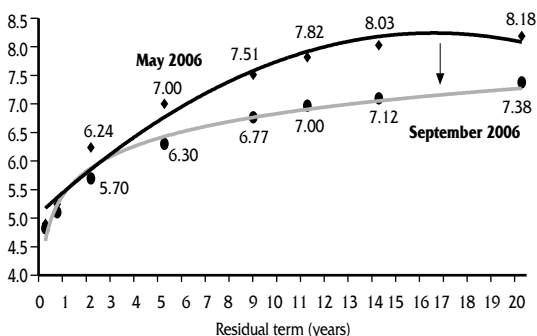
5. The interbank interest rate acts as a benchmark for the rest of interest rates in nuevos soles, affecting particularly those rates involving lower credit risks and lower maturity terms. Over the past few months, the main short-term active and passive rates in nuevos soles have decreased in line with the reversal of shortage of liquidity in the monetary market. This evolution resulted from banks' greater demand for nuevos soles –via 1-month and 3-month instruments– to cover their exchange operations involving similar maturity terms, in addition to banks' previously mentioned greater requirements of liquidity.

6. The 90-day corporate prime rate, which had risen from 4.0 percent in November 2005 to 6.8 percent in April 2006, initiated a decreasing trend since May this year to settle at a rate of 5.4 percent in September. As a result of this, the differential between the interbank rate and the corporate prime rate in nuevos soles was again close to one percentage point –a differential similar to the one recorded before the electoral period, although a differential of 2.4 percentage points had been recorded in April.

7. The average active rate on credit operations (FTAMN) carried out by banks in the month decreased from 24.1 percent in May to 22.8 percent in September. In addition to the evolution of the reference rate, the various active interest rates reflect the particular conditions of each credit market, especially in terms of loans with higher maturity terms and higher credit risks. While the average interest rate in the case of commercial loans remained stable at 8.9 percent, the rates for microbusiness, consumer and mortgage loans decreased, reflecting a greater

Graph 4
INTERBANK AND CORPORATE INTEREST RATE IN DOMESTIC CURRENCY
(In percentage)

Graph 5
DOMESTIC CURRENCY INTEREST RATE FOR COMMERCIAL, MICROBUSINESSES AND CONSUMPTION LOANS
(In percentage)

competition among financial entities as well as the better situation of borrowers given the dynamic performance of economic activity.

8. The average passive rates (FTIPMN) decreased from 4.2 to 3.7 percent, especially in the shorter-term tranche. The rate on 30-day deposits decreased from 5.0 percent in May to 4.6 percent in September.

Graph 6
SECONDARY MARKET OF PUBLIC TREASURY SOVEREIGN BONDS
(In percentage)

9. Interest rates in the capital market continued to exhibit a downward trend throughout the year. The interest rates on sovereign bonds with 5-year or longer maturites have decreased between 81 and 121 points so far this year, having decreased between 70 and 91 points since May. The rate of the bond maturing in 2011 fell from 7.11 percent in December 2005 to 6.30 percent in September, and the rate on the 2020 bond fell from 8.15 percent to 7.12 percent in said period. The rate on the bond with the longest maturity term (20 years) dropped nearly 80 points since it was first placed in May 2006. All of these reductions were associated with the favorable evolution of the country risk indicator, as well as to lower expectations of devaluation in the long run.

BOX 1
EFFECT OF THE INTERBANK INTEREST RATE IN NUEVOS SOLES
ON THE REST OF INTEREST RATES

The interbank interest rate is used as a benchmark for the rest of interest rates in soles in the banking system. The latter rates affect aggregate spending and hence, inflation. By adjusting the interbank interest rate, the Central Bank's monetary policy is reinforced and has a greater impact on the rest of interest rates in soles in the financial system in a shorter period of time.

EFFECT OF A CHANGE IN 100 BASIS POINTS IN THE
INTERBANK INTEREST RATE OVER THE INTEREST RATES
IN NUEVOS SOLES AND THE ADJUSTMEN PERIOD

	Loans up to 360 days	Loans of more than 360 days	Deposits up to 30 days	Deposits up to 180 days	Deposits up to 360 days	Deposits of more than 360 days
Effect in a month						
Dec-04 1/	22	36	23	10	6	3
Jul-06 2/	23	41	37	14	10	6
Long term effect						
Dec-04 1/	88	145	70	67	61	55
Jul-06 2/	94	162	73	72	68	61
Adjustment period (in months)						
Dec-04 1/	4	4	3	7	11	16
Jul-06 2/	4	4	2	5	7	11

1/ Data estimation considers from 1996 to 2004.
2/ Data estimation considers from 1996 to July 2006.

Comparing results with those documented in the Central Bank's Annual Report 2004[1], it is clear that the total (or long-term) effect of interbank interest rate adjustments on the rest of interest rates in soles in the market has continued to increase over the last two years, as shown in the table below:

Notes:
1/ Memoria BCRP, 2004, Recuadro "Impacto de la tasa de interés interbancaria sobre el resto de tasas de interés en nuevos soles"

10. Interest rates in dollars, on the other hand, maintained an upward trend associated with the rising evolution of international interest rates that stemmed from the US Federal Reserve's withdrawal of monetary stimulus. The FED raised its rate 100 points from 4.25 percent to 5.25 percent between January and July, and the 3-month libor increased 90 points from 4.49 percent to 5.39 percent. Interest rates in dollars in our country rose slightly less. For example, the 90-day corporate prime rate in dollars rose 62 points to 6.13 percent between December and September, while the rate on 30-day deposits in dollars rose 54 points and the rate on 360-day deposits increased 57 points. In consequence, the differential between the rates in nuevos soles and those in dollars increased favoring the former, especially in the case of deposits maturing between 3 months and one year.
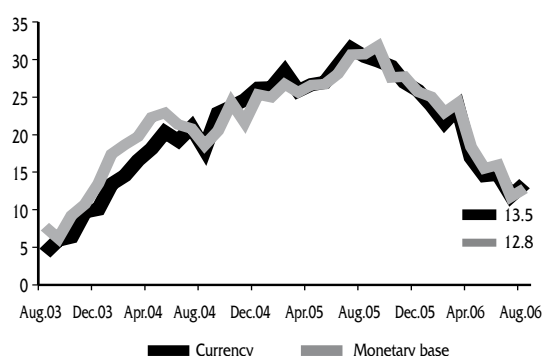
This lower impact of changes in international rates on local passive rates is explained by the effect of the rate of reserve requirements on liabilities in foreign currency and their remuneration, which is currently set at 2.5 percent by the BCRP.

Table 1

INTEREST RATES IN DOMESTIC AND FOREIGN CURRENCY: 2005 - 2006
(In percentages)

	(A) Nuevos soles			(B) Dollars			Differential (A) - (B)		
	Dec. 2005	Apr. 2006	Sep. 2006	Dec. 2005	Apr. 2006	Sep. 2006	Dec. 2005	Apr. 2006	Sep. 2006
1. Reference rate and *FED funds* rate	3.25	4.25	4.50	4.25	4.75	5.25	-1.00	-0.50	-0.75
2. Deposits up to 30 days	3.55	5.52	4.61	3.62	4.02	4.16	-0.07	1.50	0.45
3. Term deposits between 31 and 180 days	3.59	4.95	4.90	2.88	3.08	3.45	0.71	1.87	1.45
4. Term deposits between 181 and 360 days	4.60	5.23	5.81	2.92	3.21	3.49	1.68	2.02	2.32
5. Corporate prime	4.37	6.84	5.34	5.51	6.05	6.13	-1.14	0.79	-0.79
6. Average lending up to 360 days	13.93	14.54	14.68	9.37	9.67	9.94	4.56	4.87	4.74
7. Average lending constant structure	17.00	17.34	17.06	10.25	10.39	10.46	6.75	6.95	6.60

Evolution of monetary aggregates

11. As of August 2006, the pace of growth of monetary aggregates, such as money in circulation and the monetary base, has slowed down, recording annual growth rates of 13.5 and 12.8 percent respectively. In previous years, these aggregates exhibited an important pace of growth that was favored by a context marked by monetary stimulus, dynamism of economic activity, and a higher preference for domestic
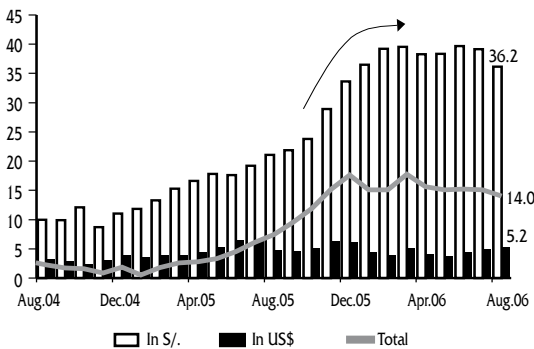
Graph 7
CURRENCY AND MONETARY BASE BALANCE GROWTH IN NUEVOS SOLES
(Percentage change compared to same period in previous year)

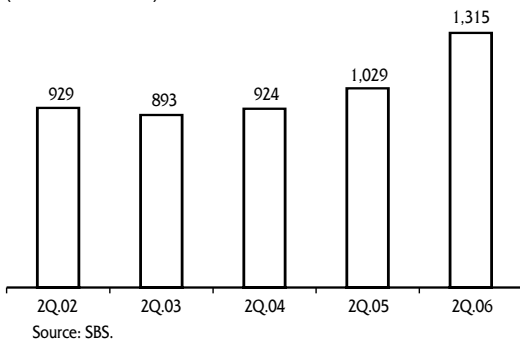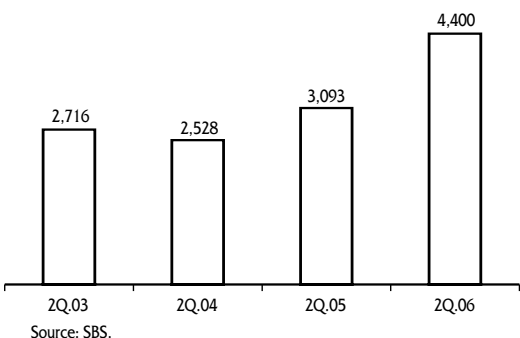currency over foreign currency. However, coinciding with the gradual withdrawal of monetary stimulus, these aggregates have started to exhibit a trend that is more consistent with the nominal growth of GDP (about 14 percent) since this year. Other monetary aggregates, such as deposits in nuevos soles, have also slowed down.

Table 2

MONETARY AND CREDIT AGGREGATES OF THE FINANCIAL SYSTEM
(Percentage change over the last 12 months)

	2003	2004	2005	2006 August
Currency	13.4	26.3	25.8	13.2
Monetary base	10.1	25.3	25.7	12.8
Deposits in domestic currency	7.6	34.6	26.8	7.1
Total liquidity (banking system)	1.0	8.2	18.4	8.5
Credit to the private sector in soles	11.9	11.0	33.6	36.2
Total credit to the private sector	-0.8	1.9	17.6	14.0

Graph 8
FINANCIAL SYSTEM LOANS TO THE PRIVATE SECTOR
(Percentage change compared to same period in previous year)

☐ In S/.   ■ In US$ ▬ Total

Graph 9
CONSUMPTION LOANS BY BORROWER OF THE COMMERCIAL FINANCIALS
(In nuevos soles)

Source: SBS.

Graph 10
CREDIT OF LEASING OF THE COMMERCIAL BANKS
(Millions of nuevos soles)

Source: SBS.

12. On the other hand, banks' credit to the private sector continues to couple the more dynamic performance of economic activity with an annual growth of S/. 8.4 billion, which is equivalent to a growth rate of 14.0 percent as of August.

13. This dynamism exhibited by credit is evident in all its components. As of August 2006, total mortgage loans posted an annual growth of 17 percent, while consumer loans grew 31 percent. Average levels of indebtedness in terms of consumer loans have increased by nearly 30 percent with respect to those of last year's second quarter.

14. Moreover, leasing contracts also increased significantly (42 percent), especially those associated with the acquisition of machinery and equipment, and those associated with the acquisition of land transport vehicles. In terms of growth, the sectors which used this type of instrument more dynamically to finance their investments included hotels and restaurants, public utilities (energy, gas and water), construction and transport.

15. In terms of currencies, most of the credit provided to the private sector over the past 12 months was in soles

(S/. 6.8 billion). Banks' placements (S/. 4.0 billion) contributed most heavily to this evolution, due to banks' greater financing of commercial and consumer loans. As a result of this, credit in nuevos soles grew 36 percent relative to August 2005.

The expansion of the credits granted by microfinance entities (S/. 1.7 billion) and by institutional investors (S/. 806 million) through the purchase of fixed income instruments in domestic currency should also be highlighted.

Table 3

FINANCIAL SYSTEM LOANS TO THE PRIVATE SECTOR IN DOMESTIC CURRENCY

	Balance in millones of soles			Rates of growth	
	Aug.05	Dec.05	Aug.06	Aug.06/ Aug.05	Aug.06/ Dec.05
Banks 1/	9,592	11,606	13,620	42.0	17.4
Banco de la Nación	1,178	1,277	1,361	15.5	6.6
Microfinance institutions	**4,998**	**5,882**	**6,672**	**33.5**	**13.4**
Banks (microfinance loans)	1,306	1,545	1,724	32.0	11.6
Municipal savings and loans	1,606	1,848	2,112	31.4	14.3
Rural savings and loans	299	348	411	37.4	18.2
Cooperatives	550	634	682	23.9	7.6
Edpymes	271	351	450	65.9	28.1
Finance companies	965	1,156	1,294	34.1	11.9
Institutional investors 2/	**2,750**	**2,900**	**3,556**	**29.3**	**22.6**
Pension funds	1,641	1,821	2,477	50.9	36.0
Insurance companies	820	751	714	-12.9	-4.9
Mutual funds	289	328	364	26.2	11.3
Leasing **companies and others**	**313**	**323**	**431**	**37.6**	**33.3**
Total for Financial System	**18,832**	**21,987**	**25,640**	**36.2**	**16.6**

1/ Excludes microfinance loans.
2/ Mainly securities issued by the private sector.

16. Credit in foreign currency grew 5.2 percent with respect to the close of August 2005 and 3.0 percent with respect to December. By components, credit grew due to increased purchases of fixed income instruments by institutional investors (US$ 382 million between September 2005 and August 2006) and to higher credit flows by microfinance institutions (US$ 115 million between September 2005 and August 2006).

Table 4

**FINANCIAL SYSTEM LOANS TO THE PRIVATE
SECTOR IN FOREIGN CURRENCY**

	Balance in millions of dollars			Rates of growth	
				Aug.06/	Aug.06/
	Aug.05	Dec.05	Aug.06	Aug.05	Dec.05
Banks 1/	9,875	9,875	10,084	2.1	2.1
Banco de la Nacion	22	22	22	-1.3	-0.7
Microfinance institutions	**724**	**804**	**839**	**15.9**	**4.3**
Banks (microfinance loans)	159	177	187	17.8	5.6
Municipal savings and loans	274	292	316	15.5	8.3
Rural savings and loans	54	56	54	-0.4	-3.0
Cooperatives	151	188	181	20.0	-3.6
Edpymes	52	55	57	10.7	5.3
Finance companies	34	37	43	27.2	16.3
Institutional investors 2/	**1,315**	**1,497**	**1,697**	**29.0**	**13.4**
Pension funds	679	733	853	25.7	16.5
Insurance companies	105	151	174	65.2	14.9
Mutual funds	531	613	670	26.1	9.3
Leasing companies and others	**664**	**669**	**616**	**-7.2**	**-7.8**
Total for Financial System	**12,599**	**12,867**	**13,257**	**5.2**	**3.0**

1/ Excludes microfinance loans.

2/ Mainly securities issued by the private sector.

Graph 11
BANKING SYSTEM DOLLARIZATION RATIO
(In percentage)
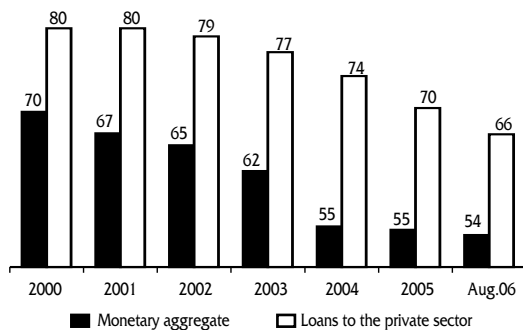
17. After remaining unchanged between 2004 and 2005, the dollarization ratio for operations in the banking system declined from 55 to 54 percent between December 2005 and August 2006. Moreover, the degree of dollarization of credit to the private sector from both the banking and financial systems decreased 4 percentage points in both cases in this period, thereby reducing the economy's exposure to the sheet balance effect that derives from exchange and credit risks.

Table 5

FINANCIAL DOLLARIZATION INDICATORS
(As a percentage of the total monetary aggregate)

Year	Banking system liquidity	Banking system loans to the private sector	Financial system loans to the private sector
1993	69	76	77
1994	64	74	74
1995	63	71	72
1996	67	74	72
1997	65	77	75
1998	69	80	79
1999	70	82	82
2000	70	82	81
2001	67	80	78
2002	65	79	76
2003	62	77	73
2004	55	74	71
2005	55	70	67
2006 1/	54	66	63

1/ As of August 2006.

BOX 2
THE BALANCE SHEET EFFECT

In economic literature, the rol played by the market's credit conditions in enhancing aggregate demand shocks is known as the "balance sheet" or financial accelerator effect. This effect is generated by imperfections in the credit markets, such as information asymmetries between lenders and borrowers. In these cases, lenders –usually banks– generally demand that the equity of borrowing firms guarantee the credits to be granted in order to ensure that these loans are repaid. Thus, firms with a more solid financial position and a lower degree of financial leverage will obtain better credit conditions –particularly lower interest rates– than highly indebted firms.

In this way, in economies where the balance sheet effect is important, the cost of financing investment will decrease in periods of economic boom given that the financial situation of firms improves in these cases. This reduction in the cost of financing investments will, in turn, encourage firms to increase their levels of investment and, therefore, the initial expansive effect of the economic cycle will "accelerate"[1]. Note that the sheet balance effect is not an additional transmission mechanism of aggregate demand shocks, but rather a transmission mechanism that enhances traditional channels.

The balance sheet effect and financial dollarization
In financially dollarized economies, such as the Peruvian economy, the exchange rate is an additional determinant of the balance sheet effect because variations in the exchange rate affect the value of firms' debts. Thus, unexpected increases in the nominal exchange rate induce a higher leverage in firms and deteriorate their financial situation, as a result of which firms have to pay a higher risk premium for credit. This leads to a reduction in aggregate investment.

A key variable to determine the impact of financial dollarization on the balance sheet effect is the degree of business leverage. Firms with low leverage levels may be perceived as involving little risk even though their debts are highly dollarized, because their equity position would only deteriorate should very strong unexpected devaluations occur. Conversely, even very small movements in the exchange rate may lead to firms' bankruptcy when there is a high degree of financial leverage. Therefore, the degree of dollarization per se is not an indicator of the financial fragility of businesses, nor of the financial system. It is also important to consider the elasticity of firms' sales to exchange movements. For example, export-oriented businesses that receive incomes in dollars will be less affected by a devaluation, because the increased financial expenditures that devaluation may generate will be counterbalanced by an increase in their sales[2]. However, this is not the case of firms invoicing in dollars and operating in the domestic market, since an unforeseen depreciation will negatively affect their sales. Strictly speaking, this vulnerability stems from the risk of value fluctuations in the real exchange rate of the debt, a variable that increases when the economy faces real negative shocks.

Empirical evidence on Peru
Several authors have sought to measure the balance sheet effect in the Peruvian economy using different approaches. Thus, for example, Castillo and Dorich (2005) use data from the balances of a set of firms listed in the stock market to estimate firms' response to the cost of credit when their levels of indebtedness increase. If the balance sheet effect is strong, small increases in a firm's level of indebtedness will substantially increase its financial costs.These authors find a risk premium estimated in 4 percent for a leverage level of 100 percent. However, since this is a non-linear effect, the risk premium for a leverage level of 2 rises to 7 percent.

Moreover, Carranza et al. (2003) use the data of the financial statements of 107 Peruvian firms in the period 1994-2001 to calculate the relationship between investment demand and the depreciation of the exchange rate. Their findings show that firms' degree of leverage and the degree of dollarization of their debts affect negatively their levels of investment. Based on a database on 560 firms, Loveday, Molina, and Rivas-Llosa (2003) find that there is a positive relationship between the depreciation of the exchange rate and firms' levels of investment, but that the benefit of a real depreciation decreases inversely to the degree of firms' leverage. Azabache (2006) and Jiménez (2004) report a statistically significant and negative relation between devaluations and the quality of banks' portfolios.

Empirical evidence points to the existence of a balance sheet effect in Peru. This effect is quantitatively more important when estimated in an aggregate manner than when calculated in microeconomic terms. As pointed out in the previously mentioned studies, enhancing mechanisms –such as a high degree of leverage, an abrupt outflow of capitals, and strong declines in the terms of trade– are required to be able to observe recessive effects associated with the balance sheet effect. Hence, the importance of promoting policies oriented not only at reducing dollarization, but also at reducing the vulnerability of the economy with respect to external shocks.

Notas:

1. Bern Bernanke et al. (1999),and Kiyotaki and Moore (1997) use macroeconomic models to show how –unlike models of real economic cycles– models including the balance sheet effect can generate not only more persistant responses to monetary policy shocks, but also greater responses to productivity shocks in terms of the output.

2. Céspedes et al. (2004) and Gertler et al. (2003) analyze the impact of the balance sheet effect generated by devaluations on the selection of an exchange regime. Both studies conclude that dollarization does not lead to a preference for a fixed exchange regime over a flexible regime when there is a balance sheet effect.

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- Castillo, P., y J. Dorich (2005) "¿Existe el efecto Hoja de Balance en Perú ?: Evidencia de data Micro", Mimeo, Banco Central de Reserva del Perú.

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- Loveday, M. y R. Rivas-Llosa (2004) "Mecanismos de Transmisión de la Política Monetaria y el Impacto de una devaluación en el nivel de las firmas". *Revista de Estudios económicos del Banco Central de Reserva del Perú, N° 12*.

Exchange rate

The volatility of the exchange rate increased due to electoral uncertainty between end-2005 and the first months of 2006. The exchange rate fluctuated between S/. 3.27 and S/. 3.45 per dollar, although a downward trend has been observed this year. The exchange market was also influenced in May and June by the higher volatility of capital flows in emerging countries given fears that international interest rates would be raised even further. As uncertainty dissipated from July on, other currencies experienced drastic reductions in their positions as a preference for the nuevo sol tended to prevail. In order to offset these reductions, the BCRP purchased US$ 2,237 million over the past 3 months.

18. The exchange rate continued to show a downward trend during the last months, falling in September to levels similar to the ones recorded prior to the period when an upward volatility was observed (S/. 3.25 per dollar). Thus, the appreciation of

Graph 12
NOMINAL AND REAL EXCHANGE RATE
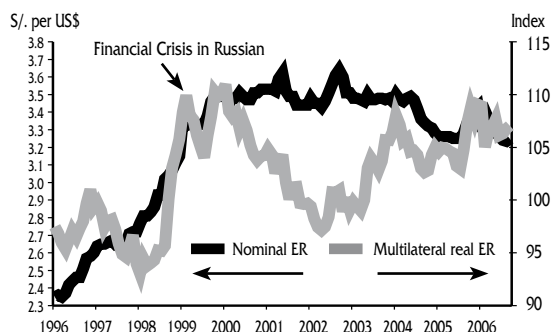
the nuevo sol so far this year (5.2 percent) reflects mainly the reversal of a scenario marked by an upward volatility of exchange from an average level of S/.3.43 in December to a level of S/.3.25 per dollar in September.

19. In annual terms, the nominal appreciation of the nuevo sol was lower (1.8 percent). The real multilateral exchange index remained stable because the rate of inflation in Peru (2.0 percent) was lower than average inflation in our trading partners.

Graph 13
CURRENCIES DEPRECIATIONS AND APPRECIATIONS OF PERU'S MAIN TRADE PARTNERS AGAINST US DOLLAR
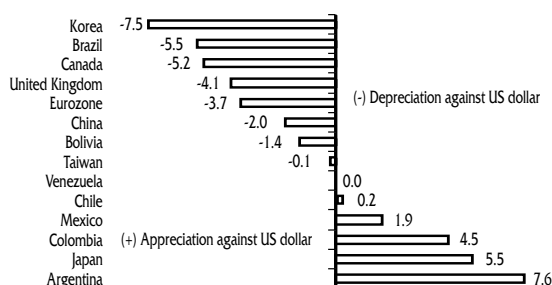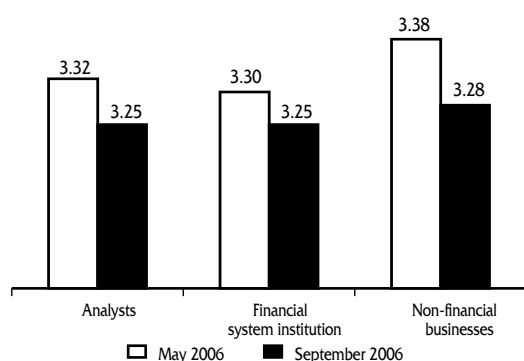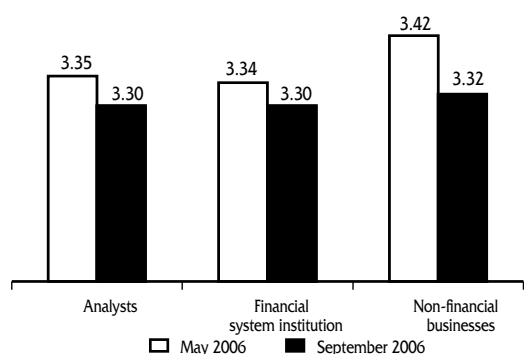(September 2006 / September 2005)

Table 6

NOMINAL AND REAL CHANGES OF THE NUEVO SOL WITH RESPECT TO THE CURRENCIES OF ITS MAIN TRADE PARTNERS AS OF SEPTEMBER 2006

	Nominal respect to:		Real respect to:	
	Sep. 2005	Dec. 2005	Sep. 2006	Dec. 2005
United States	-1.8%	-5.2%	-1.2%	-3.0%
Euro zone	2.0%	1.8%	1.7%	2.1%
Japan	-6.9%	-4.0%	-7.9%	-4.4%
Brazil	3.9%	0.0%	5.6%	0.5%
United Kingdom	2.4%	2.5%	3.7%	3.9%
Chile	-2.1%	-9.3%	-1.0%	-7.7%
China	0.2%	-3.4%	0.2%	-2.2%
Colombia	-6.1%	-9.9%	-3.8%	-7.6%
Mexico	-3.6%	-8.3%	-2.1%	-7.7%
Argentina	-8.7%	-8.7%	-1.3%	-3.6%
Korea	6.1%	1.8%	6.8%	3.7%
Taiwan	-1.7%	-4.0%	-3.8%	-3.8%
Venezuela	-1.8%	-5.2%	10.2%	4.5%
Canada	3.6%	-1.4%	3.0%	-0.6%
Bolivia	-0.4%	-4.0%	2.5%	-1.9%
Basket	**-1.0%**	**-3.1%**	**-0.1%**	**-1.7%**

Graph 14
EXPECTATION OF EXCHANGE RATE TO 2006

20. The downward pressures observed on the nominal exchange rate are explained by the continuous favorable evolution of external accounts; the lower country risk and lower expectation of depreciation following the electoral period; the degree of financial dedollarization and movements modifying positions in the exchange market that expressed greater confidence in the nuevo sol; and pressures towards a global weakening of the dollar.

21. The expectations of economic agents over the exchange rate by the close of the year have been corrected downwards for 2006 and 2007: the exchange rate is estimated to fluctuate between S/. 3.25 and S/. 3.28 per dollar this year and between S/. 3.30 and S/. 3.32 per dollar in 2007.

Graph 15
EXPECTATION OF EXCHANGE RATE TO 2007

Graph 16
NOMINAL EXCHANGE RATE AND TRADE COMMERCIAL
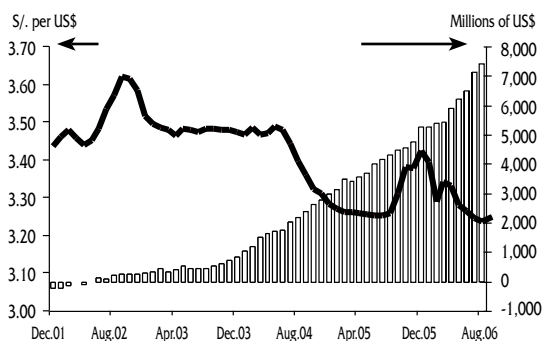
Graph 17
COUNTRY RISK AND EXCHANGE RATE
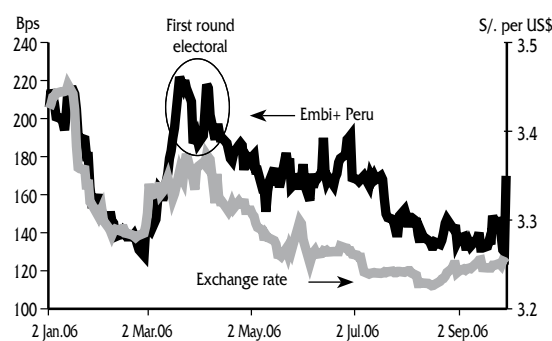
Graph 18
FORWARD NET SALE BALANCE AND END OF PERIOD EXCHANGE RATE

Graph 19
SOVEREIGN BONDS: STRUCTURE BY OWNER AS OF AUGUST 2006

Source: MEF.

Table 7

FOREIGN EXCHANGE EXPECTATIONS FOR DECEMBER 2006 1/
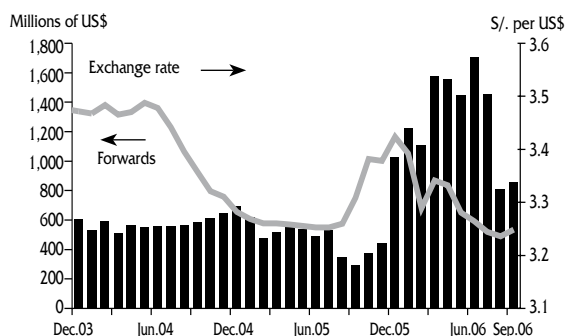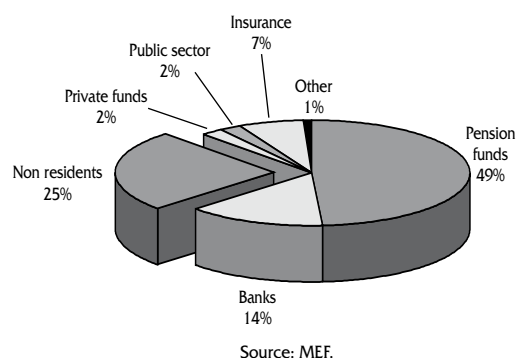
	Dec.05	Jan.06	Feb.06	Mar.06	Apr.06	May.06	Jun.06	Jul.06	Aug.06	Sep.06
Financial system	3.40	3.40	3.30	3.33	3.34	3.30	3.30	3.27	3.26	3.25
Non-financial businesses	3.45	3.45	3.40	3.40	3.40	3.38	3.35	3.30	3.30	3.28
Economic analysts	3.42	3.40	3.34	3.37	3.35	3.32	3.30	3.29	3.26	3.25

1/ From the Macroeconomic Expectations Survey of the BCRP.

22. Since 2004, the balance of payments has been posting a current account surplus (1.4 percent of GDP in 2005 and 1.2 percent in the first half of 2006) amid a context of high prices for exports and of diversification of the same. As of August 2006, the trade balance accumulated a last-12-month positive result of US$ 7.4 billion, which constitutes a new historical record.

23. Once the electoral period and the period of volatility in emerging markets were over, the country risk indicator dropped 60 basis points from 190 bps in May to 130 bps on September 28. It is worth explaining that the country risk indicator rose to 171 basis points at the close of September due to the new methodology used to measure this indicator since September 29. This new methodology also includes bonds with longer maturities (the 2025 and 2033 bonds).

24. The position of hedging instruments against depreciation risks in the forward market reduced drastically in the last months. The balance of future contracts in dollars, defined as the net value of banks' forward sales and purchases of foreign currency still pending to be delivered, decreased from US$ 1.7 billion in June to US$ 860 million in September.

25. Although the current balance of hedging instruments against exchange risks still remains to be above last year's levels, it should be pointed out that this higher demand is associated with foreign investors who, in order to offset exchange risks, hold sovereign bonds in nuevos soles. As of August 2006, foreign investors held around 25 percent of Peruvian sovereign bonds in nuevos soles, which represents an investment of S/. 2.6 billion.

26. Important short-term appreciatory pressures were generated as a result of the evolution of these forward contracts. As these pressures were particularly strong in the first half of August, the BCRP intervened in the exchange market to adjust these movements in the currency portfolios (buying a total of US$ 1.4 billion in August). During this period, the exchange rate dropped to lower levels than the ones recorded before

Graph 20
NET PURCHASES OF US$ AND EXCHANGE RATE

Millions of US$ / S/. per US$

Net purchases ■ Exchange rate ▬
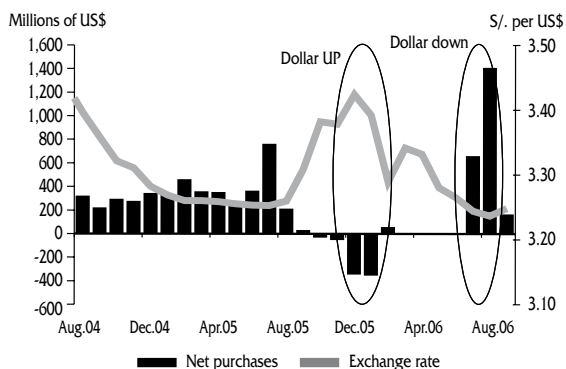
the period of exchange volatility began in September 2005. Since the second half of August, the balance of net forward sales stabilized at around US$ 800 million and appreciatory pressures declined signficantly.

27. In the last three months, the BCRP resumed purchases of dollars in the exchange market (a total of US$ 2,236 million were bought), thereby recovering first and then strengthening the Central Bank's foreign exchange position (US$ 9.1 billion at the close of September, representing 60 percent of international reserves).

BOX 3

EVOLUTION OF THE REAL EXCHANGE RATE

In the month of September, the nominal exchange rate was S/. 3.248 per dollar. In nominal terms, this represented an appreciation of the Nuevo sol of 5.2 percent relative to December 2005 and of 1.8 percent relative to September 2005.

While the nominal exchange rate compares the relative price of two currencies, the real exchange rate (RER) measures the purchasing capacity of exporters, which implies that:

$$RER = P^{USA} \cdot E / P^{PERU}$$

The real exchange rate considers not only nominal variations but also changes in the prices of two countries. Therefore, the evolution of the nominal exchange and the evolution of the real exchange very often differ. Thus, for example, despite the nominal appreciation of the Nuevo sol against the dollar, the real bilateral exchange rate (RBER) between Peru and the U.S. has improved. In this case, the nominal appreciation of the Nuevo sol has been compensated by the differential in inflation rates: the U.S. posted a higher inflation rate (annual rate of 3.7 percent in August) than Peru (annual rate of 1.9 percent in August).

In addition to the U.S.A, Peru also trades products with other countries and, therefore, the real exchange rate also includes Peru's main trading partners in the index known as the real multilateral exchange rate (RMER). This index is built as the average of multiple bilateral exchange rates, where each country is weighed according to its participation in Peru's trade in the base year (1994).

The graph below shows the evolution of both the RMER and the nominal exchange rate, and illustrates that periods of nominal appreciation have not necessarily represented a real appreciation of the sol, just like periods of nominal depreciation have not necessarily meant a real depreciation. This is explained by the fact that a nominal appreciation of the nuevo sol against the dollar may well be offset by the depreciation of the nuevo sol against the currencies of Peru's other trading partners.

BILATERAL (USA) AND MULTILATERAL REAL EXCHANGE RATE
(1994=100)
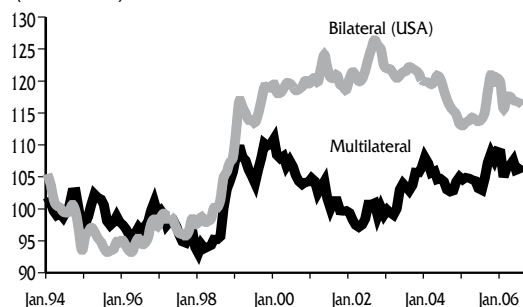
NOMINAL (USA) AND MULTILATERAL EXCHANGE RATE
(1994=100)
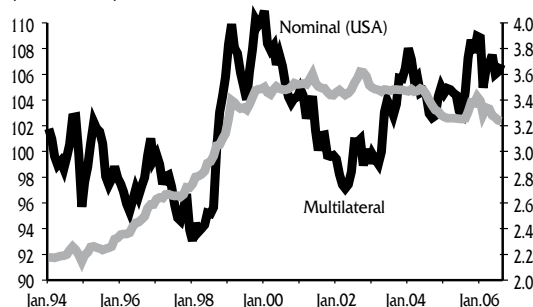
Likewise, the graph also shows that the evolution of the RMER is somewhat different from that of the bilateral exchange with the U.S. This means that real exchange rates with the currencies of other trade partners (other than the U.S.A.) have evolved differently, and that the current level of the RMER is one of the highest over the past twelve months if last decade's problems of balance of payments or financial turbulences –such as those observed during the most recent electoral period– are isolated.

The recent recovery of the real exchange rate is partly explained by the appreciation of other currencies against the dollar, particularly the euro and the yen. This implies that the appreciation of the nuevo sol against the dollar is lower than the weakening of the dollar against the other currencies.

3. INTERNATIONAL ENVIRONMENT

Second quarter-related economic indicators show a slightly faster pace of growth in the global economy in 2006. This pace of growth, which is faster than the one forecast in our previous Inflation Report (May 2006), is partly due to the outstanding dynamism of China. Together with supply-related factors, this evolution accounts for the high prices of the main commodities. In 2007, factors such as those associated with the cooling of the real estate market in the United States point to a global economic slowdown, which would cause our terms of trade to decrease.

Global economic situation

28. Between January and September, the global economy has continued to grow at a faster pace than initially expected, as a result of which forecasts for 2006 have been slightly revised upwards. The evolution of the Chinese economy and, to a lesser extent, of the European economy have been determinant for this revision. In line with the anticipated slowdown of the US economy, a growth of 3.5 percent –slightly lower than in May– is estimated for our trading partners in 2007.

Table 8

FORECAST FOR THE MAIN TRADE PARTNERS GDP GROWTH 1/
(In percentage)

	Trade 2004	2004 Year	2005 Year	2006 IR May 06	2006 IR Sep 06	2007 IR May 06	2007 IR Sep 06
Trade partners 2/		**4.8**	**4.0**	**4.0**	**4.1**	**3.6**	**3.5**
North America	*35%*	*4.1*	*3.5*	*3.4*	*3.5*	*2.9*	*2.6*
USA	33%	4.2	3.5	3.4	3.5	2.9	2.6
Canada	2%	3.3	2.9	3.0	2.9	2.8	2.7
Europe	*26%*	*2.5*	*2.0*	*2.4*	*2.8*	*2.2*	*2.3*
Germany	3%	1.2	0.9	1.8	2.2	1.1	1.2
United Kingdom	6%	3.3	1.9	2.3	2.6	2.5	2.4
Asia	*15%*	*7.1*	*6.7*	*6.8*	*7.2*	*6.2*	*6.3*
China	8%	10.1	9.9	9.6	10.4	8.8	9.1
Japan	4%	2.3	2.6	3.0	2.8	2.3	2.2
Latin America	*23%*	*6.8*	*5.3*	*4.9*	*5.0*	*4.4*	*4.5*
Argentina	2%	9.0	9.2	7.7	7.8	5.2	5.9
Brazil	5%	4.9	2.3	3.5	3.2	3.7	3.5
Chile	7%	6.2	6.3	5.6	5.0	5.3	5.3
Mexico	2%	4.2	3.0	4.0	4.5	3.4	3.4
Venezuela	2%	17.9	9.3	7.4	8.7	5.0	6.2
Note:							
World economy (IMF) 3/		**5.3**	**4.9**	**4.9**	**5.1**	**4.7**	**4.9**

1/ *Consensus Forecast* data as of the corresponding month.
2/ Weighted according to the 2004 trade.
3/ IMF, September 2006 World Economic Outlook (WEO) for this report, and April 2006 WEO for the previous report.

29. The **U.S.** economy has been growing in a sustained manner over the past few years, a trend expected to continue in 2006 with a growth rate of 3.5 percent. In 2007, it is estimated that the U.S. will grow at a lower pace –between 2 and 3 percent– due to the lower dynamism of the real estate market in that country.

Table 9

MAIN USA AND CANADA INDICATORS 1/

	2004	2005	2006*	2007*
GDP (% change)				
USA	4.2	3.5	3.5	2.6
Canada	2.9	2.9	2.9	2.7
Inflation				
USA	2.7	3.4	3.6	2.7
Canada	1.8	2.2	1.8	2.0
Current account (Billions of US$)				
USA	-665	-792	-855	-856
Canada	21	26	22	19

1/ Source: *Consensus Forecast* of September 2006.
*   Forecast.

30. Inflation in the U.S. has showed an upward trend that is mainly explained by the evolution of the prices of oil and other commodities, even though results in August point to a certain slowdown of inflation and core inflation –excluding food products and energy– has posted a lower level than overall inflation. Reinforced by FED reports and statements, the expectations in the market are that inflation will gradually slow down in response to monetary measures and to the deceleration of the real estate market (see Box 4).

31. In **Europe**, Consensus Forecast estimates an average growth of 2.8 percent in 2006 and of 2.3 percent in 2007. This upward revision is based on the growth recorded by Germany and France during the second quarter, where these countries posted growth rates unheard of in over five years. On the other hand, inflation in Europe has remained at a level above the inflation target of 2.0 percent and a similar level is expected in both 2006 and 2007.

Table 10

MAIN EUROPE INDICATORS 1/

	2004	2005	2006*	2007*
GDP (% change)				
Germany	1.2	0.9	2.2	1.2
Spain	3.2	3.5	3.5	3.0
United Kingdom	3.3	1.9	2.6	2.4
Inflation				
Germany	1.7	2.0	1.8	2.4
Spain	3.0	3.4	3.8	3.0
United Kingdom	1.3	2.1	2.3	2.2
Current account (Billions of US$)				
Germany	102	115	107	115
Spain	-55	-83	-103	-114
United Kingdom	-35	-48	-59	-62

1/ Source: *Consensus Forecast* of september 2006.
*   Forecast.

BOX 4

**PRICE ADJUSTMENTS IN THE REAL ESTATE MARKET AND IMPACTS
ON ECONOMIC EXPANSION IN THE UNITED STATES**

In recent years, the average prices of houses in the United States of America have grown steadily. Since the end of 2001, prices have increased by more than 50 percent and, in real terms, by almost 35 percent. According to the figures provided by the Office of Federal Housing Enterprise Oversight (OFHEO), the nominal growth rates recorded since the end of 2003 have exceeded those observed during the boom of the eighties and nineties, and are similar to those observed in the mid-seventies.

Table 4

USA HOUSE PRICES: 1976-2006
(Annual percentage change)
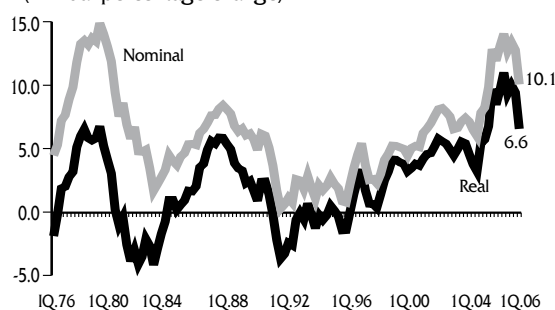
This trend has slowed down in the last quarters, generating fears that the prices of houses might fall, particularly because the low interest rates that contributed to the price rise have gradually increased in the last two years. These fears are also reinforced by lower activity in the construction sector and by builders' lower confidence, in addition to the likelihood of a price adjustment.

Concerns of a fall in real estate prices are explained by the negative effects this would have on the product given its impact on consumption, a variable accounting for 70 percent of GDP growth. The main transmission channel would be reflected in the impact of lower prices on the wealth of agents, given that real estate is a significant component of wealth. Some studies (BBVA, 2006) estimate that a gradual adjustment in the real estate prices would represent an impact of 0.5 points in GDP terms, while an abrupt adjustment would bring about an impact of between 1 and 2 percentage points.

As Wheelock (2006) shows, past experiences demonstrate that not all previous periods with price booms have been followed by periods of prices falls.

Several studies conducted by the IMF in various countries (2003 and 2004) show that price fall events are more likely to occur (40 percent) when preceded by a price boom, because there is a closer connection between price rises and falls (correction process) in the real estate market than in the stock market. These investigations also show that these price falls in the real estate market usually occur every 20 years, have approximately a 4-year duration, and imply a price reduction of nearly 30 percent.

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- FMI (2004) "The Global Price Boom". En World Economic Outlook, September, (www.imf.org)
- FMI(2003) "When Bubles Burst", En World Economic Outlook, September, (www.imf.org).
- Wheelock, David (2006), "What Happen to Banks When House Price Fall? U.S. Regional Housing Bust of the 1980s and 1990s", Federal Reserve Bank of St. Louis Review, September/October.

32. Moreover, the main economies in **Asia** are expected to maintain their pace of growth in 2007, boosted mainly by Japan and China.

    Japan has exhibited an important economic recovery, as well as a reversal of the deflationary process affecting this country. GDP grew 3.3 percent in the first quarter, although it only grew at a rate of 1.0 percent in the second quarter. However, recent indicators –such as those on manufacturing activity and request orders for machinery– provide mixed signs on economic recovery. In addition to this, the Bank of Japan has declared that the evidence regarding the end of the deflationary process is not definite either, and that inflation –measured using a new methodology– would have increased less than expected. Additionally, that the GDP deflator continues to show negative changes.

Table 11

MAIN ASIA INDICATORS 1/

	2004	2005	2006*	2007*
GDP (% change)				
China	10.1	9.9	10.4	9.1
South Korea	4.7	4.0	5.1	4.5
Japan	2.3	2.6	2.8	2.2
Inflation				
China	3.9	1.8	1.7	2.3
South Korea	3.6	2.7	2.7	3.0
Japan	0.0	-0.3	0.4	0.6
Current account (Billions of US$)				
China	69	161	174	167
South Korea	28	17	5	3
Japan	172	166	159	169

1/ Source: *Consensus Forecast* of september 2006.
*   Forecast.

33. On the other hand, **China** grew at a rate of 11.3 percent in the second quarter. Other indicators, such as retail sales, industrial output and the trade surplus of July, would point to an important expansion of the economy, despite the fact that the Central Bank of China has raised it interest rate on loans twice this year to a level of 6.12 percent. In August, China's trade balance is estimated to have achieved a record surplus of US$ 10.8 billion, while international reserves as of June are estimated to have grown by US$ 123 billion to a total of US$ 941 billion. In this context, pressures for the appreciation of the yuan would remain, although this currency has already appreciated 2.0 percent so far this year.

34. **Latin America** has benefited from the high prices of commodities and from favorable financial conditions in the

international markets. Moreover, a significant increase in domestic demand has also been observed in many countries in the region. All these factors have considerably increased the prospects for growth in the region. Growth forecasts for 2006 in the case of our main trading partners increased from 4.6 percent (Inflation Report, January 2006) to 4.9 percent (Inflation Report, May 2006) and to 5.0 percent in this report. A growth of 4.5 percent is estimated in 2007. However, these rates are lower than those recorded in 2004 (6.8 percent) and in 2005 (5.3 percent), which partly reflects the prospects for a global slow down.

Table 12

MAIN LATIN AMERICA INDICATORS 1/

	2004	2005	2006*	2007*
GDP (% change)				
Argentina	9.0	9.2	7.8	5.9
Brazil	4.9	2.3	3.2	3.5
Chile	6.2	6.3	5.0	5.3
Mexico	4.2	3.0	4.5	3.4
Inflation				
Argentina	6.1	12.3	9.8	10.4
Brazil	7.6	5.7	3.4	4.3
Chile	2.4	3.7	4.8	4.8
Mexico	5.2	3.3	3.4	3.4
Current account (Billions of US$)				
Argentina	3	6	6	4
Brazil	12	14	11	6
Chile	2	1	4	3
Mexico	-7	-5	-2	-7

1/ Source: *Consensus Forecast* of september 2006.
* Forecast.

International interest rates

35. Year-to-date, most central banks have raised their interest rates in a context marked by increased inflationary pressures and economic expansion. This trend has been consistent with the U.S. Federal Reserve's cycle of interest rate increases. During 2006, the FED continued to implement its policy of moderate rises, raising its interest rate by 25 points on four different occasions to reach a level of 5.25 percent. After 17 consecutive rises, the FED decided to maintain its interest rate on the Board meetings held on August 8 and September 20 due to the slowdown of economic activity and to a context with moderate inflationary pressures.

The evidence of an economic deceleration, together with recent evidence on the control of inflationary pressures have increased expectations that the FED will put an end to its cycle of interest rate rises. Even more, a reduction of 25 points is expected for the first quarter of 2007.

36. As regards to Europe, the European Central Bank (ECB) has raised its interest rate on three occasions, from 2.25 percent in December 2005 to up to 3.0 percent. Further increases are still expected in the rest of the year and in 2007. Likewise, the Central Bank of England raised its interest rate by 25 bps. to 4.75 percent in July. This constituted the first increase implemented by this bank over the past twelve months.

37. The Bank of Japan (BoJ) announced in March that it would switch the framework of its monetary policy from one based on monetary aggregates to another based on interest rates. In this way, the BoJ announced a gradual withdrawal of liquidity in line with future increases of the interest rate, which became effective in July when the BoJ raised the interest rate from zero to 0.25 percent. However, recent developments in terms of economic activity and inflation have increased expectations that the Bank of Japan will postpone additional increases until 2007.

38. Most of the central banks from emerging economies have also raised their interest rates this year, except for a few cases such as the central banks of Mexico and Brazil.
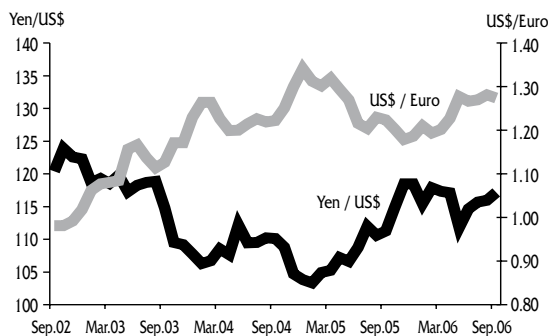
39. On the other hand, long-term interest rates in the U.S. have been decreasing, an evolution influenced by prospects of a lower rate of growth in this country. In recent months, the rates on 2-year bonds have decreased more than those on 10-year bonds, as a result of which the yield curve has reversed again (as it did in the months of February-March and June-July).

Graph 21
USA: TREASURY YIELD

Currencies

40. The dollar depreciated slightly against the euro and appreciated slightly against the yen in the international markets. Expectations of a lower differential between the rates in the U.S and in the Eurozone influenced the 7 percent depreciation of the dollar against the euro that took place between January and September. On the other hand, the dollar appreciated 2.2 percent against the yen due to lower expectations of an additional adjustment by the Bank of Japan this year. In addition to this, the dollar depreciated slightly against most Latin American currencies in this same period, except for the Argentinian and Uruguayan pesos.

Graph 22
DOLLAR AGAINST EURO AND YEN

A moderate depreciation of the dollar against the euro and the yen is expected for 2006 and 2007, which assumes an orderly corrrection of U.S. external imbalances. On the other hand, a mixed behaviour of the dollar is expected with respect to the currencies of emerging economies.

Debt spreads in emerging economies

41. In general terms, the spreads on the securities of emerging economies showed a downward trend. The market turbulence observed between May and June affected only temporarily some emerging spreads, after which these spreads resumed their downward tendency, favored by reduced expectations that the FED would raise its interest rates. In August, spreads in Argentina and Brazil reached historical minimum levels.

Table 13

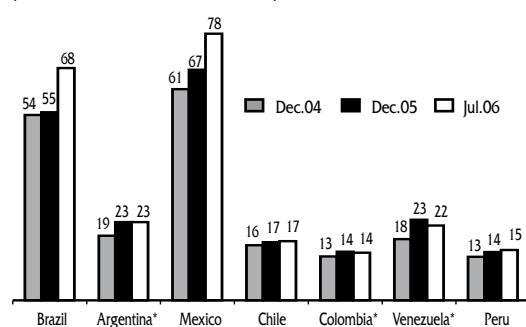**EMERGING MARKET BOND *SPREAD* INDEX (EMBI+)***

	Dec. 03	Dec. 04	Dec. 05	Sep. 06	BPS change Sep. 06 - Dec. 05
Emerging economies	**418**	**356**	**245**	**208**	**-44**
Latin America	521	420	283	224	-63
Brazil	463	382	311	233	-85
Colombia	431	332	238	200	-32
Mexico	199	166	126	121	-11
Argentina	5,632	4,703	504	342	-162
Peru 1/	312	220	206	171	-47

* End-of-period data.
1/ As of September 29, 2006 JP Morgan included the 2025 and 2033 global bonds in the calculation of the EMBI+, resulting in an increase of approximately 40 bps.
Source: Reuters.

42. A determinant factor in this evolution was the improvement of economic fundamentals in various countries, which was reflected in the better grading given to some economies by the main risk rating agencies. Some of the most important emerging economies, such as India, Russia and Brazil, were also included in this review. Peru was also upgraded by Fitch from BB to BB+, a level below the rating of investment grade.

43. This favorable context was coupled by important capital inflows to several countries in the region. According to the IMF's Global Financial Stability Report (September 2006), net financing flows including bonds, shares, and loans amounted to US$ 167 billion, with Brazil and Mexico accounting for a total of US$ 12.8 billion and US$ 10.5 billion respectively between January and July this year.

Graph 23
NET INTERNATIONAL RESERVES
(Thousand of millions of US$)

■ Dec.04 ■ Dec.05 □ Jul.06

Brazil 54 55 68 | Argentina* 19 23 23 | Mexico 61 67 78 | Chile 16 17 17 | Colombia* 13 14 14 | Venezuela* 18 23 22 | Peru 13 14 15

* Last data disposable as of May 2006.

BOX 5
HIGHER VOLATILITY IN EMERGING ECONOMIES

Between May and June, international financial markets recorded high volatility, an evolution partly explained by the perception that the US Federal Reserve would adjust its reference interest rate more aggressively due to the inflation trend observed. As a result of this, expectations of growth declined affecting in turn commodity quotations and stock exchanges. This also led to an increase in the country risk indicator and to the depreciation of currencies in the emerging economies. However, impacts were moderate in the end and even reversed in subsequent months.

The demand for commodities was affected by expectations that higher interest rates would have an impact on economic growth. In June, the prices of both copper and gold fell 11 percent on average. In July and August, quotations recovered partly due to the evolution of several supply-related factors.

The demand for securities from emerging economies was also affected. The country risk indicator on emerging economies (EMBI +) increased from 190 to 223 bps, while the same indicator for Latin America (EMBI + LATIN AMERICA) grew from 214 to 241 bps. It is worth mentioning that high-risk bonds –or "junk bonds"– did not show the same trend, probably reflecting the higher sensitivity of emerging economies to the recent changes produced in the international environment. During the following months, the country risk decreased substantially, recording even historical minimums in both Argentina and Brazil in the month of August.

The expectations of higher rates also implied losses in the main stock exchange markets, reversing the profits registered since the beginning of the year –profits were completely reversed in some cases. In Peru, the recent fall in the stock exchange was moderate and was far from reversing the profits accumulated throughout the year.

In this regard, the IMF's Global Financial Stability Report (GFSR) considered that the May-June correction brought about that the short position be taken in the stock markets, reflecting risk aversion more than a change in the fundamentals of emerging economies. This correction generated increased price correlation among the different assets during the month of May. Thus, the correction that started in the stock markets was coupled by a correction in the foreign exchange market. In June, in a second moment of this correction, investors began to discriminate among emerging markets, thus suggesting which would be the most vulnerable countries to external shocks or the weakest policy frameworks.

EMERGING MARKETS: CURRENT ACCOUNT AND EXCHANGE VARIATION
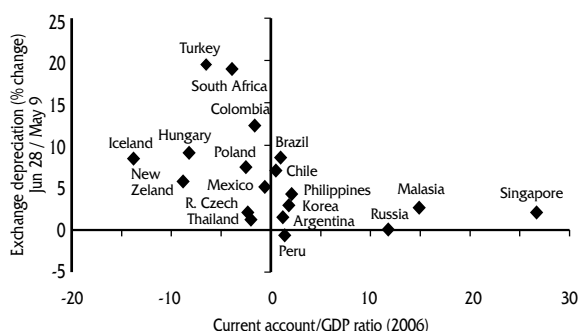
The most vulnerable countries are the ones exhibiting greater financing needs in terms of their balance of payments (deficit in current account), excessive confidence in capital inflows and little credibility vis-à-vis policy implementation. On the other hand, fiscal imbalances also aggravated perceptions of vulnerability in these cases.

Graph 24
TERMS OF TRADE: 1950-2007
(Percentage change)
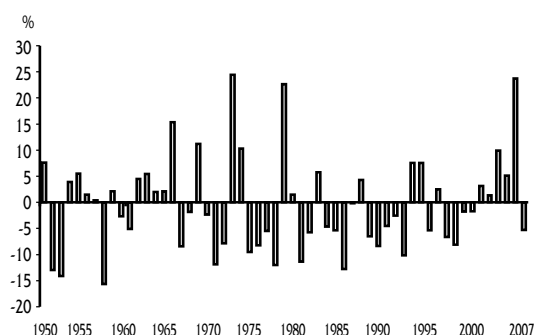
Terms of trade

44. So far this year, the terms of trade have grown significantly due to the favorable evolution of the prices of most commodities, which have exceeded market expectations. However, several quotations have been downward corrected over the past few weeks and prices are expected to fall moderately in the rest of the year. Thus, terms of trade are expected to increase 24 percent in 2006.

45. In 2007, although the forecast that the terms of trade will fall around 5 percent remains, there is a high degree of uncertainty with respect to the level of oil inventories, the geopolitical scenario, and the probability that global economic deceleration might be higher than expected.
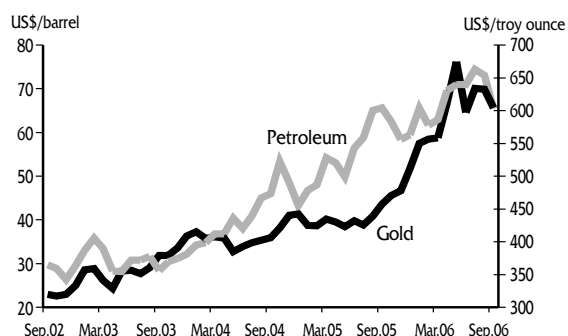
Table 14

TERMS OF TRADE
(Annual change)

	2005	2006 1/		2007 1/	
		IR May 06	IR Sep 06	IR May 06	IR Sep 06
Terms of trade	5.2	16.5	23.8	-4.9	-5.3
Exports price index of which:	16.3	25.4	33.5	-0.6	-1.2
- Gold (US$ / troy ounce)	445	608	605	649	627
- Copper (US$ / pound)	1.67	2.71	3.11	2.56	3.01
- Zinc (US$ / pound)	0.63	1.24	1.38	1.14	1.37
- Fish meal (US$ / MT)	686	775	1,045	683	922
Imports price index of which:	10.6	7.7	7.8	4.6	4.4
- Petroleum (US$ / barrel)	57	70	69	73	71
- Wheat (US$ / MT)	130	165	167	173	172

1/ Forecast.

Gold

46. Year-to-date, although corrected slightly over the past three months, the quotation of gold has exhibited an upward trend. The continuous increase in the price of this metal is explained by the greater demand of gold as a hedging instrument against inflationary pressures in the United States, the weakening of the dollar vis-à-vis other strong currencies, and geopolitical uncertainty in the Middle East.

Despite the recent fall in the price of gold, market prospects for this metal in 2006 are still positive. The average price is expected to rise to US$ 605 per troy ounce in 2006 and to US$ 627 per troy ounce in 2007. These projections –which

Graph 25
GOLD AND PETROLEUM PRICES

Graph 26
GOLD PRICE: FORECAST

US$ per troy ounce

Actual price

Forecast

IR Sep.06

Quotation as of October 4, 2006:
US$ 563 per ounce troy.

IR May.06

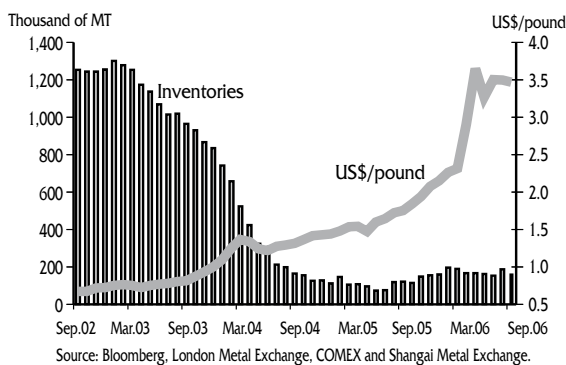Dec.02 Jun.03 Dec.03 Jun.04 Dec.04 Jun.05 Dec.05 Jun.06 Dec.06 Jun.07 Dec.07

Graph 27
COOPER PRICE AND TOTAL INVENTORIES

Thousand of MT

US$/pound

Inventories

US$/pound

Sep.02 Mar.03 Sep.03 Mar.04 Sep.04 Mar.05 Sep.05 Mar.06 Sep.06

Source: Bloomberg, London Metal Exchange, COMEX and Shangai Metal Exchange.

Graph 28
COOPER PRICE: FORECAST

US$/pound

Forecast

Actual price

Quotation as of October 4, 2006:
US$ 3.38 per pound.

IR Sep.06

IR May.06

Dec.02 Jun.03 Dec.03 Jun.04 Dec.04 Jun.05 Dec.05 Jun.06 Dec.06 Jun.07 Dec.07

Graph 29
ZINC PRICE AND INVENTORIES

Thousand of MT

US$/pound

Inventories

US$/pound

Sep.02 Mar.03 Sep.03 Mar.04 Sep.04 Mar.05 Sep.05 Mar.06 Sep.06

Source: Bloomberg, London Metal Exchange.

imply an upward trend– could reverse should the deceleration in the price of oil be confirmed and should geopolitical tensions in the Middle East decrease.

A moderate growth in the price of gold is explained by the expected supply-demand balance. Although no growth is expected in terms of production[1], demand would continue to increase due to investors' purchases of gold as a hedging instrument, given the weakening of the dollar and the strong current account deficit of the United States. This current trend would be affected in the rest of 2006 following a drop in the physical demand for gold, which would in turn affect particularly the jewelry industry.

Copper

47. After reaching a historical record of US$ 3.97 per pound in May, the quotation of copper was corrected downward for six weeks, after which it resumed a positive evolution due to supply-related problems[2] and low inventories, and by the expansion of the global economy.

The average quotation in 2006 is estimated at US$ 3.11 per pound and at US$ 3.01 in 2007. Although the slowdown of economic growth in the United States and China would affect the global demand for this metal, the price of copper is not expected to fall drastically because copper inventories are currently at their lowest historical levels (equivalent to 4.5 days of global consumption) and, therefore, any interruption on the side of supply would have a direct impact on copper quotations[3].
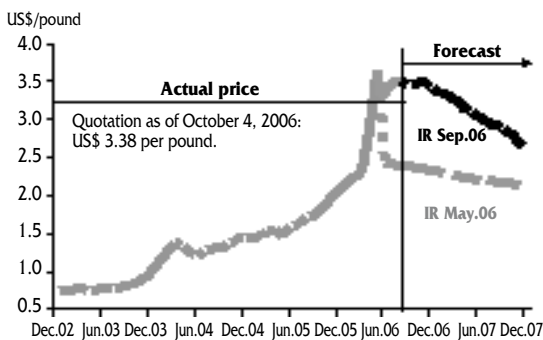
Zinc

48. After a pause period of six and a half weeks –between May 11 (US$/pound 1.81) and June 26 (US$/pound 1.35)–, the quotation of zinc maintained its upward tendency. The zinc market posted a deficit of 40 thousand MT in the first half of 2006 and, therefore, demand is expected to exceed supply over the next two years[4]. This imbalance between supply and demand is explained by lack of investment in recent years. Other factors contributing to the higher prices of this metal include the higher participation of investment funds in the commodity market and the extremely low level of inventories of zinc.

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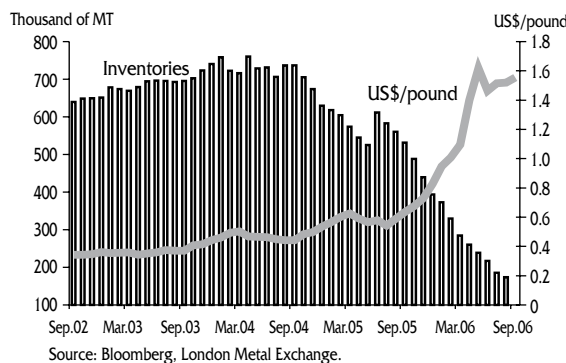
1 Projections based on *Gold Fields Mineral Survey (GFMS)*.
2 Including the strike at mine La Escondida -accounting for 8% of global production-, wage disputes and negotiations, a landslide in the Chilean mine Chuquicamata, the close of La Caridad mine (Grupo Mexico) until October, and reduced operations at the Grasberg mine (Indonesia) due to technical problems.
3 Projections based on reports by BHP Billiton, Codelco and *Freeport McMoRan*.
4 Based on report by the *World Bureau of Metal Statistics*.

Graph 30
ZINC PRICE: FORECAST
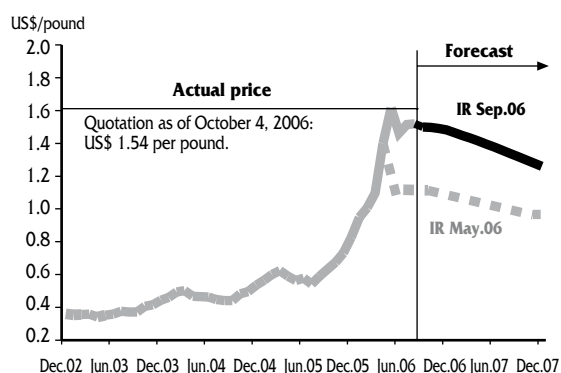
2006 offers good prospects for zinc prices. The market would post a deficit of this mineral for the third consecutive year due to expectations that developing countries, and particularly China, will increase demand. The average quotation is forecast at US$ 1.38 per pound in 2006, while a slight correction (US$ 1.37 per pound) is expected in 2007.

Table 15

BALANCE OF WORLD'S SUPPLY AND DEMAND OF THE MAIN METALS
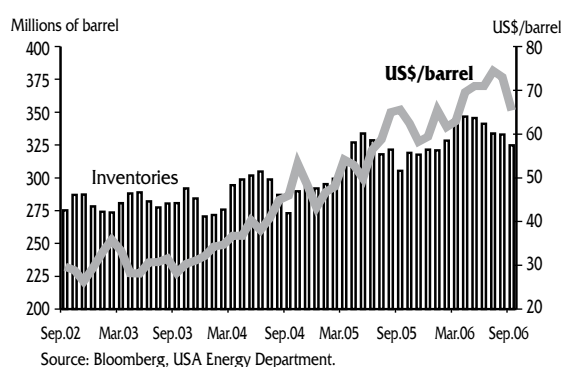(Thousands of MT)

	2004	2005	2006*	2007*
Gold				
- Supply	3,361	3,953	1,642	n.a.
- Demand	3,496	3,727	1,618	n.a.
Gap (Supply - Demand)	-134	226	24	n.a.
Copper				
- Supply	11,689	11,891	12,406	13,240
- Demand	12,537	11,929	12,429	12,845
Gap (Supply - Demand)	-848	-38	-23	395
Inventories	488	451	428	823
Consumption days	2.1	2.0	1.8	3.4
Zinc				
- Supply	7,296	7,031	7,254	7,775
- Demand	7,548	7,298	7,563	8,035
Gap (Supply - Demand)	-252	-267	-309	-260
Inventories	1,039	811	502	242
Consumption days	7.3	6.0	3.6	1.6

* Forecast. In the case of gold, the information corresponds to the first semester of 2006.
Source: World Gold Council, Metal Bulletin Research *(Base Metals Monthly*, Sep. 2006).
n.a.: non available.

Fishmeal

49. The increase in the price of fishmeal in 2006 is explained by supply restraints associated with the lower availability of marine species for fishmeal production in Peru and by the increasing demand of the acquaculture industry, especially in China. An average quotation of US$ 1,045 per MT, equivalent to a 52 percent increase is estimated for 2006, while a 12 percent reduction is expected for 2007 in a context of gradual normalization of supply conditions, considering the occurrence of a weak El Niño event. Conditions affecting demand are expected to remain unchanged. This would also be the case of the market of soja, one of the main substitutes of fishemeal.

Petroleum

50. The oil quotation maintained an upward trend, reaching a historical peak of US$ 77 per barrel in July. The main factors explaining this increase were political tensions in Iran and Lebanon, the low levels of gasoline inventories in the United States, and important supply restraints including Nigeria's

Graph 31
PETROLEUM PRICE AND INVENTORIES IN USA

Source: Bloomberg, USA Energy Department.

Graph 32
PETROLEUM PRICE: FORECAST

US$/barrel

Actual price

Quotation as of October 4, 2006: US$ 59.4 per barrel.

IR May.06

IR Sep.06

Forecast

Dec.02 Jun.03 Dec.03 Jun.04 Dec.04 Jun.05 Dec.05 Jun.06 Dec.06 Jun.07 Dec.07
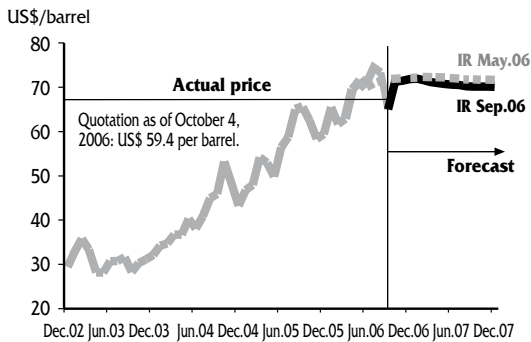
lower production of oil; a temporary suspension of oil delivery through Russia's pipeline; and a temporary close of operations at Prudhoe Bay, Alaska, the largest oil deposit in North America.

However, the price of oil was significantly corrected downwards in September, closing at US$ 63 per barrel at end-September, due to the relief of tensions in Irak, the lower impact of hurricanes on North American refineries, a greater accumulation of inventories in the U.S., and forecasts of a lower demand[5]. Another factor contributing to this was Chevron's recent finding of oil in the Gulf of Mexico, which would increase oil reserves in the United States by 50 percent.

In 2006, the oil quotation is expected to be at US$ 69 per barrel, slightly below the price forecast in our previous Inflation Report (May 2006). A similar price is forecast for 2007, as such as forecast is in line with the expected balance between the supply and demand. The demand of oil es expected to grow by 1.2 and 1.7 million barrels a day in 2006 and 2007 respectively, a third of this growth of being explained by a higher demand from the United States and China[6]. On the supply side, the global production of oil would increase by 0.5 million barrels per day in 2006 and by 19 million barrels per day in 2007.

In this context, any potential problem in the supply of oil could considerably affect prices. The greater risks in this regard are associated with Iran's exports.

Table 16

BALANCE OF WORLD'S SUPPLY AND DEMAND OF PETROLEUM
(Millions of barrels per day)

	2004	2005	2006*	2007*
Supply	**83.0**	**84.5**	**84.9**	**86.8**
OPEC	32.9	34.2	34.0	34.5
Russia	11.3	11.7	12.1	12.5
Other	38.8	38.5	38.8	39.8
Demand	**82.5**	**83.8**	**85.0**	**86.7**
USA	21.1	21.0	21.0	21.5
Europe	16.3	16.2	16.2	16.2
China	6.5	6.9	7.4	7.9
Japan	5.4	5.4	5.3	5.3
Other	33.2	34.4	35.2	35.8
GAP (Supply-Demand)	**0.5**	**0.6**	**-0.1**	**0.1**

* Forecast   .
Source: United States Department of Energy, Short Term Energy Outlook - September..

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5 In its monthly report of August, the Organization of the Petroleum Exporting Countries (OPEC) reduced estimates of global demand of crude (from 84.6 to 84.5 million barrels per day) given signs of deceleration of the global economy.
6 Information based on data provided by he U.S. Department of Energy and the International Energy Agency. It should be pointed out that this growth is consistent with the forecasts of the OPEC published in its September report.
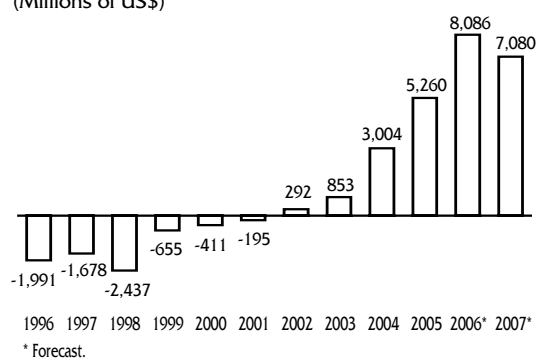
4. BALANCE OF PAYMENTS

A current account surplus equivalent to 1.3 percent of GDP is forecast in the balance of payments for 2006, due to a positive trade balance of US$ 8.1 billion resulting from the growth of exports and from increased remittances from abroad. However, a less favorable international context is expected in 2007. Therefore, in 2007, the trade surplus is expected to decrease to around US$ 7 billion, and the current account surplus is expected to fall to a level equivalent to 0.2 percentage points of GDP.

51. A current account surplus equivalent to 1.3 percent of GDP is forecast for this year. This rate is 0.6 percentage points of GDP higher than the one estimated in our May Inflation Report, given improvements in the trade balance and the increased amount of remittances from abroad. A positive trade balance of US$ 8.1 billion is estimated due to the growth of exports and to higher remittances from abroad, which would amount to US$ 1.7 billion.

52. **Exports** would amount to US$ 23 billion in 2006 (recording a 34 percent increase), due mainly to traditional exports (40 percent). Non-traditional exports are expected to grow by 17 percent. Increased mining exports –favored by higher international prices– would be partly offset by lower exports of fish products, which are expected to decline given the lower availability of this resource during 2006.

Graph 33
CURRENT ACCOUNT
(Percentage of GDP)

* Forecast.

Graph 34
TRADE BALANCE
(Millions of US$)

* Forecast.

Table 17

TRADE BALANCE
(Millions of US$)

	2004	2005	2006			2007	
			Sem I.	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
EXPORTS	**12,809**	**17,336**	**10,395**	**21,842**	**23,262**	**23,427**	**24,705**
Of which:							
Traditional products	9,199	12,919	7,965	16,679	18,109	17,588	18,867
Non-traditional products	3,479	4,277	2,350	5,007	4,992	5,665	5,664
IMPORTS	**9,805**	**12,076**	**7,001**	**14,653**	**15,176**	**16,990**	**17,265**
Of which:							
Consumption goods	1,995	2,318	1,187	2,639	2,664	3,072	3,072
Raw materials	5,364	6,603	3,848	7,901	8,080	8,827	8,834
Capital goods	2,361	3,060	1,901	3,981	4,319	4,953	5,599
TRADE BALANCE	**3,004**	**5,260**	**3,394**	**7,189**	**8,086**	**6,437**	**7,080**

* Forecast.

Graph 35
DIRECT FOREIGN INVESTMENT [1/]
(Millions of US$)
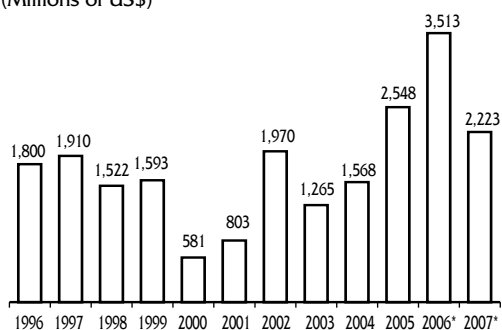
1/ No privatization.
* Forecast.

Imports would grow 26 percent this year, a growth in line with the dynamism of economic activity and the implementation of investment projects. By components, the main increases would be recorded mainly in capital goods (41 percent) and in raw materials for industrial purposes (18 percent). Thus, imports in 2006 are estimated at US$ 15 billion.

The **financial account** of the private sector would record a positive flow of US$ 521 million, explained mainly by higher direct investment (reinvested earnings), the financing of investment projects –such as Cerro Verde–, and by the purchase of shares by the capital market dealer SAB Miller. On the other hand, public capitals are expected to record a negative flow of US$ 631 million, while the flow of Direct Foreign Investment (DFI) is estimated at US$ 3.5 billion.
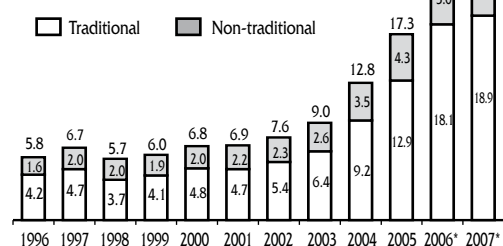
53. As a less favorable international context is expected for **2007**, the trade surplus is expected to decline to US$ 7.1 billion and the current account surplus is expected to decrease to 0.2 percentage points of GDP. **Exports** would grow 6 percent, due to the lower growth of traditional exports in terms of value, which are expected to grow at a rate of 4 percent. This rate would continue to show positive levels given that several mining projects would initiate operations, including Cerro Verde (sulfide), Cerro Corona (copper) and Cerro Lindo (zinc). **Imports** this year would grow 16 percent, led by imports of capital goods, which are estimated to grow 30 percent.

Table 18

BALANCE OF PAYMENTS
(Millions of US$)

| | 2005 | | 2006 | | | 2007 | |
	Sem. I	Year	Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
I. CURRENT ACCOUNT BALANCE	**19**	**1,105**	**513**	**596**	**1,219**	**185**	**151**
As a percentage of GDP	*0.0*	*1.4*	*1.2*	*0.7*	*1.3*	*0.2*	*0.2*
1. Trade balance	3,004	5,260	3,394	7,189	8,086	6,437	7,080
a. Exports	12,809	17,336	10,395	21,842	23,262	23,427	24,705
b. Imports	- 9,805,	-12,076	-7,001	-14,653	-15,176	-16,990	-17,625
2. Services	- 732	-834	-434	-931	-1,038	-1,091	-1,233
3. Investment income	- 3,686	-5,076	-3,438	-7,655	-7,894	-7,329	-7,934
4. Current transfers	1,433	1,755	991	1,994	2,065	2,168	2,239
II. FINANCIAL ACCOUNT	**2,417**	**361**	**-195**	**904**	**281**	**1,015**	**1,049**
III. CHANGE IN CENTRAL BANK RESERVES	**2,437**	**1,466**	**318**	**1,500**	**1,500**	**1,200**	**1,200**

* Forecast.

Graph 36
GOOD EXPORTS
(Thousand of millions of US$)

Traditional ☐ Non-traditional ■

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006*	2007*
Total	5.8	6.7	5.7	6.0	6.8	6.9	7.6	9.0	12.8	17.3	23.3	24.7
Non-traditional	1.6	2.0	2.0	1.9	2.0	2.2	2.3	2.6	3.5	4.3	5.0	5.7
Traditional	4.2	4.7	3.7	4.1	4.8	4.7	5.4	6.4	9.2	12.9	18.1	18.9

Note: Total exports include other exports.
* Forecast.

Graph 37
GOOD IMPORTS
(Thousand of millions of US$)

Consumer goods ☐ Raw materials ■ Capital goods ☐

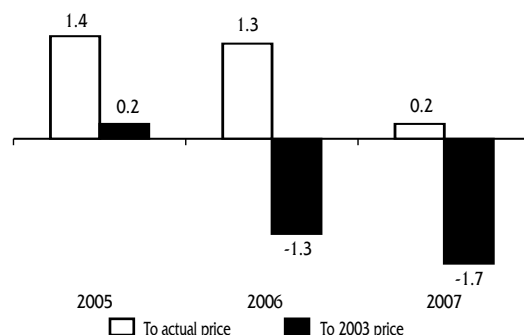|	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006*	2007*
Total	7.9	8.5	8.2	6.7	7.4	7.2	7.4	8.2	9.8	12.1	15.2	17.6
Capital goods	2.4	2.8	2.6	2.1	2.1	1.9	1.8	2.0	2.4	3.1	4.3	5.6
Raw materials	3.2	3.4	3.4	3.0	3.6	3.6	3.7	4.3	5.4	6.6	8.1	8.8
Consumer goods	1.8	1.9	1.9	1.5	1.5	1.6	1.8	1.8	2.0	2.3	2.7	3.1
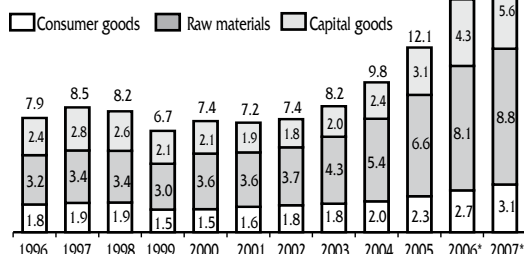
Note: Total imports include other imports.
* Forecast.

Graph 38
TRADE BALANCE: SIMULATION WITH EXPORT PRICES FROM 2006
(Millions of US$)

	2005	2006	2007
To actual price	5,260	8,086	7,080
To 2003 price	3,273	1,438	387
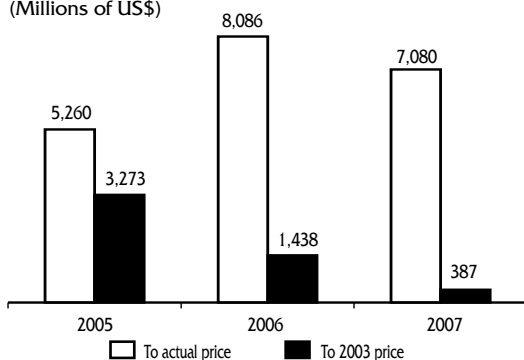
Graph 39
CURRENT ACCOUNT: SIMULATION EXPORT PRICES FROM 2006
(Percentage of GDP)

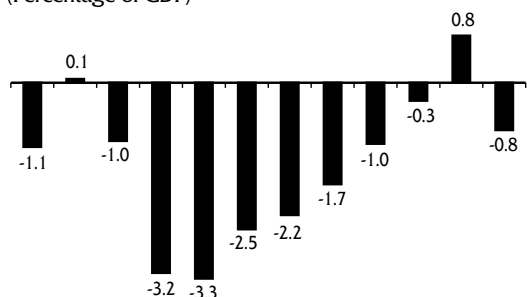|	2005	2006	2007
To actual price	1.4	1.3	0.2
To 2003 price	0.2	-1.3	-1.7

54. The balance in the **financial account** would amount to US$ 1.0 billion. The forecast on the balance of payments considers an increase of international reserves of US$ 1.5 billion in 2006 and of US$ 1.2 billion in 2007.

55. As previously mentioned, the positives results recorded in recent years in both the trade balance and the current account of the balance of payments have been partly associated with favorable terms of trade. In order to measure the impact that a reversal of prices might have, the value of the trade balance and of the balance of the current account have been estimated at 2003 prices. These prices are 47 percent lower than current prices. Results indicate that although the trade balance in both 2006 and 2007 would be nearly US$ 7 billion lower, a surplus would still be recorded in both cases. On the other hand, the current account adjusted to the prices of minerals and fuels in 2003 would log negative results, equivalent to 1.3 and 1.7 percent of GDP in 2006 and 2007 respectively. The lesser sensitivity of the current account of the balance of payments to the terms of trade is explained by the fact that the profits of mining companies would partially offset the deterioration of the trade balance, which would continue to show positive results. These moderate levels of deficit in the current account with terms of trade at values of 2003 show that an important part of the improvement recorded in our external accounts is due to the growth of real exports (13.3 percent on average over the last 3 years) as a result of not only a greater diversification of our exports and better access to markets, but also to the consolidation of important projects in the mining and hydrocarbon sectors.

5. PUBLIC FINANCE

Considering that the greater economic dynamism and the higher prices of exports would increase the current revenues of the central government from 15.7 percent to 17.2 percent of GDP, the forecast on the economic outcome has been revised from 0.2 to 0.8 percent of GDP. Taking into account the forecasts included in the Multiannual Macroeconomic Framework of the Ministry of Economics and Finance, updated as of August, a fiscal deficit equivalent to 0.8 percent of GDP is being considered for 2007. This considers a significant increase of 21.1 percent in public investment in real terms.

56. In **2006**, the Non-Financial Public Sector is expected to record a positive **economic outcome** of 0.8 percent of GDP –a better result than the one forecast in our May Report (0.2 percent of GDP)–, due to a higher estimate in terms of current revenues (equivalent to 0.7 points of GDP) as GDP increased from 16.5 percent to 17.2 percent. This result stems from a scenario with higher extraordinary revenues, given the favorable context for the price of commodities. In **2007**, the public sector would record a higher **fiscal deficit** (0.8 percent of GDP) than the one

Graph 40
OVERALL BALANCE OF THE NON-FINANCIAL PUBLIC SECTOR
(Percentage of GDP)

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

Table 19

NON-FINANCIAL PUBLIC SECTOR
(Millions of nuevos soles)

| | 2005 | | 2006 | | | 2007 | |
	Sem. I	Year	Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
1. Current revenue	**20,640**	**41,046**	**26,665**	**48,549**	**51,384**	**50,054**	**52,142**
(% of GDP)	*16.0*	*15.7*	*18.1*	*16.5*	*17.2*	*16.0*	*16.4*
2. Non-financial expenditure	**-16,059**	**-38,468**	**-18,158**	**-42,629**	**-44,156**	**-44,585**	**-48,746**
(% of GDP)	*-12.5*	*-14.7*	*-12.3*	*-14.5*	*-14.8*	*-14.3*	*-15.4*
Current	*-14,749*	*-33,577*	*-16,571*	*-36,863*	*-37,352*	*-37,852*	*-40,303*
(% of GDP)	*-11.4*	*-12.8*	*-11.2*	*-12.6*	*-12.5*	*-12.1*	*-12.7*
Capital	*-1,310*	*-4,891*	*-1,587*	*-5,766*	*-6,805*	*-6,733*	*-8,443*
(% of GDP)	*-1.0*	*-1.9*	*-1.1*	*-2.0*	*-2.3*	*-2.2*	*-2.7*
3. Others	**1,076**	**1,699**	**1,423**	**601**	**1,102**	**600**	**575**
(% of GDP)	*0.8*	*0.6*	*1.0*	*0.2*	*0.4*	*0.2*	*0.2*
4. Primary balance (1+2+3)	**5,657**	**4,277**	**9,930**	**6,521**	**8,330**	**6,069**	**3,971**
(% of GDP)	*4.4*	*1.6*	*6.7*	*2.2*	*2.8*	*2.0*	*1.3*
5. Interests	**-2,411**	**-5,066**	**-2,844**	**-5,907**	**-5,916**	**-5,922**	**-6,401**
(% of GDP)	*-1.9*	*-1.9*	*-1.9*	*-2.0*	*-2.0*	*-1.9*	*-2.0*
6. <u>Overall balance (4+5)</u>	**<u>3,246</u>**	**<u>- 789</u>**	**<u>7,086</u>**	**<u>614</u>**	**<u>2,413</u>**	**<u>147</u>**	**<u>-2,430</u>**
(% of GDP)	*2.5*	*-0.3*	*4.8*	*0.2*	*0.8*	*0.0*	*-0.8*

* Forecast.

Graph 41
FISCAL DEFICIT: SIMULATION WITH
EXPORT PRICES FROM 2006
(Percentage of GDP)

* Forecast.

□ Deficit ■ Deficit adjusted for mineral and hydrocarbons price from 2003
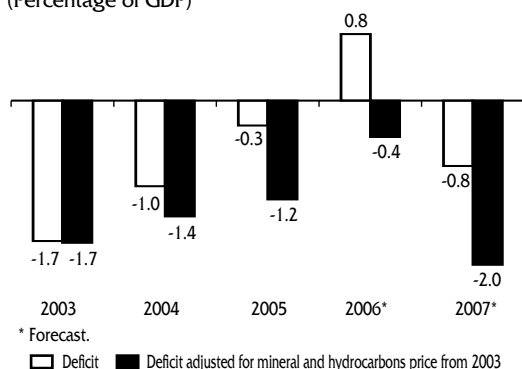
considered in our May Report, which estimated a balance in the economic outcome. This higher deficit in 2007 is explained by an increase in non-financial expenditure, which is estimated to rise from 14.3 percent to 15.4 percent of GDP.

57. The result obtained by isolating the impact of higher prices of exports on fiscal revenue simulating 2003 prices is that the estimated surplus for 2006 (0.8 percent of GDP) would turn into a deficit of 0.4 percent of GDP[7]. Using the same methodology for year 2007, the fiscal deficit would increase from 0.8 percent of GDP to 2.0 percent. These results reinforce the idea that a prudential fiscal position should be adopted in order to preserve resources for periods of fiscal tightness.

7   This calculation does not consider other additional effects, such as lower fiscal revenues as a result of lower economic activity due to a fall in the prices of exports.

BOX 6
EVOLUTION OF FISCAL IMPULSE

One of the determinants of the evolution of aggregate demand is fiscal policy, both in terms of tax and expenditure policies. Changes observed in the fiscal deficit allow measuring the impact of fiscal policy on aggregate demand. Thus, for example, the non-financial public sector has exhibited a sustained decline over the past few years.

Nevertheless, this improvement has taken place within a favorable macroeconomic environment in which public revenues have increased not only as a result of administrative and tax policy-related measures, but also as a result of the expansion of economic activity and the continuous higher international prices of our exports.

Therefore, in order to measure the fiscal balance excluding these effects and reflect the fiscal policy stance better, the structural deficit is calculated. This measure isolates from the fiscal deficit the effect of the economy's position in the economic cycle, as well as the impact of higher prices for mineral exports and of oil prices in fiscal revenues[1]. The changes in the structural deficit reflect the impact of the fiscal policy itself on aggregate demand. This indicator is called the fiscal impulse.

FISCAL IMPULSE: 2000-2007
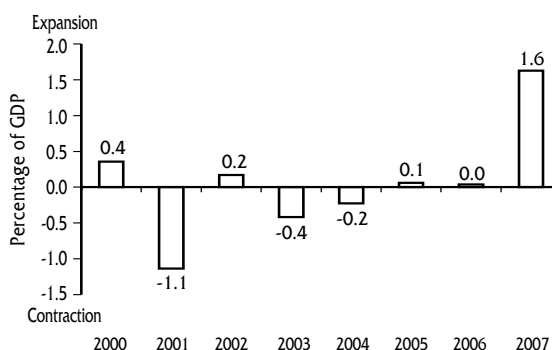
Note:
1/ The economic cycle-related adjustment was made considering a gap between the GDP and its potential level and a 1.09 product-elasticity in fiscal revenues. In the case of minerals and oil prices, the average of last 20-year international prices was used as reference to estimate the adjustment in revenues on account of income tax, royalties, and special royalties on the mining and hydrocarbon sectors. Further information on this methodology may be found in Moreno E. and Montoro C, (2006) "Regla Estructural y Ciclo Económico", (available at http://www.mef.gob.pe/DGAES/Seminarios_talleres/).
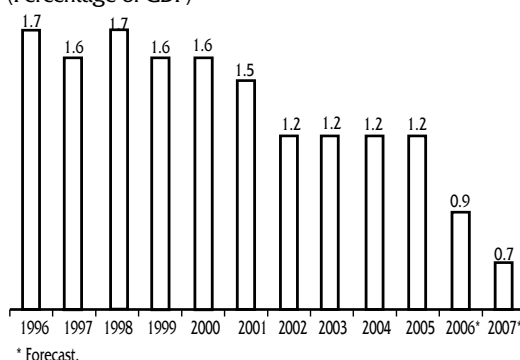
Graph 42
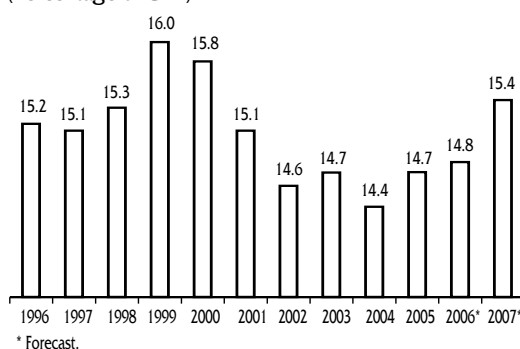**CENTRAL GOVERNMENT CURRENT REVENUE**
(Percentage of GDP)

* Forecast.
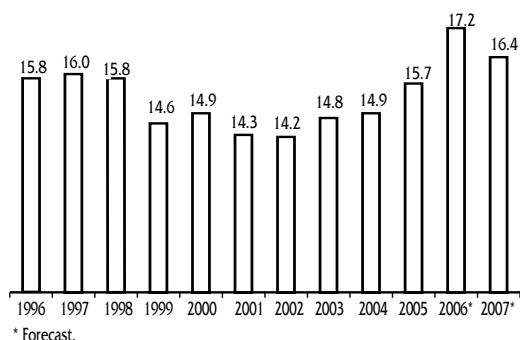
Graph 43
GENERAL SALE TAX
(Percentage of GDP)

* Forecast.
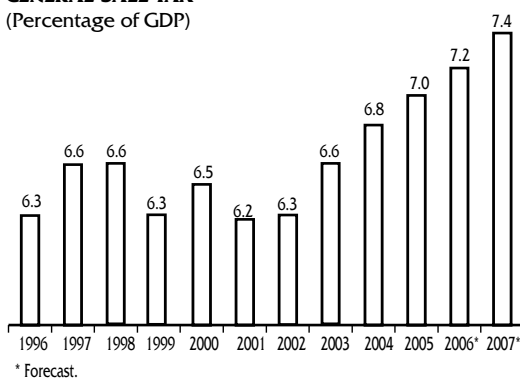
Graph 44
IMPORT TAX REVENUE
(Percentage of GDP)

* Forecast.

Graph 45
NON-FINANCIAL EXPENDITURE OF THE CENTRAL GOVERNMENT
(Percentage of GDP)

* Forecast.

58. In 2006, the **current revenues** of the central government would amount to 17.2 percent of GDP, implying a growth of 22.7 percent in real terms. This forecast is explained by higher revenues on account of income tax –as a result of the favorable evolution of the price of our commodities– and by extraordinary revenues, associated with the sale of shares of a mining company. Revenues in 2007 would fall to 16.4 percent of GDP. Factors explaining this fall include lower revenues on account of income tax –given lower prices for our exports–; the reduction of the excise tax on fuels implemented in 2006; and lower revenues on account of import duties. The latter considers the elimination of tariffs due to the signing of the Trade Promotion Agreement with the United States, as well as the elimination of tariffs on capital goods. The Tax on Financial Transactions (ITF) and the Temporary Tax on Net Assets (ITAN) would continue to be in force.

59. In 2006, the **central government's non-financial expenditure** would amount to 14.8 percent of GDP, which in real terms implies an increase of 12.5 percent. This increase is mainly explained by increased capital expenditure (36.3 percent in real terms), rising from 1.9 percent of GDP in 2005 to 2.3 percent of GDP in 2006. In 2007, non-financial expenditure in nominal terms would amount to a sum equivalent to 15.4 percent of GDP, as stipulated in the Multiannual Macroeconomic Framework for 2007-2009 of the Ministry of Economics and Finance (MEF). Current expenditure would increase to 12.7 percent of GDP, while capital expenditure would amount to 2.7 percent of GDP, increasing by 0.4 percentage points with respect to forecasts for 2006.

60. The amortization of public debt in 2006 would amount to US$ 2.6 billion, with maturities of external debt accounting for US$ 1.2 billion and maturities of domestic debt accounting for US$ 1.4 billion. The **financial requirement** for 2006, estimated at US$ 1.9 billion, is to be covered by external disbursements (US$ 713 million) and bond issue (US$ 1.7 billion).

BOX 7

PROMPTING QUALITY IN PUBLIC EXPENDITURE THROUGH A RESULT-ORIENTED BUDGET

The main conceptual approaches analyzing the management of a result-oriented budget are the agency theory of management and the New Public Management theory.

The *agency theory* establishes a vertical relationship between the government's central management (principal) and the units implementing expenditure planning and financial management (agents). The principal pays agents according to the efforts made by the latter to achieve objectives. However, this implies a problem of asymmetric information since the efforts made by agents are not directly observable by the principal and, therefore, a system of incentives and punishments should be established to promote both the participation and efforts of agents implementing expenditure.

The *New Public Management theory* sees citizens much like State customers who demand a series of goods and services according to their preferences. In this sense, a result-oriented budget is a system that, while maintaining fiscal sustainability, connects the costs of social programs or public services to the impact they have on their target population.

This system is dynamic in the sense that actions and the allocation of resources are oriented by results, which means that achieved results may be compared against the results desired and that policies and programs may be revised accordingly to ensure the accomplishment of goals. In line with these frameworks, the World Bank (1998)[1] has established three basic conditions that every result-oriented budget should meet:

1. Fiscal discipline in the aggregate management of public finance, an indispensable condition to guarantee the sustainability of public policies.
2. Public resource allocation should be based on strategic priorities in order that public expenditure is consistent with the evolution of the economy.
3. Finally, once these conditions are met, resources should be efficiently and effectively used.

It is recommended that these budget-related decision-making, planning, formulation and implementation priorities be integrated into a Medium Term Expenditure Scheme.

The experiences of Chile, Colombia and Peru show that the transition from an inertial budget formulation to a result-oriented budget is slow and gradual. These countries have implemented macro-fiscal regulations to guarantee fiscal sustainability and hence, the sustainability of public expenditure.

With respect to program priorities, Chile has designed a competition scheme according to which all Public Sector institutions develop and submit proposals to expand successful programs or create new ones, competing for a common fund. The President of the Republic –assisted by the Treasury Department and the Planning and Cooperation Ministry– is responsible for evaluating and approving the budget proposal of each institution.

In Colombia, a State Counsel is in charge of evaluating and approving the policies, strategies, programs and projects to be implemented by the National Government in a four-year period. Nevertheless, this time-horizon is too long so as to introduce corrections in the budgets of the following years.

In Peru, the budget is formulated by several agencies of the Ministry of Finance (MEF). Resource allocation is currently being improved by the Direccion General de Programacion Multianual del Sector Publico, and a Monitoring and Evaluation System for Public Expenditure (Sistema de Seguimiento y Evaluación del Gasto Publico) is being designed. This system is intended to provide precise and timely information on management, financial, economic and impact indicators and data on the different public administration programs and processes.

This system should allow that the required impact and efficiency criteria are included in future budget formulation and planning.

Another important aspect in this sense is establishing the mechanisms that will allow an efficient and effective use of

COMPARISON OF THE MAIN OUTPUTS OF THE SCHEME ESTIMATED BY RESULT

	Chile	Colombia	Peru
Fiscal Sustainability and Macreconomic consistency	Structural surplus	Current savings	Fiscal deficit
Program priorities	Contestable funds	National Advise of Economic and Social Policy (Consejo Nacional de Politica Economica y Social)	Direccion General de Programacion Multianual del Sector Publico
Efficient uses: contract incentives	PMG Productivity bond	Indicative plan	CAR Productivity Bond

resources. To do so, the Public Treasury in each country signs productivity agreements with public institutions that establish the objectives and goals to be accomplished. These agreements are then audited by the government's corresponding internal auditing units in each country.

A country showing major progress in this regard is Chile (Programa de Mejoramiento de la Gestión - PMG) as this country has established monetary incentives – financed with Treasury resources– to the accomplishment of objectives.

On the other hand, Colombia (Planes Indicativos) has not established any kind of incentives for this purpose, which explains why no positive outcomes have been achieved in terms of a result-oriented budget. In Peru (Convenio de Administración por Resultados - CAR), incentives have been established, but are conditioned to entities' accomplishment of objectives and to the fact that enough money is saved to fund said incentives. In most cases, institutions have not been able to generate the required savings.

In conclusion, the implementation of a result-oriented budget will not only increase the efficiency and effectiveness of public spending, but will also improve the relationship between the citizen and the State.

Notes:

1.   Public Expenditure Management Handbook, World Bank 1998.

61. **Financial requirements** in 2007 (US$ 2.2 billion) would be covered by external disbursements for a total of US$ 1.1 billion and with domestic bond issues for a total of US$ 772 million. In this scenario, the balance of the **public debt** would decrease from 37.7 percent of GDP in 2005 to 33.0 percent in 2006, and then to 31.3 percent as of December 2007.

Table 20

NON-FINANCIAL PUBLIC SECTOR FINANCIAL REQUIREMENTS
(Millions of US$)

	2005		2006			2007	
	Sem. I	Año	Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
I. USES	**230**	**4,656**	**- 429**	**1,460**	**1,858**	**2,013**	**2,212**
1. Amortization	**1,226**	**4,460**	**1,713**	**1,621**	**2,559**	**2,058**	**1,463**
a. External	732	3,678	645	1,200	1,205	1,647	1,174
b. Internal	494	783	1,068	421	1,354	411	289
Of which: Pension							
Reform Bonds	92	192	78	105	154	79	80
2. Fiscal deficit	**- 996**	**196**	**-2,142**	**- 161**	**-701**	**- 45**	**749**
II. SOURCES	**230**	**4,656**	**- 429**	**1,460**	**1,858**	**2,013**	**2,212**
1. External 1/	**312**	**1,046**	**133**	**855**	**770**	**778**	**1,077**
2. Internal	**-1,156**	**- 168**	**-1,737**	**- 95**	**-565**	**195**	**363**
3. Bonds	**1,074**	**3,778**	**1,175**	**701**	**1,654**	**1,040**	**772**

* Forecast.
1/ Includes condonations.
Source: BCRP, MEF, ONP, MEF forecasts.

BOX 8

RECENT CHANGES IN THE DEBT PATTERN OF EMERGING ECONOMIES

The composition of emerging countries' sovereign debt[1] has been characterized by the higher weight of foreign currency with respect to domestic currency, as investors avoid engaging in domestic-currency borrowing, or do so at very high real interest rates due to fears of a high inflation and/or to the volatility of inflation as a result of the exchange rate.

How can the debt composition be restructured? Ilyina and other authors (2006) say that the combination of a flexible exchange rate with an explicit inflation targeting scheme would minimize incentives for the dollarization of sovereign debt or facilitate the issuance of debt in domestic currency.

The debt portfolio has recently been restructured to favor local currency. This evolution responds to: (1) the low interest rates in the international environment, higher terms of trade and higher credit ratings; and (2) better macroeconomic fundamentals.

The debt portfolio has recently been restructured to favor local currency. This evolution responds to: (1) the low interest rates in the international environment, higher terms of trade and higher credit ratings; and (2) better macroeconomic fundamentals.

The GFSR indicates that the proportion of debt at fixed rates in domestic currency has risen mainly due to Asian emerging economies (excluding Indonesia), and that governments have sought to increase the maturity of domestic sovereign bonds, a process that has been facilitated by the favorable international environment.

In the region, the external debt issued in local currency is low. In recent years only Uruguay, Colombia and Brazil have issued external debt in their own currencies. In Uruguay, this was part of a debt-restructuring program as a result of which pesos for an equivalent of US$ 540 million were placed between 2003 and 2004. Moreover, US$ 290 million of this sum were inflation-indexed bonds. The Colombian and Brazilian experiences were more relevant as the purpose was to reduce vulnerability by means of a portfolio diversification. Colombia placed 5-year bonds for a total of 954 billion pesos (US$ 375 million) in November of 2004, reopening the bond in January 2005 with the issue of bonds amounting to 294 billion pesos (US$ 125 million). More recently, Brazil issued 10-year bonds for a total of 3.4 billion reales (US$ 1.5 billion).

As a result of these operations, the participation of foreign currency bonds –issued both domestically and abroad[2]– has decreased in terms of the total debt, particularly in Latin American and European emerging countries. According to Standard & Poor´s, the governments of Brazil and Mexico are the ones that have most heavily reconverted their portfolios from foreign to local currency. The case of Colombia, with a 54 percent of its debt portfolio in national currency, is also noteworthy.

Notes:
1. The sovereign debt corresponds to the accumulated and outstanding liabilities acknowledged by the public sector face the rest of the economy and the world, which were caused by public sector operations in the past.
2. The appreciation of other currencies against the dollar would have also contributed to this evolution.

References:
Tovar, Camilo E. (2005) "International government debt denominated in local currency: recent developments in Latin America", BIS Quarterly Review, December.

Olivier, Jeanne and Anastasia Guscina, 2006, "Government Debt in Emerging Market Countries: A New Data Set" (unpublished; Washington: International Monetary Fund).

GOVERNMENT BONDS IN DOMESTIC CURRENCY WITH RESPECT TO THE TOTAL GOVERNMENT BONDS
(In percentages)

	2000	2004	Changes in percentage points
Brazil	60.7	73.6	12.9
Chile	9.1	16.0	6.9
Colombia	47.4	54.2	6.8
Mexico	48.3	59.4	11.1
Peru	6.3	10.0	3.7
Venezuela	28.6	36.5	7.9

Source: Standard & Poor´s.

SIZE OF THE DOMESTIC DEBT IN LATIN AMERICA: 2004

	Sovereign		Total*	
	Billions of US$	As a percentage of GDP	Billions of US$	As a percentage of GDP
Argentina	9.6	6.3	24.3	16.0
Brazil	295.9	49.0	371.6	61.5
Chile	20.0	21.2	41.8	44.4
Colombia	29.6	30.4	30.2	31.0
Mexico	153.1	22.7	176.9	26.2
Peru 1/	4.0	5.8	7.1	10.3
Latin America	**512.2**	**30.3**	**651.8**	**38.5**

* Includes bonds issued by the private sector.
1/ Considers only Sovereign Bonds and Pension Reform Bonds.
Sources: IMF; BIS, Camilo E. Tovar.

6. ECONOMIC ACTIVITY

Favored by high levels of consumer and business confidence regarding Peru's economic prospects and by a positive international environment with high prices for our export products, economic activity has exhibited a greater dynamic performance than the one described in our previous Inflation Report (May 2006). As a result, economic activity is forecast to grow at rates of between 6.5 and 7.0 percent in 2006 and between 5.5 and 6.0 percent in 2007. On the expenditure side, domestic demand would maintain an important dynamism in all its components. The central forecast scenario for 2007 considers a recovery in the primary sectors and climatic conditions with a weak occurrence of El Niño, as well as the implementation of the Trade Promotion Agreement between Peru and the United States.

62. The dynamic performance exhibited by several indicators of economic activity since the second quarter of 2005 has consolidated during the first half of 2006, boosted by a significant expansion of domestic demand, particularly private investment and private consumption. The magnitude in which these indicators have grown allows characterizing the current situation of the Peruvian economy as experiencing a stage of economic expansion or growth above the trend. As explained in Box 2 in our Inflation Report of August 2003, up to five similar stages have taken place in the Peruvian economy since the mid-60s, each of which recorded rates of growth of private investment and private consumption of over 5 and 15 percent respectively, figures that are similar to the ones currently observed.

63. This stage of economic expansion in 2006 and 2007 is being developed in a context of price stability where inflation forecasts indicate that inflation will remain within the target range announced by the Central Bank. Furthermore, this context also includes a positive international environment that will continue to be favorable throughout 2006, although to a lesser extent next year given the slowdown observed in the global economy and the gradual correction of the terms of trade that this may entail.

Table 21

GLOBAL DEMAND AND SUPPLY
(Real annual % changes)

	2004	2005	2006			2007	
			Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
I. Global demand (1+2)	6.0	7.1	7.4	6.4	7.8	6.0	6.5
1. Domestic demand 1/	**4.4**	**5.5**	**8.6**	**7.1**	**9.3**	**5.7**	**6.4**
a. Private consumption	3.5	4.4	5.4	4.8	5.4	4.3	4.6
b. Public consumption	4.1	9.8	8.4	6.2	8.3	4.2	8.3
c. Private investment	9.1	13.9	20.1	13.5	19.4	12.0	12.0
d. Public investment	5.7	12.2	11.9	20.5	29.9	9.9	21.1
2. Exports	14.7	14.9	1.4	2.9	1.0	7.6	6.8
II. Global supply (3+4)	6.0	7.1	7.4	6.4	7.8	6.0	6.5
3. GDP	**5.2**	**6.4**	**6.6**	**5.5**	**6.6**	**5.3**	**5.7**
4. Imports	10.6	10.6	11.8	11.3	14.0	10.0	10.0

* Forecast.
1/ Includes inventories changes.
Source: INEI.

BOX 9

ECONOMIC CYCLE AND MONETARY POLICY

A timely identification of inflationary pressures in the economy is essential to the practice and design of monetary policy. Therefore, it is important to include indicators that allow the timely implementation of policy measures in order to meet the inflation target. The Central Bank's anticipatory reaction is supported by the existence of time lags between the implementation of monetary policy and its impact on aggregate demand and inflation.

Inflationary pressures originate in several sources. One of these sources is pressure on demand, which is transferred onto inflation through the impact of higher activity on firms' unitary costs. Therefore, the Central Bank requires measures and indicators that allow anticipating the occurrence of said demand pressures.

One of the indicators used to identify possible inflationary pressures derived from the balance between the demand for and supply of goods and services in the economy is the output gap, that is, the differential between the real GDP and its potential level. The latter is defined as the level of economic activity that would not generate inflationary or deflationary pressures. If the output gap is systematically positive, this implies that the aggregate demand is in a phase that tends to induce inflationary pressures; on the other hand, when the gap is negative, the demand has the contrary effect. Thus, monetary policy is concerned with estimating these biases or gaps in order to have better information on possible demand pressures.

The potential output is a concept associated with long-term supply in the economy and is therefore determined by real fundamentals such as the productivity of factors, technological progress, real interest rates, demographic growth, among others.

The main problem faced by the central bank when making policy decisions is that the potential output is not directly observable. Several methods are currently used to estimate this indicator. First, some methods are aimed at estimating the trend of economic activity. On the other hand, the production function method is used. This method consists of breaking down the growth of the potential output into its main components, which are associated, on the one hand, with the accumulation of production factors (labor and capital) and with technological progress, on the other hand. Given that it is impossible to measure technological progress directly from real data, this variable is indirectly measured as a remainder, that is, as the part of economic growth that is not explained by the accumulation of factors. Finally, a third method is used that assumes a particular structure for the transmission mechanism through which demand pressures not directly observable are transferred onto inflation. In this case, a dynamic structural model is considered that estimates non-observed signs of pressure on demand by means of the Kalman filter[1].

The graph below shows the output gap, as well as its range of uncertainty as estimated through the Kalman filter. The graph also shows the estimates produced on the basis of both the production function method and the single-variable method of Hodrick and Prescott. All of these estimates point to an increased probability that the output gap will show an expansive course since the third quarter of 2005[2].

UNCERTAINTY ABOUT THE PRODUCT GAP
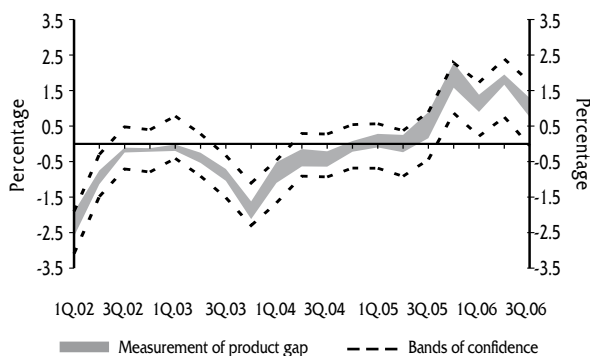
Notes:
1. The application of this methodology in Peru was developed by Llosa and Miller (2005).
2. The confidence bands are calculated based on the Kalman filter method considering one upward or downward standard deviation. The shaded region corresponds to the zone where the main estimators are located, including i) the Hodrick-Prescott filter (trend), ii) the Production Function, and iii) the Kalman filter.

References
• Llosa, G. y S. Miller (2005) "Usando información adicional en la estimación de la brecha producto en el Perú: una aproximación multivariada de componentes no observados", Documento de Trabajo No. 2005-004, Banco Central de Reserva del Perú. (Reproducido en The Irving Fisher Committee on Central-Bank Statistics Bulletin No. 20, abril 2005).

64. The international scenario appears to be one of the best scenarios since 1950. The terms of trade this year (expected to increase by 24 percent) would reach similar levels to the historical record levels of 1973, and would even exceed the levels recorded in 1979, when the international market also posted an important increase in the prices of minerals. As pointed out in the box on terms of trade in this report, the evolution of prices observed in foreign trade since 2002 would play an important role in explaining the long-term growth of the output and investment. In line with the price dynamic observed in the international market, the global economy shows signs of strengthening, with upward revisions in growth forecasts on practically all the commercial blocks with which we have trade relationships, except in the case of the U.S. economy.

BOX 10

TERMS OF TRADE AND THE DYNAMISM OF THE ECONOMY

The terms of trade index (TTI), defined as the ratio between the export and import prices indices, is one of the most important relative prices of the economy and one of the determinants of product and investment fluctuations.

There are several mechanisms through which terms of trade (TT) affect economic activity and investment. First, TT determine the purchasing power of exports, and therefore affect a country's wealth. The consumption and saving capacities of an economy will increase to a greater or lesser extent depending on how persistent changes in the TT are. When changes are relatively persistent, the TT have a greater impact on the expected level of wealth, and therefore consumption tends to increase, generating in turn higher levels of economic activity. On the other hand, when changes in the TT are relatively transitory, the impact on savings is higher than on consumption.

Second, given that the expected price of exports –particularly metals and food products– is a fundamental determinant of the expected profitability of firms in the export sector, increases in TT also generate an expansion in the demand of investment in these sectors, therefore favoring the growth of the potential output in the economy. Finally, firms in many economies use imported raw materials –such as oil, for example– in their production processes. Increases in the TT resulting from a fall in the prices of these raw materials will represent not only important savings for these firms in terms of their production costs, but also improvements in terms of their competitiveness that will lead them to produce more without generating inflationary pressures.

Empirical evidence corroborates this mechanism. For example, based on a sample of 7 developed economies, Mendoza (1995) reports a 0.78 average correlation between TT and the product, while in the case of investment the correlation is 0.87[1]. In emerging economies, these same correlations post values of 0.32 and 0.60 respectively[2]. As documented by Castillo, Montoro and Tuesta (2006), since the 90's TT have become an important determinant of the economic cycle in Peru. Thus, the correlation between the TT and the output gap in the1994-2005 period reaches 0.78 and 0.8 in the case of investment. The same correlations in the period 1979-1993 recorded –0.45 and –0.52 respectively[3].

The importance of TT in the cyclic evolution of the product and investment can be observed clearly in the two following graphs, which show the strong relationship between these two variables and the TT throughout the sample period, but particularly in the 1994-1999 period.
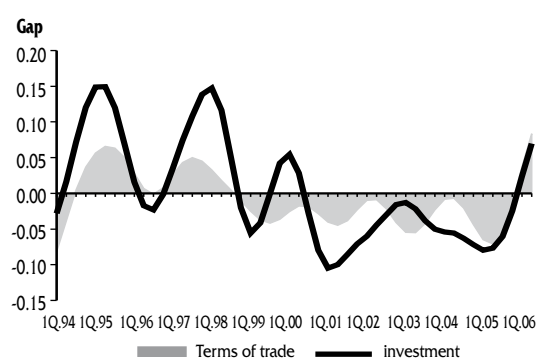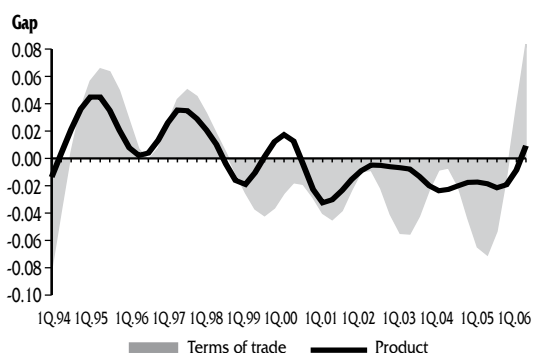
However, TT not only have effects in the economic cycle, but also in the long-term performance of the economy. As previously pointed out, persistent increases in TT generate increases in capital through the continuous growth of investment, especially in the export sector. In the case of Peru, TT have shown a growing trend since 2001, although it is difficult to predict how permanent this trend will be. Despite this, the long-term impact may be inferred on the basis of the evolution of the economy in the 1992-2005 period.

With this purpose, historical data on TT, consumption, investment and the product of the Peruvian economy during the previously mentioned sample period mentioned is used together with the methodology suggested by Mellander, Vredin and Warne (1992) to separate the permanent components of TT from the transitory ones[4]. Based on this break down, the importance of TT permanent components are estimated in the variance of the product, investment and consumption.

Thus, the variance of the TT would explain the 74 and 59 percent of the long-term product and investment variances during the 1992-2005 period. However, in the case of consumption, the contribution of the TT to its long-term evolution would have been minimum. Productivity increases would account for most of the evolution recorded in this variable.

The high export prices expected for the rest of 2006 would indicate that the terms of trade would continue to be favored not only by the sustained expansion of the output gap, but also of the potential output in the following years. In spite of this, this context would not continue in 2007 given that TT are expected to fall in the future.

Notes:
1. Developed economies considered include the United States of America, the United Kingdom, France, Germany, Italy, Canada and Japan.
2. The emerging economies considered are Argentina, Brazil, Chile, Mexico, Peru and Venezuela.
3. The cyclic components of the TT series –output and investment– have been obtained using the Baxter and King filter (1999), with quarterly information for the 1979-2005 period.
4. Unlike the Baxter and King filter (1999), the filter suggested by Mellander, Green and Warne permits not only to break down the series between its cyclic and trend components, but also to establish the determinants for each component.
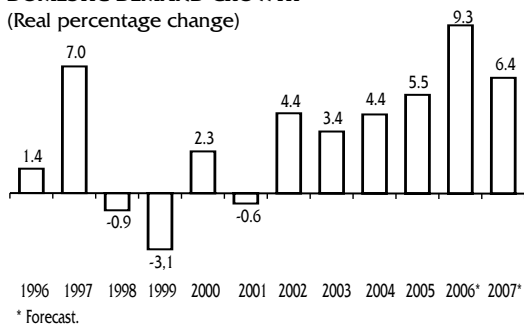
References:
- Castillo, P., Montoro, C. and V. Tuesta (2006) "Hechos estilizados de la economía Peruana" Documento de Trabajo DT2006-004, Banco Central de Reserva del Perú.
- Mendoza, Enrique (1995) "The Terms of Trade, the Real exchange Rate and Economic Fluctuations", International Economic Review, Vol 36, N° 1.
- Mellander, Vredin y A Warne (1992) "Stochastic Trends and Economic Fluctuations in a Small Open Economy", Journal of Applied Econometrics, Volume 7, N° 4.

Graph 46
GDP GROWTH
(Real percentage change)

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

Graph 47
DOMESTIC DEMAND GROWTH
(Real percentage change)

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

Graph 48
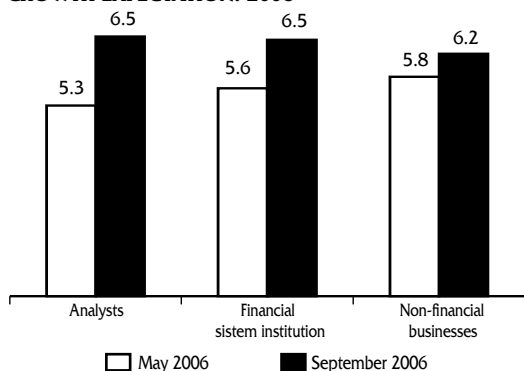**GROWTH EXPECTATION: 2006**

May 2006   September 2006
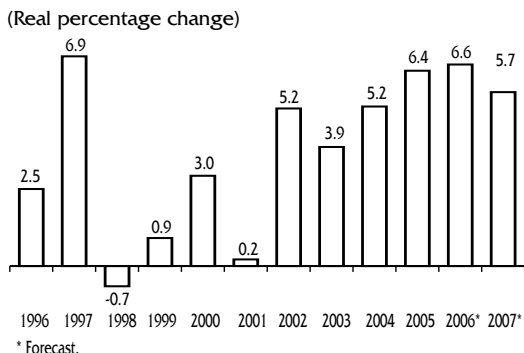
65. During the first semester of 2006, economic activity grew at a rate of 6.6 percent, boosted by the expansion of domestic demand that grew 8.6 percent. This evolution reflects important increases, both in private investment (20.1 percent) and in private consumption (5.4 percent). During the first months of the year, and despite the uncertainty that the electoral process generated, several indicators of demand –such as credit, imports of consumer durable goods and capital goods– and indicators of consumer confidence continued to show very positive signs, consistent with the expansive cycle that the economy is currently experiencing.
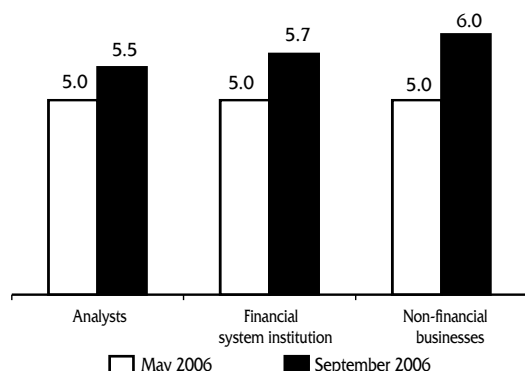
66. Taking into account this macroeconomic context, the central forecast scenario for this year considers a GDP growth rate of between 6.5 and 7.0 percent, a higher rate than the one considered in our May Report (5.5 percent). As previously explained, this upward revision is mainly explained by the dynamic performance exhibited by variables such as private consumption and investment, which would grow around 5 and 19 percent respectively this year, as well as by increased public spending in the second half of this year.
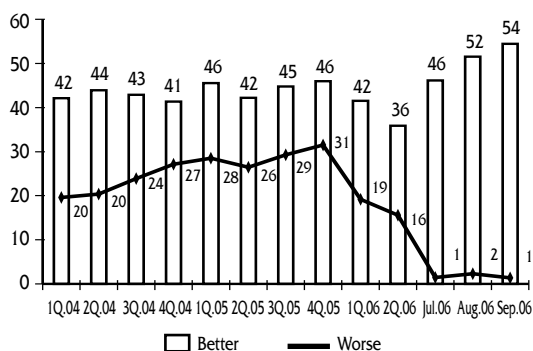
67. Forecasts on economic activity in 2007 consider a continuous important dynamism in private investment, as well as a better access of our products to international markets. The central forecast scenario also considers that the Peru-U.S. Trade Promotion Agreement will be ratified by the U.S. Congress and that this agreement will be in force during 2007. The impact of this agreement on the Peruvian economy is expected to be
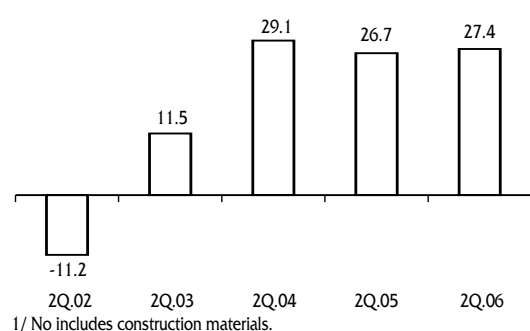
Graph 49
GROWTH EXPECTATION: 2007

	Analysts	Financial system institution	Non-financial businesses
May 2006	5.0	5.0	5.0
September 2006	5.5	5.7	6.0

☐ May 2006   ■ September 2006

Graph 50
EVOLUTION OF THE MANUFACTURING COMPANIES IN THE NEXT 3 MONTHS

☐ Better   — Worse

Graph 51
IMPORTS OF CAPITAL GOODS ¹ᐟ
(Annual percentage change)

1/ No includes construction materials.

Graph 52
PRIVATE FIXED INVESTMENTS
(Percentage of GDP)

* Forecast.

very positive, as previously explained in Box 6 of our Inflation Report of May 2006: benefits include increased productivity in our economy, the transfer of technology, and a greater access of our products to the U.S. market, among other positive impacts. However, as a less favorable international context –reflecting in a moderate reversal of terms of trade and in the slowdown of global economy– is expected for 2007, our forecast for next year is that the economy will grow at a rate of between 5.5 and 6.0 percent. Although lower than the growth rate estimated for 2006, this growth rate in 2007 is higher than the one forecast in our May Report (5.3 percent).
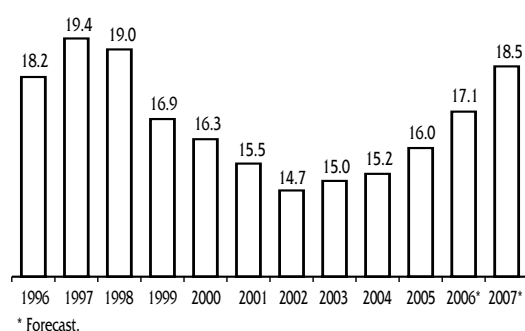
68. The dynamism exhibited by **private investment** takes place in a context marked by the favorable evolution of the prices of our main export products and by the the positive performance of the Peruvian economy. These aspects are reflected in improved expectations on the growth of the economy and hence in business confidence, as well as in greater sales and profits.

69. The favorable evolution observed in all economic sectors and the positive economic prospects are also reflected in business decisions aimed at increasing productive capacity in several sectors. For example, imports of capital goods for industry grew 34.8 percent during the first half of 2006.
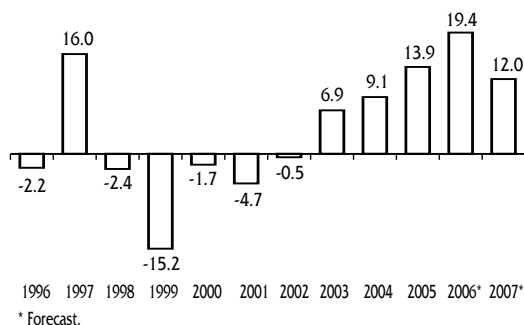
70. This evolution is expected to continue and private investment is expected to reach a pace of growth of 19.4 percent in 2006, taking into account the impact that mining projects (such as Cerro Lindo, Cerro Corona, and the extension of the Cerro Verde project) and energy projects (Enersur's thermoelectrical power plant in Chilca) will have. In addition to this, commercial facilities are also being built in Lima and in other cities, such as Trujillo, Huancayo and Cuzco, and companies operating in various sectors are also expanding their installed capacity. Private investment in 2007 is estimated to grow by 12.0 percent.

71. The dynamism of **private consumption** is corroborated in the favorable evolution of a number of indicators that have been showing a positive trend throughout this year.

• The public's confidence has also had a positive influence on the behavior of consumers. In this sense, Apoyo's Index on Cosumer Confidence (INDICCA) has remained at positive levels –over 50 basis points– since the beginning of the year, and has even recorded an upward trend in recent months. As of September, this index posted a level

Graph 53
PRIVATE FIXED INVESTMENTS
(Real percentage change)

16.0

19.4

13.9

12.0

6.9 9.1

-2.2 -2.4 -1.7 -0.5

-4.7

-15.2

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

Graph 54
CONSUMER CONFIDENCE INDEX: INDICCA

65
60
55
50
45
40
35

38 38 37 39 39 41 39 40 43 43 44 43 40 42 48 49 53 53 50 53 56 55 61 56

Nov. Jan. Mar. May. Jul. Sep. Nov. Jan. Mar. May. Jul. Sep.
2005   2006

Source: Apoyo.

Graph 55
URBAN EMPLOYMENT IN COMPANIES WITH 10 OR MORE WORKERS
(Annual percentage change)

9

6

3

0

Mar.05 May.05 Jul.05 Sep.05 Nov.05 Jan.06 Mar.06 May.06 Jul.06

— Peru urban   — Metropolitan Lima   - - - Other urban areas

Graph 56
**URBAN EMPLOYMENT IN COMPANIES WITH 10 OR
MORE WORKERS BY CITIES: JANUARY-JULY 2006**
(Annual percentage change)

17.7
14.6
11.6
9.7 9.2
7.7 7.0 7.0 6.4 6.3 6.3 6.2 5.5 4.6 4.4 4.4
3.0 2.8 1.4 1.3 1.0

Chincha Sullana Trujillo Tarapoto Paita Ica Pisco Piura Chiclayo Talara Arequipa Lima Chimbote Iquitos Cusco Huaraz Puno Huancayo Pucallpa Tacna Cajamarca

Source: MTPS.

of 56 points. This index shows a higher level of confidence vis-à-vis the future situation of economic agents, and is coupled by a better disposition of the public to engage in borrowing.

- **National disposable income** grew 8.7 percent in the first semester of 2006 as a result of the strong increase recorded by terms of trade.

Table 22

NATIONAL DISPOSABLE INCOME
(Real percentage changes compared to the same period in previous year)

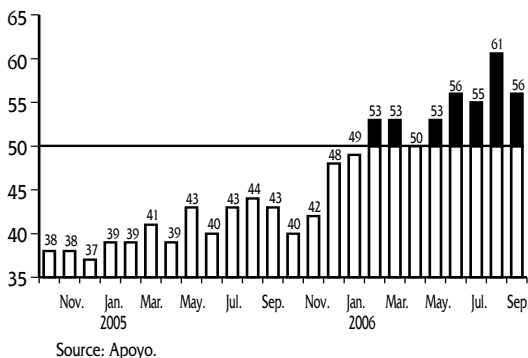|	2004	2005	2006			2007	
			Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
Gross Domestic Product (GDP)	5.2	6.4	6.6	5.5	6.6	5.3	5.7
Gross National Income (NI) 1/	5.4	6.3	8.4	7.0	8.5	5.0	5.1
National Disposable Income (NDI) 2/	5.4	6.5	8.7	7.1	8.6	5.0	5.1

* Forecast.
1/ Includes profit and losses from changes in foreign terms of trade.
2/ Net transfers from non-residents are added to NI.
Source: INEI and BCRP.

- According to the Survey on Employment conducted by the Ministry of Labor, urban employment in companies with 10 or more workers grew 6.4 percent between January and July. Employment grew particularly in cities other than Lima, including Chincha (17.7 percent), Sullana (14.6 percent) and Trujillo (11.6 percent). In terms of activities, growth in employment has been associated with activities such as agriculture and mining, as well as with export-oriented agribusiness and with activities in the service sector.

- Another indicator is the larger number of imports of durable consumer goods and the **increased number of new vehicles purchased**. It is worth pointing out that families tend to buy durable goods in phases of economic expansion, both through their increased incomes and through loans.
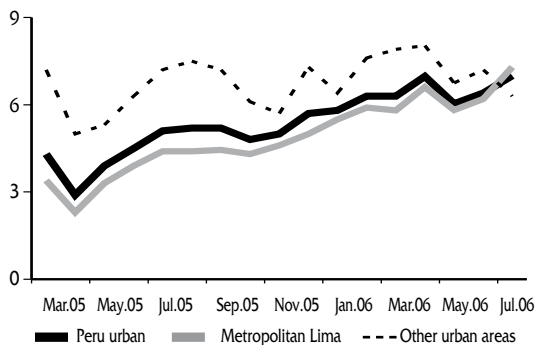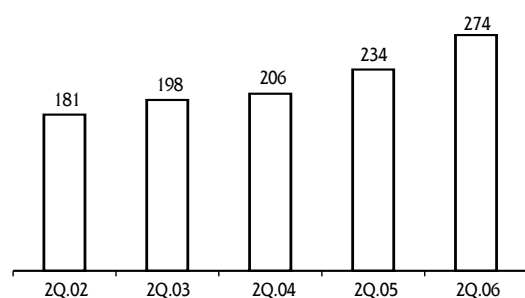
72. Considering the evolution of these indicators, **private consumption** is expected to grow by 5.4 percent in 2006 –the highest rate in the last eleven years–, while private consumption would grow 4.6 percent in 2007.
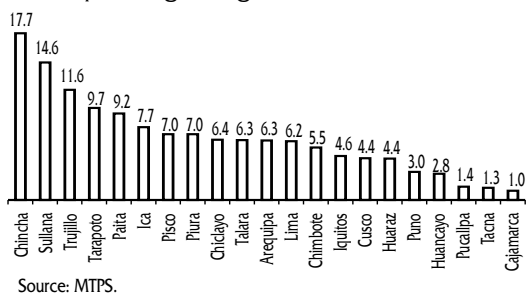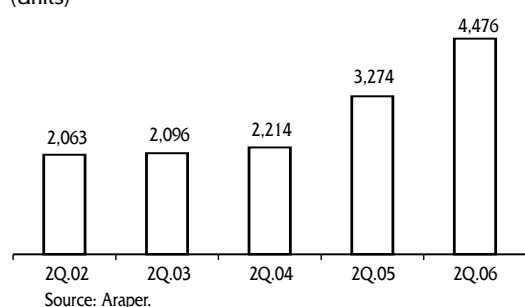
73. **Public expenditure** would represent an additional drive for economic activity in the second semester of 2006 and throughout 2007. Public investment is expected to grow at a rate of 30 and 21 percent in 2006 and 2007 respectively.
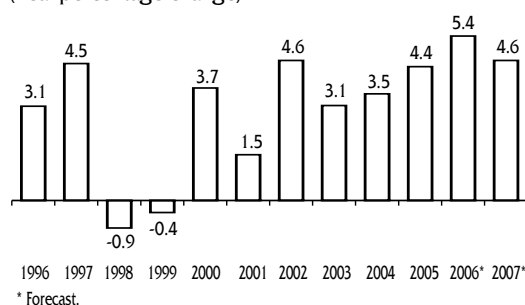
Graph 57
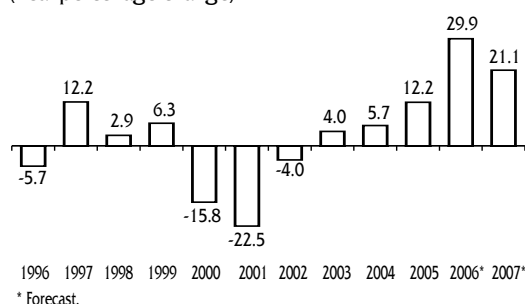**IMPORTS OF DURABLE GOODS**
(Millions of US$)

Graph 58
SALES OF FAMILY CARS
(Units)

Source: Araper.

Graph 59
PRIVATE CONSUMPTION GROWTH
(Real percentage change)

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

Graph 60
PUBLIC INVESTMENT
(Real percenage change)

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006* 2007*
* Forecast.

74. Component's **contribution to growth** allows identifying how many percentage points of GDP's expansion at a given period are explained by components of domestic demand or by net exports (net external demand). In the years 2004 and 2005, the contribution of exports was significantly high with respect to their weight in GDP. This contribution would be lower in 2006 and 2007, and instead the highest contribution to growth would be given by private consumption and private investment, the latter accounting for 3.7 points of the 6.6 percent growth of GDP recorded in 2006 and for 1.7 points of the 5.7 percent growth recorded in 2007. On the other hand, public investment would increase its contribution from 0.3 points in 2005 to 0.9 percentage points on average in the years 2006 and 2007.

Table 23

CONTRIBUTION OF THE EXPENDITURE COMPONENTS TO THE GDP GROWTH
(In percentage points)

	2000	2001	2002	2003	2004	2005	2006*	2007*
Domestic demand	**2.3**	**-0.6**	**4.4**	**3.4**	**4.3**	**5.3**	**9.0**	**6.3**
Private consumption	2.6	1.0	3.3	2.2	2.5	3.1	3.7	3.1
Public consumption	0.3	-0.1	0.0	0.3	0.4	0.9	0.8	0.8
Gross domestic investment	-0.6	-1.5	1.1	0.8	1.5	1.4	4.5	2.4
- Private investment 1/	0.2	-0.6	1.2	0.7	1.3	1.0	3.7	1.7
- Public investment	-0.8	-0.9	-0.1	0.1	0.2	0.3	0.9	0.8
Net foreign demand	**0.6**	**0.8**	**0.7**	**0.5**	**0.9**	**1.1**	**-2.4**	**-0.6**
Exports	1.3	1.2	1.2	1.1	2.7	3.0	0.2	1.4
Imports	-0.6	-0.5	-0.5	-0.6	-1.8	-1.9	-2.6	-2.0
GDP rate of growth	**3.0**	**0.2**	**5.2**	**3.9**	**5.2**	**6.4**	**6.6**	**5.7**

* Forecast.
1/ Includes inventories.

Sector production

75. In the first half of 2006, non-primary sectors led growth with an expansion of 7.6 percent. Although the expansion recorded in non-primary sectors was general, the increase posted in the number of microenterprises was noteworthy. Another sector also worth pointing out is the construction sector, which grew 14.8 percent. This sector has been posting two-digit rates of monthly expansion since August 2005, due to the dynamism of housing programs and to self-built houses, as well as to the development of public infrastructure works in the city of Lima (Av. Grau Expressway, enhancement works at Lima's Airport, Ecological Project at the Atocongo-Conchán stretch) and other infrastructure works carried out by subnational governments.

Table 24

GROSS DOMESTIC PRODUCT
(Percentage changes compared to same period in previous year)

	2004	2005	2006			2007	
			Sem. I	IR May 06*	IR Sep 06*	IR May 06*	IR Sep 06*
Agriculture & livestock	**1.7**	**4.8**	**3.2**	**3.1**	**3.6**	**4.7**	**4.0**
Agriculture	-3.2	4.0	2.0	1.7	2.5	5.0	3.7
Livestock	2.0	6.6	5.1	5.4	5.1	4.6	4.6
Fishing	**33.9**	**1.2**	**-2.3**	**-1.2**	**-0.7**	**4.7**	**4.2**
Mining & hydrocarbons	**5.2**	**8.1**	**6.6**	**1.6**	**1.2**	**6.2**	**5.6**
Metallic mining	5.2	7.4	7.1	0.8	1.1	6.2	5.6
Hydrocarbon	7.1	23.4	1.6	10.7	2.9	6.6	5.6
Manufacturing	**7.4**	**6.5**	**4.7**	**5.7**	**5.6**	**5.7**	**5.6**
Based on raw materials	7.3	2.1	1.3	1.7	1.9	3.0	2.5
Non-primary	7.4	7.7	5.5	6.6	6.6	6.4	6.4
Electricity & water	**4.6**	**5.3**	**5.6**	**5.5**	**5.7**	**4.4**	**5.0**
Construction	**4.7**	**8.4**	**14.8**	**9.2**	**12.6**	**7.0**	**9.0**
Commerce	**5.8**	**5.2**	**8.7**	**6.3**	**9.1**	**5.2**	**6.1**
Other services	**4.5**	**6.3**	**6.9**	**5.9**	**7.3**	**5.0**	**5.7**
GROSS VALUE ADDED (GVA)	**5.1**	**6.2**	**6.7**	**5.5**	**6.7**	**5.3**	**5.8**
Taxes on products and import duties	6.4	8.5	5.5	5.0	6.0	4.9	5.5
GLOBAL GDP	**5.2**	**6.4**	**6.6**	**5.5**	**6.6**	**5.3**	**5.7**
Primary GVA	**4.6**	**5.4**	**3.8**	**2.3**	**2.3**	**5.0**	**4.3**
Non-primary GVA	**5.2**	**6.5**	**7.6**	**6.3**	**7.8**	**5.4**	**6.1**

* Forecast.

76. **Growth in 2006** would be led by non-primary sectors, which are expected to grow 7.8 percent, while primary sectors would grow by 2.3 percent. The expansion of non-primary activities forecast for 2006 is closely connected to the growth of private investment, as reflected in the dynamism of construction. This sector would post the highest growth of all sectors: 12.6 percent, both due to the onset of several private sector investment projects and to the works carried out by local governments. Another factor contributing to this result is the expansion of self-built houses, given the increase recorded in terms of employment and incomes.

This growth of construction in 2006 is expected to be coupled by the expansion of commercial activity and of services, as well as by non-primary manufacturing –producing both consumer goods for the domestic market and raw materials for construction– and by production oriented to the external market.

77. A recovery of primary sectors –which would grow 4.3 percent– is forecast for **2007**. This forecast considers a scenario with slight anomalous climatic conditions for agriculture and fishing, as well as the onset of operations of the Cerro Lindo mining units and the enhancement of Cerro Verde, both of which would have a positive impact on production in the mining sector. On the other hand, non-primary sectors would increase 6.1 percent, driven by a strong component of the construction sector (9.0 percent). This evolution would be associated with the dynamism of house constructions, as well as with road construction and infrastructure works carried out in the frame of the program of concessions and privatizations conducted by the public sector.

78. The central forecast scenario also considers a weak El Niño event for 2007. According to a Report of the World Meteorological Organization (October 3), the intensity of this event would be between weak and moderate and might persist until the beginning of 2007. Furthermore, on October 5, the National Weather Service of the U.S. (NOAA) confirmed the existence of anomalous temperatures in the Pacific Ocean, consistent with an occurrence of El Niño event.

    In Peru, the Multisectoral Committee for the National Study of El Niño (ENFEN) reported that, according to climatic conditions and to the analysis of numeric models, El Niño event would not have similar characteristics in the Peruvian Coast to previous El Niño events classified as of extreme intensity in the years 1982-1983 and 1997–1998. This organization also indicated that the movement of a Kelvin wave toward the Eastern Pacific Ocean could evolve into a warm event of weak intensity whose impact could affect some sectors and some geographic areas in the first quarter of 2007.

79. The impact of a weak El Niño event on agriculture would depend on the period of the agricultural calendar when it occurs, as the effects of El Niño are relevant not only in terms of the availability of water but also in terms of its effects on temperature (products such as mango and lemon are particularly sensitive to anomalous temperatures during the first stage of the crop cycle). Some other crops would be favored by El Niño since this event would mean a greater availability of water at the beginning of the agricultural campaign and this would be adequate for crops, such as rice and hard yellow maize in the northern areas of the country.

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8   Further information on the report of the National Weather Service of the National Oceanographic and Atmospheric Administration (NOAA) dated October 5, 2006, may be found at the NOAA's website: http://www.nws.noaa.gov

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BOX 11

MULTISECTORAL COMMITTEE FOR THE NATIONAL STUDY OF EL NIÑO (ENFEN)

IMARPE	SENAMHI	IGP	DHN	INDECI	INRENA

OFFICIAL COMMUNIQUÉ N° 10/2006- ENFEN

With respect to ocean-atmospheric, biological-fishing and hydrological conditions, the Multisectoral Committee for the National Study of El Niño (ENFEN) informs the public that:

CONDITIONS AS OF SEPTEMBER:

1. The Atmospheric Pressure System in the South Eastern Pacific Ocean was within its normal range, with an intensity close to its climatologic average across the South American Coast, and returning to the normal levels posted before the past two months. However, isolated winds blowing North were observed in the Central and Northern Coast of Peru.

2. The atmospheric temperature in the Peruvian Coast recorded positive anomalies of between 1 and 2° C. These anomalies were lower than those observed in the months of July and August (4° C.)

3. The Sea Surface Temperature (SST) in the Equatorial Pacific Ocean showed positive anomalies of between 0.7 and 1.0° C. A Kelvin wave continues to move toward the Equatorial South American Coast.

4. The SST in the Peruvian littoral decreased approximately 1° C with respect to the previous months. However, due to the arrival of the Kevin wave, a temporary increase was recorded in the SST to the North of the Lobos de Afuera Island in the last days of the month. The emergence of cold waters in the Coast intensified from San Juan de Marcona (Ica) to the South.

5. The anchovy resource recorded a delay in its reproductive process, exhibiting a higher tendency to spawning over the last weeks of September.

6. The main rivers in the Peruvian Coast posted slightly lower flows than their historical average flows, except for the rivers Chancay-Huaral, Pisco and Majes. Furthermore, the volumes of water stored in reservoirs showed higher values than in September 2005.

OUTLOOK:

Anomalous conditions continued during September both in the atmosphere and in the Equatorial Pacific Ocean, showing a tendency to evolve into a warm event along the South American Coast. The Kelvin wave observed in the Central-Eastern Pacific Ocean that arrived at the end of September is expected to increase temporarily the SST in the Northern Coast during the month of October, while the normalization and orientation of the South Pacific anticyclone is expected to intensify the emergence of cold waters along the Southern Coast of Peru.

With respect to concerns about the intensity of precipitation in the following rainy season, the ENFEN Committee is able to confirm that the analyses carried out on the basis of prestigious international models point to a warming of coastal waters that may be classified as a weak El Niño event. According to the studies carried out by institutions member of the Committee, and considering the most pessimistic forecasts, rainfall is expected to be lower or similar to the level of precipitation observed in the years 1987 and 1992. The occurrence of an extreme El Niño event similar to that of the years 1982-1983 or 1997-1998 may be ruled out.

The Technical Committee of the ENFEN will keep on monitoring environmental conditions to provide timely information to the public on any significant change.
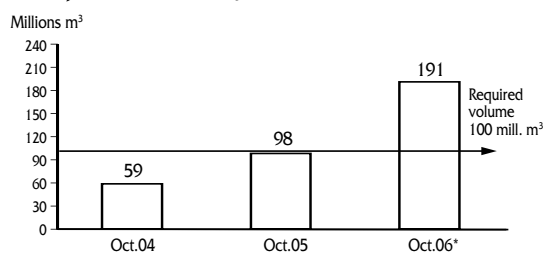
Lima, October 05, 2006

Further information may be found at:
www.imarpe.gob.pe www.senamhi.gob.pe www.dhn.mil.pe
www.igp.gob.pe www.inrena.gob.pe www.indeci.gob.pe

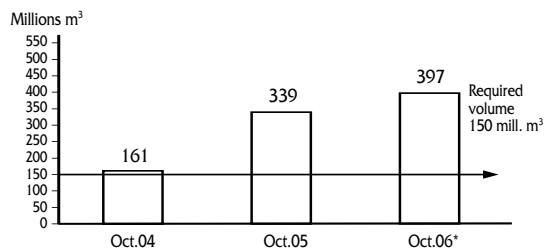**Graph 61**
VOLUME OF WATER STORED IN RESERVOIRS: 2004-2006*

POECHOS - PIURA DEPARTMENT

Millions m³
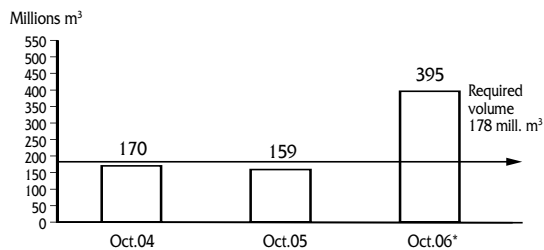
TINAJONES - LAMBAYEQUE DEPARTMENT

Millions m³

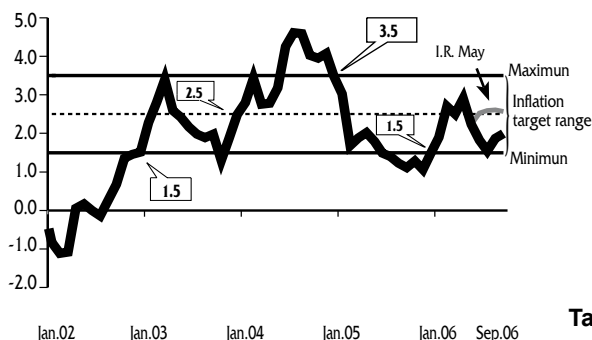**GALLITO CIEGO - LA LIBERTAD DEPARTMENT**

Millions m³

* With information as of October 6.

80. Available information indicates that water reservoirs in the northern coastal areas have accumulated much more water reserves than the minimum required. This is the case in the reservoirs of Poechos in Piura, Tinajones in Lambayeque and Gallito Ciego in La Libertad. The most important agricultural export products would not be affected, given that the impact on the availability of water for these products would be limited. For example, this relative independence in the case of asparagus is associated with improvements made in terms of irrigation infrastructure in the North Coast, including tubular wells and drip irrigation systems. These improvements have also been implemented in artichoke fields in La Libertad, which together with Ica, Junin and Cajamarca concentrate most of the production of this crop. The production of other important crops, such as grapes and paprika, is concentrated in Ica, an area where the influence of El Niño would be quite limited.

Graph 62
INFLATION AND TARGET INFLATION
(Percentage change over the last 12 month)

7. RECENT EVOLUTION OF INFLATION AND INFLATION FORECASTS

As of September 2006, last-12 month inflation was 2.0 percent, within the target range, and showing a downward trend given a correction in the prices of food products after these prices recorded an increase in the first months of the year. The baseline scenario considers that inflation will remain during most of the 2006-2007 forecast horizon at the lower band of the target range (between 1.5 and 2.5 percent), gradually converging to 2.5 percent while the economy continues to grow at a sustained pace.
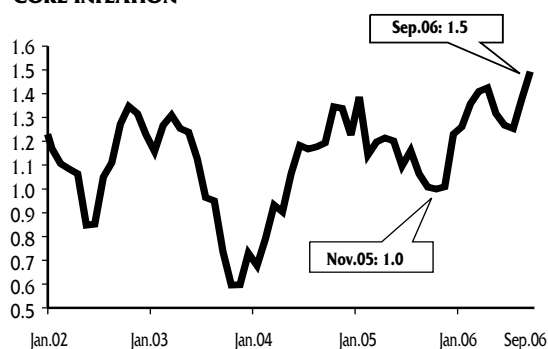
81. Two different periods in the evolution of inflation may be identified so far this year: in the first period, between January and April, accumulated inflation was 2.0 percent; while in the second period, between May and September, the rate of inflation was –0.7 percent. These different evolutions are associated with a reversal of shocks affecting the prices of products such as sugar, potato, and chicken. These price increases are included in core inflation.

Table 25

INFLATION 2002-2006
(Percentage changes)

	Weighting	2002	2003	2004	2005	2006 Jan-sep	2006 Sep.06/Sep.05	Annual average 2002-2006
I. Core	**60.6**	**1.23**	**0.73**	**1.23**	**1.23**	**1.02**	**1.49**	**1.15**
1. Food	10.7	0.02	0.14	3.24	0.98	0.38	0.52	0.99
2. Non-food	49.9	1.49	0.85	0.80	1.28	1.16	1.70	1.18
a. Goods	23.3	1.39	0.08	-0.29	0.71	0.60	1.07	0.52
b. Services	26.6	1.57	1.53	1.75	1.77	1.63	2.23	1.74
II. Non-core	**39.4**	**1.96**	**5.16**	**6.75**	**1.87**	**1.81**	**2.69**	**3.68**
1. Food	22.5	0.28	3.73	5.82	1.62	3.15	3.91	3.06
2. Non-food	16.9	4.22	7.00	7.90	2.17	0.20	1.19	4.49
a. Fuel	3.9	15.60	8.94	17.77	6.89	1.77	3.08	10.59
b. Transportation	8.4	0.11	10.99	3.49	1.29	-0.10	0.87	3.24
c. Public services	4.6	1.96	-1.98	6.19	-1.72	-1.24	-0.58	0.63
III Total	**100.0**	**1.52**	**2.48**	**3.48**	**1.49**	**1.35**	**1.99**	**2.17**
Note:								
Imported CPI		10.3	3.03	11.33	2.18	1.41	1.93	5.03

Graph 63
CORE INFLATION

Sep.06: 1.5

Nov.05: 1.0

Graph 64
ALTERNATIVE MEASUREMENTS OF CORE INFLATION
(Percentage change over the last 12 month)

— CPI   — Ad-hoc   — — Current core
—●— Percentile 62   —■— Weighted   —△— T(33 to 83)
—□— (38+75)/2   ···· Current-no foods   —▲— Kernel
—○— Weighted contribution

Graph 65
TOTAL INFLATION AND NON CORE INFLATION
(Percentage change over the last 12 month)

■ Inflation   Non core inflation

Graph 66
SUGAR INTERNATIONAL AND DOMESTIC PRICES

■ Internacional quotation   Domestic price sugar

Core inflation

82. The rate of last-12 month core inflation, an indicator representing the growth trend of prices isolating the most volatile components of the general index, accumulated 1.5 percent over the last 12 months. After growing at a faster pace between November 2005 (1.0 percent) and April 2006 (1.4 percent), this indicator has remained between 1.3 and 1.5 percent between May and September.

83. This evolution in the rate of core inflation –increasing between November 2005 and April 2006, and relatively stable since May– is complemented with other alternative indicators of trend inflation[9] which, for the most part, show a similar trajectory for core inflation. Thus, eight of the nine major alternative measurements of inflation showed an upward trend in the November 2005-April 2006 period and six of the same nine indicators recorded a stable or decreasing trend between May and September 2006.

84. As of September 2006, the various indicators of trend inflation are within the range of 1.3 percent and 1.8 percent. These low inflation levels –below or within the lower band of the target range– would reflect improvements in productivity, higher competition and lack of pressures of labor costs in the context of an economic expansive cycle.

Non-core inflation

85. Non-core inflation, which represents the set of goods and services facing supply shocks or subject to price controls, accumulated 2.7 percent over the last 12 months and 1.8 percent between January and September. It should be highlighted that the products whose prices increased in this period were sugar (22.6 percent), chicken meat (5.7 percent) and, to a lesser extent, fuels (3.1 percent) .
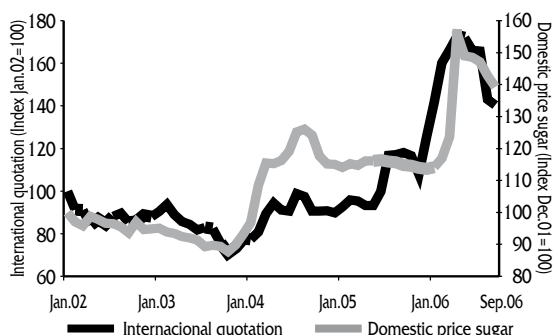
86. The price of **sugar** rose 40 percent in the first four months of the year (between January and April) due to management problems, low yield, and to the safeguards applied on the sugar imported from Colombia. Between May and September, this price was then corrected downward by 13 percent, as supply conditions returned to normal. In July, the safeguard applied on Colombian sugar was eliminated, as a result of which the cost of importing sugar was significantly reduced.

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9   A summarized explanation of this set of indicators may be found in Box 2 of our Inflation Report of May 2006. More detailed information on the indicators may be found in *Nota de Estudios Económicos* N° 11 (BCRP)-2006.

Graph 67
CHICKEN MEAT PRICE
(Nuevos soles per Kg.)
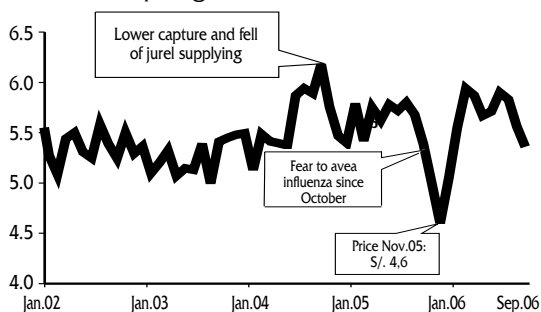
87. The increase in the price of **chicken** meat was basically associated with the recovery of demand, following the strong contraction of the price of this product recorded between October and November 2005 as a result of fears of the bird flu. However, after the price rise produced between December 2005 and February 2006 (monthly average variation of 7.7 percent), the price fell at an average rate of –2.7 percent between July and September, reflecting the increase in the placements of BB chicken (8 percent in the first 9 months of the year), the main indicator of the level of supply.

88. The domestic price of **fuels** recorded an average increase of 1.8 percent between January and September. In the international market, the price of West Texas Intermediate (WTI) oil rose from US$ 59 in December 2005 to US$ 74 per barrel in July 2006, and then decreasing to US$ 64 in September 2006. However, this increase was not completely transferred to domestic prices due both to the implementation of several fiscal measures and to the Fuel Price Stabilization Fund, as well as to the reduction of the excise tax on gasolines and kerosene and the appreciation of the nuevo sol.

89. The **rates of public utilities** fell 1.2 percent on average between January and September 2006. Energy rates dropped 4.7 percent, particularly in May (-6.8 percent) due to Osinerg's regulation N° 111-2006-OS/CD which established a rate system for the May 2006 – April 2007 period. Telephone rates decreased -3.5 percent because productivity increasing factors were established by Osiptel and corrected in terms of inflation.

Table 26

PUBLIC UTILITIES RATES
(% changes)

	2002	2003	2004	2005	2006	
					Jan. - Sep.	12 months
Public services	**2.0**	**-2.0**	**6.2**	**-1.7**	**-1.2**	**-0.6**
Electricity	7.9	-4.6	12.0	-2.5	-4.7	-5.2
Phone	-8.3	0.3	-2.0	-7.0	-3.5	-4.4
Water	2.3	0.9	3.0	5.2	8.5	14.1

Source: INEI.

Nationwide inflation

90. The national aggregate consumer price index is elaborated by the National Institute of Statistics and Information (INEI) since 2003 on the basis of price indices for 25 cities. The accumulated price increase between January and August 2006 was 1.3 percent. A higher than average increase was observed

Graph 68
NATIONAL INFLATION: JANUARY-AUGUST 2006
(Percentage change accumulated)
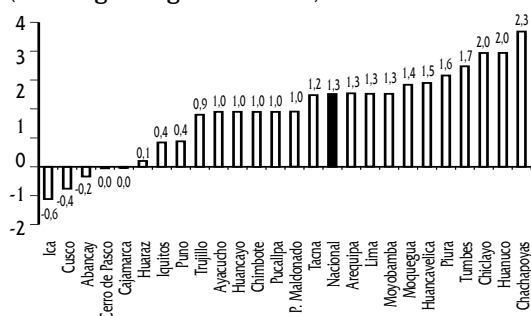
in 10 cities, while the other 15 cities posted a mean inflation that was lower than average inflation. However, inflation was negative in 3 of these cities.

91. The cities with higher price rises were Chachapoyas (2.3 percent), and Huanuco and Chiclayo (2.0 percent each). Conversely, the cities recording the lowest price increases were Ica (-0.6 percent) and Cuzco (-0.4 percent).

BOX 12

IMPACT OF THE CONSUMER LAW REGULATING PRICE LABELING IN DOMESTIC CURRENCY

The Consumer Law 28300, which went into effect on August 27, 2004, contains provisions regulating labeling. According to this regulation, all suppliers of goods and/or services must label the prices of their products in nuevos soles, but have the option of a double price labeling system whereby the price may also be expressed in foreign currency.

The correlation between the monthly percentage variations of the consumer basket and the exchange rate has significantly decreased since this Law went into effect. Today, the highest correlation in terms of the exchange rate is observed in the activity of home renting. The correlation of exchange and prices of electrical appliances decreased significantly since August 2004, falling from 0.9 to 0.2 on average over the past 24 months.

LINE OF PRODUCTS OF GREATING CORRELATION WITH THE EXCHANGE RATE

	Weighted	Correlation Sep.04-Aug.06	Correlation 1/	Correlation 1995-Aug.06
Correlation greater to 0,5 1/				
Goods				
Households-electrical goods	1.0	0.16	0.96	0.82
Recreational articles	0.5	-0.06	0.86	0.48
Purchase of vehicles	0.4	0.71	0.85	0.59
Jewelry articles	0.3	-0.06	0.92	0.60
Parts of vehicles	0.1	0.26	0.69	0.45
Culture and leisure goods	0.1	0.00	0.93	0.25
Services				
Rents	2.3	0.94	0.96	0.75
Hotels charges	0.1	0.11	0.74	0.55
Total	**4.7**			

1/ Greater correlation taking movable ranks of 24 months from January 1995 to August 2006.
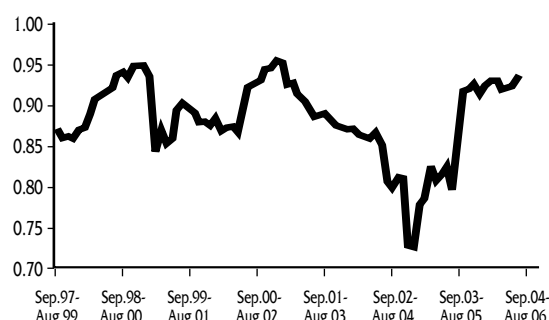
CORRELATION BETWEEN HOUSEHOLD-ELECTRICAL AND EXCHANGE RATE
(Movable rank of 24 months)
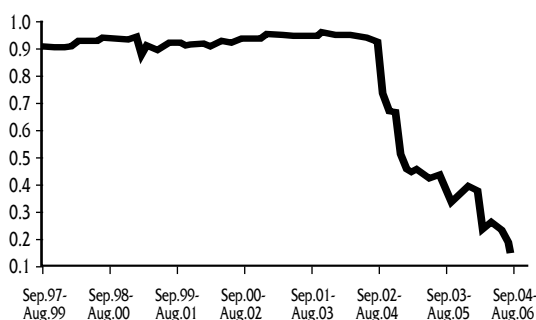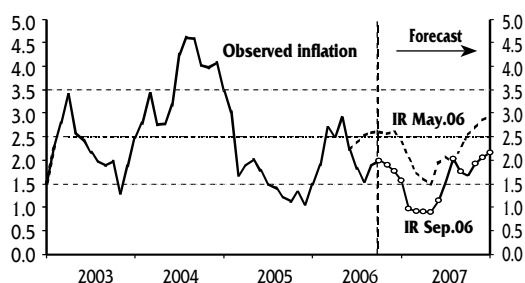

CORRELATION BETWEEN RENTS AND EXCHANGE RATE
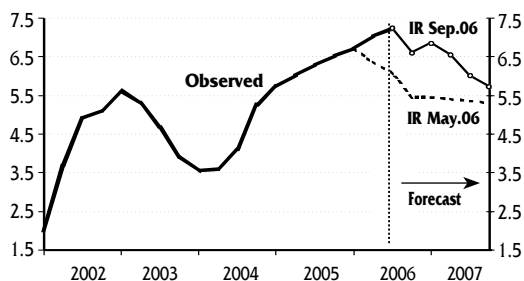(Movable rank of 24 months)

Forecasts

92. Current inflation forecasts for the 2006-2007 forecast horizon have been revised downward. The trajectory of annual inflation in the baseline scenario would continue to be in the lower band of the target range for the rest of the year. Inflation is then expected to be temporarily below the target range in the first months of 2007, given that the comparison period (January – April) used to calculate 12-month inflation previously exhibited a relatively high level of prices in the consumer price index. Thus, inflation is expected to decrease in the first half of 2007 due to the normalization of supply conditions for some food products from May 2006 on. This normalization of food prices had already been forecast in our May report, although it was expected to be a more gradual process.

Graph 69
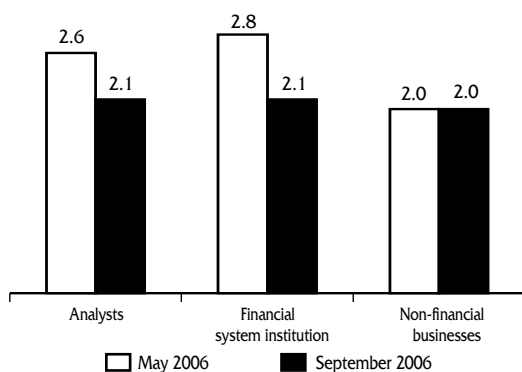**12 MONTHS INFLATION FORECAST**

93. This scenario also considers a gradual withdrawal of monetary stimulus in the forecast horizon in order to ensure that the inflation target is consistently met. The BCRP will continue to adjust its monetary position on the basis of all available new economic information relevant to meet the inflation target. In this central scenario, economic activity will continue to grow at a sustained pace in a context of lower inflation gradually converging towards the target range.

Graph 70
GDP GROWTH
(Average variation rate to the last 4 quarters)

94. The dynamism of **economic activity** in 2006 and 2007 would propel the convergence of inflation towards the 2.5 percent inflation target during 2008. Given that this dynamism reflects the growth of economic activity in the first semester of this year (6.6 percent), the high levels of consumer and investor confidence, and the better terms of trade (24 percent), the GDP growth forecast for 2006 has been revised upward from 5.0-5.5 percent (as forecast in previous Inflation Reports) to a range of 6.5-7.0 percent. Likewise, although the economy would still grow at a slower pace in 2007 given that the terms of trade are expected to decrease by 5.3 percent, the forecast range of growth has also been increased upward from 5.0-5.5 percent to 5.5-6.0 percent.
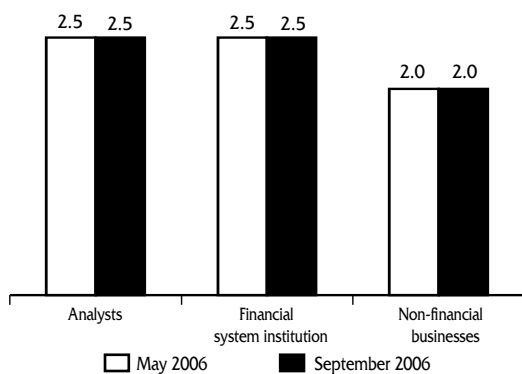
95. Another factor influencing the inflation forecast is the evolution of imported inflation. In this regard, a moderate rise is expected in the international price of oil, while a more moderate appreciatory pace is expected in terms of the exchange rate following the reversal of this trend after the electoral process. Therefore, in contrast with the evolution of imported inflation in previous years due to the impact of higher international prices of fuels, in 2007, imported inflation would imply no upward pressures on inflation.

Graph 71
INFLATION EXPECTATION: 2006

2.6   2.8   2.1   2.1   2.0   2.0

Analysts   Financial system institution   Non-financial businesses

☐ May 2006   ■ September 2006

Graph 72
INFLATION EXPECTATION: 2007

2.5   2.5   2.5   2.5   2.0   2.0

Analysts   Financial system institution   Non-financial businesses

☐ May 2006   ■ September 2006

96. An additional element influencing inflation forecasts is **expectations** regarding the future evolution of this variable, since the mechanism through which prices are set is partly determined precisely by expectations. As documented by the surveys on economic expectations that the BCRP conducts on a regular basis, the credibility vis-à-vis monetary policy has significantly increased in recent years, as a result of which inflation expectations are anchored to the inflation target throughout the forecast horizon. Thus, the cautionary position adopted by the Central Bank through the Inflation Targeting Scheme has contributed to maintain expectations in line with the inflation target.

8. BALANCE OF RISKS

97. The forecast scenario presented in this report is considered to be the most likely scenario for the 2006-2007 horizon. However, it should be pointed out that these forecasts are sensitive to the evolution of the exogenous variables considered as these may differ from the central scenario proposed herein. The balance of risks analyzes alternative scenarios that might drive inflation forecasts away from their forecast courses.

98. The following are the main risks that could affect the baseline scenario inflation forecasts:

- **Demand shock: Excessive aggregate expenditure.** The baseline scenario considers a sustained growth of economic activity ranging between 5.5 and 6.0 percent during 2007 that – considering all other factors– is consistent with controlled levels of inflation. In the contingent scenario that demand should grow at a faster pace –particularly if this growth is not coupled by increased investment or increased productivity–, upward pressures on inflation could be generated.

  Should this occur, the BCRP would react by withdrawing monetary stimulus at a faster pace in order to contain inflationary pressures and thus maintain expectations anchored to the inflation target while also maintaining at the same time sustainable growth rates in the long run.

- **Supply shock: El Niño event**. The baseline scenario considers the occurrence of a weak El Niño event. If conditions worsened, the current performance of economic activity could be affected in terms of the supply of goods and services, causing temporary pressures on prices and the loss of incomes.

  In this case, the BCRP would only react should there be a generalized price rise that might threaten to persist over time and affect inflation expectations.

· **External shock: Slowdown in the growth of the United States and deferment of the Peru-US Trade Promotion Agreement.** This scenario considers some softening of economic activity in the United States. However, the signs of cooling in the real estate sector prevent that the possibility that the slowdown of consumption might generate a stronger deceleration of the economy be ruled out.

This situation might deepen the U.S. external imbalances and generate pressures on the dollar. The scale of the current account deficit –estimated by the IMF at 6.6 percent of GDP in 2006 and 6.9 percent in 2007– and the debtor position of the U.S. might pose risks for the stability of the dollar. In the event of an abrupt depreciation of this currency, interest rates could be raised, thus affecting the pace of growth of the U.S. economy and, hence, of global growth.

In such a context, the international demand for commodities would drop and cause a reduction in Peru's terms of trade. Moreover, should interest rates in the U.S. be raised, the impact of this measure could be reflected on an increase of the country risk indicator in emerging economies, which in turn would bring about pressures on the exchange markets.

This scenario would have two effects on the Peruvian economy: on the one hand, this would slow down economic activity and, on the other hand, less positive prospects for our terms of trade would negatively affect economic fundamentals, thus generating a depreciation of the nuevo sol. In this case, monetary policy measures would be implemented should the scale and persistence of these two effects threaten that the inflation target be met. Furthermore, if this scenario induced a high upward volatility on exchange, the BCRP could intervene in the exchange market.

On the other hand, if the ratification of the Peru-U.S. Trade Promotion Agreement were deferred and the ATPDEA agreement were not extended, Peruvian exports to the U.S. would decrease, generating a negative impact on economic activity that would push inflation downwards. In this case, the BCRP could maintain a position of monetary stimulus for a longer period of time.
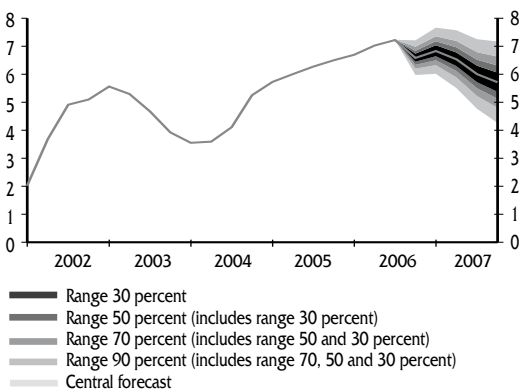
· **Financial shock: Appreciation of the Nuevo sol.** As anticipated in the May Inflation Report, the nuevo sol

Graph 73
INFLATION DENSITY FORECAST: 2006-2007
(Percentage change 12 months)
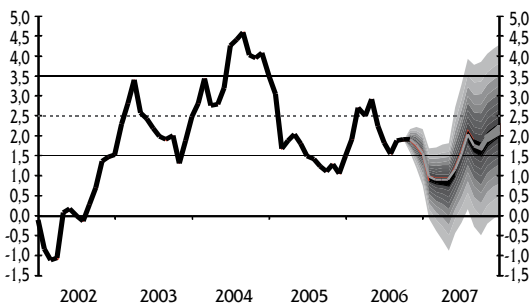
Note: The illustration shows the inflation prediction bands over the long forecast horizon. The darkest band around the central forecast represents a 10 percent probability of occurrence, while all the other bands represent a 90 percent of probability of occurrence.

Graph 74
GDP GROWTH FORECAST: 2006-2007
(Annual percentage change in quarters)

▬ Range 30 percent
▬ Range 50 percent (includes range 30 percent)
▬ Range 70 percent (includes range 50 and 30 percent)
▬ Range 90 percent (includes range 70, 50 and 30 percent)
▬ Central forecast

Note: The illustration shows the GDP growth prediction bands over the long forecast horizon. The darkest band around the central forecast represents a 30 percent probability of occurrence, while all the other bands represent a 90 percent of probability of ocurrence.

began to appreciate once the electoral period was over. This evolution reflects the link between exchange and economic fundamentals, as well as macroeconomic stability and the better prices of export products. Given the determinants of the exchange rate, the risk prevails that appreciatory pressures might be stronger than those considered in the baseline scenario.

In the event of such a situation, the BCRP could maintain its position of monetary stimulus for a longer period of time as a higher appreciation of the nuevo sol would imply lower levels of inflation than the ones previously forecast. Likewise, the BCRP could intervene in the exchange market to offset excessive downward volatility of exchange.

99. The weighing the risks considered results in a neutral balance. Therefore, taking into account all information available to date, it may be said that the probabilities that our forecasts be biased upward or downward are similar. Moreover, the forecast on the density of inflation points to a high probability (about 80 percent) that inflation will temporarily settle below the range of the inflation target during the first half of 2007.

100. In terms of GDP growth, the graph on the density of forecast probabilities shows that GDP in 2007 will grow at a slower pace than in 2006. As illustrated in the graph, there is a 20 percent probability that GDP will grow at a lower rate than 5.0 percent.