## Inflation and exchange rate

Inflation in 2004 was 3.48 percent. Supply shocks, such as increases in the price of oil and imported food stuffs and a drought that affected local agricultural production, temporarily forced inflation up during the first half of the year, to its highest annualized rate ( 4.6 percent) in July. Thereafter, a partial reversal of these shocks and an appreciation of Peru's currency caused inflation to fall gradually until it once again met the explicit inflation target.

The nuevo sol appreciated 5.5 percent with respect to the dollar, closing the year at S/. 3.28. This appreciation, which occurred mainly in the second half of the year, was associated with a significant trade surplus, remittances from Peruvians living abroad, and low inflation expectations, which led economic agents to adjust their portfolios towards sol-denominated assets. In real terms, the Peruvian currency appreciated 1.5 percent during the year.

## 1. Inflation

Inflation in 2004 was characterized by two phases; one, in the first half of the year in which it rose in response to supply shocks, both internal
and external, after which annualized inflation reached a maximum of 4.6 percent in July; and a second starting in August in which it fell, closing the year with a rate of inflation of 3.48 percent, within the annual target range of $1.5-3.5$ percent.


The supply shocks were anticipated and transitory in nature and this was stated in the BCRP's Inflation Reports in January, May and August 2004. The shocks included significant rises in world oil and foodstuff prices, particularly those of wheat and soybean; as well as a drought that reduced domestic production of items such as rice and sugar. Together, these factors explain 2.5 percentage points of annual inflation.

The increase in world oil prices from US\$ 32.1 a barrel at the end of 2003 to US\$ 53.2 in October 2004 and US\$ 43.2 in December had a direct impact on fuel prices, urban bus fares and electricity tariffs. As far as fuels were concerned, an item contributing 3.9 percent to the basket of consumer products, the rise was 17.8 percent. In order to avoid an even higher increase, the Government promulgated Emergency Decrees 003-2004 and 010-2004 (in May and September, respectively), establishing a mechanism for stabilizing fuel prices through a reduction in the Excise Tax (ISC) and the creation of a stabilization fund. The reduction in ISC took place between June and August and between October and November in order to offset the rise in fuel prices. The application of this mechanism reduced inflationary pressure caused by supply shocks by 0.15 percentage points.

Urban bus fares rose 3.5 percent in 2004 as fierce competition in the sector absorbed most of the rise in fuel prices through reduced margins. Electricity tariffs rose 12 percent in several stages given the higher cost of generation and distribution. It should be pointed out that in this case the increase in tariffs was also influenced by increased future demand, according to estimates made by the regulator (Osinerg) for the period 2005-2008, using methodology established by the Ministry of Energy and Mines.

The price of wheat, the main material for making bread and pasta, rose 27 percent between July 2003 and January 2004, as adverse weather conditions affected sowing and yields in the United States and Europe and demand from China increased. Thus inventories fell to their lowest levels for 5 years. Influenced by these factors, the price of bread rose 12.9 percent during 2004 and that of pasta 8.4 percent. There was also a 69 percent increase in the soybean world price between August 2003 and March 2004, in response to higher demand from China and this affected the price of edible oils (which rose 4.1 percent during the year and 12 percent between November 2003 and February 2004).


The drought in northern Peru, mainly in Lambayeque and Piura, seriously affected the production of hulled rice (which fell by 16 percent) with a consequent increase of 18.8 percent in the price. It should be emphasized that phytosanitary restrictions on rice from Asia (Departmental Ruling $\mathrm{N}^{\mathrm{o}} 064$, $\mathrm{N}^{\mathrm{o}} 141 \& \mathrm{~N}^{\mathrm{o}}$ 194-2004-AG-Senasa) meant that reduced domestic production could not be offset. Nevertheless, towards the end of the year the situation improved as rice ("extra" and "superior" grades) was imported from Uruguay and the United States; this, together with a larger area under cultivation in the jungle (particularly in San Martin), prevented even greater price increases in a product that accounts for 2.3 percent of the basket of consumer goods.

Finally, the price of sugar registered an increase of 23.3 percent during 2004 because of the drought, which affected yields, and financial and management problems affecting producer companies. As a result, production fell 22 percent during the year. The reduced supply was partially offset by increased imports, especially from Bolivia,

Colombia, Ecuador and Brazil, which together accounted for 25 percent of national production.

As can be seen, a significant number of shocks were external and had a powerful impact on the imported inflation ${ }^{1 /}$ indicator, accounting for 1.5 percentage points of annual inflation. Imported inflation in 2004 was 11.3 percent, compared to 3.0 percent in 2003.

In certain months supply shocks increased the inflation expectations ${ }^{2 /}$ for 2005 above the 2.5 percent target. In this context the BCRP increased its reference interest rates for operations with banks (by 25 basis points in August and October), in an effort to prevent the price increases of products affected by supply shocks from increasing core inflation and at the same time to reduce monetary stimulus.

Other factors contributed to the gradual fall in the rate of inflation: the reversal of the supply shocks - already predicted in the BCRP's Inflation Reports - and a significant appreciation of Peru's currency during the second half of the year. This latter factor

TABLA 20

## IMPORTED AND DOMESTIC INFLATION

(Annual percentage change)

|  | Weighting | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: | :---: | :---: |
| I. IMPORTED CPI | $\mathbf{1 2 . 1}$ | $\mathbf{1 0 . 3 0}$ | $\mathbf{3 . 0 3}$ | $\mathbf{1 1 . 3 3}$ |
| Food | 5.4 | 9.98 | -0.10 | 10.90 |
| Fuel | 3.9 | 15.60 | 8.94 | 17.77 |
| Electrical Appliances | 1.0 | 3.42 | -1.91 | -2.83 |
| Medicines | 1.4 | 3.60 | 1.74 | 5.22 |
| Vehicles purchase | 0.4 | 2.70 | 0.29 | -3.50 |
| II. DOMESTIC CPI | 87.9 | $\mathbf{0 . 3 0}$ | $\mathbf{2 . 4 0}$ | $\mathbf{2 . 2 8}$ |
| III. CPI | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 . 5 2}$ | $\mathbf{2 . 4 8}$ | $\mathbf{3 . 4 8}$ |

Source: INEI.

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played a major role in attenuating imported inflation.

All of these elements meant that at the close of the year inflation was 3.48 percent, within the target range established by the specific Inflation Target framework ( 1.5 to 3.5 percent) in place since 2002. Thus, despite the upward pressure on prices, which characterized this period, the inflation target was met for the third year running.

## Core inflation

This indicator of inflationary trends, which excludes fuels, public services, public transport fares, and highly variable foodstuffs (such as chicken) from the Consumer Prices Index (CPI), registered an increase of 2.6 percent during 2004, lower than the increase in the CPI ( 3.5 percent). This, together with the 5.2 percent increase in non-core inflation, reflected the transitory nature of the higher inflation rate.

## TABLE 21

INFLATION
(Annual percentage change)

|  | Weighting | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: |
| I. CORE INFLATION | 68.3 | 1.69 | 0.77 | 2.63 |
| Goods | 41.8 | 1.76 | 0.29 | 3.19 |
| Food and beverages | 20.7 | 2.07 | -0.08 | 6.82 |
| Textiles and footware | 7.6 | 1.06 | 0.91 | 1.36 |
| Electrical appliances | 1.0 | 3.42 | -1.91 | -2.83 |
| Other industrial goods | 12.5 | 1.54 | 0.70 | -1.24 |
| Services | 26.6 | 1.57 | 1.53 | 1.75 |
| Restaurants | 12.0 | 1.28 | 1.25 | 1.78 |
| Education | 5.1 | 2.70 | 3.02 | 4.63 |
| Health | 1.3 | 3.31 | 2.19 | 1.18 |
| Renting | 2.3 | 1.00 | 0.99 | -1.57 |
| Other services | 5.9 | 1.02 | 0.85 | 0.48 |
| II. NON CORE INFLATION | 31.7 | 1.16 | 6.21 | 5.20 |
| Food | 14.8 | -2.35 | 5.24 | 1.85 |
| Fuel | 3.9 | 15.60 | 8.94 | 17.77 |
| Transportation | 8.4 | 0.11 | 10.99 | 3.49 |
| Utilities | 4.6 | 1.96 | -1.98 | 6.19 |
| III. INFLATION | 100.0 | 1.52 | 2.48 | 3.48 |
| Source: INEI. |  |  |  |  |

## GRAPH 8



## Domestic inflation

Domestic inflation rose 3.66 percent during 2004, with 15 cities in the interior recording a lower figure than the average while the rest experienced higher than average inflation.

## 2. Exchange rate

The nuevo sol appreciated 5.5 percent in 2004, closing the year at $\mathrm{S} / .3 .28$. This came after four years with the exchange rate around $\mathrm{S} / .3 .50$ to the dollar, with daily fluctuations between S/. 3.40 and S/. 3.65 over this period. This appreciation of Peru's currency occurred mainly in the second half of the year (between July and December); after the exchange rate during the first half year varied between S/. 3.45 and S/. 3.51 to the dollar.

During the year, the multilateral real exchange rate (an indicator that takes into account domestic inflation and that of the country's main trading partners, as well as changes in the value of their currencies) fell by 1.5 percent because the nominal appreciation of the nuevo sol ( 5.5 percent) was offset by the differential between the variation in the
external prices index ( 7.9 percent) and domestic inflation ( 3.5 percent).

During 2004 the dollar depreciated significantly compared to the euro ( 8 percent), sterling ( 9

TABLE 22
NUEVO SOL VARIATION DURING 2004
(Against main commercial partners currencies)

|  | Nominal | Real |
| :--- | :---: | :---: |
| USA | $-5.5 \%$ | $-5.7 \%$ |
| Euro zone | $2.9 \%$ | $1.4 \%$ |
| Japan | $-1.8 \%$ | $-4.9 \%$ |
| Brazil | $1.7 \%$ | $5.8 \%$ |
| United Kingdom | $4.2 \%$ | $4.2 \%$ |
| Chile | $-1.0 \%$ | $-2.0 \%$ |
| China | $-5.5 \%$ | $-6.5 \%$ |
| Colombia | $9.8 \%$ | $12.0 \%$ |
| Mexico | $-5.0 \%$ | $-3.5 \%$ |
| Argentina | $-6.3 \%$ | $-3.9 \%$ |
| South Korea | $7.2 \%$ | $6.7 \%$ |
| Taiwan | $-0.2 \%$ | $-2.0 \%$ |
| Venezuela | $-21.3 \%$ | $-9.3 \%$ |
| Canada | $2.0 \%$ | $0.6 \%$ |
| Bolivia | $-8.3 \%$ | $-7.3 \%$ |
| Basket 1/ | $-1.5 \%$ | $\mathbf{- 1 . 5 \%}$ |

1/ Weight related with trade in 1994.
Source: BCRP.

percent), the Colombian peso (14 percent), and the Brazilian real (7 percent), against which the nuevo sol became more competitive despite real appreciation compared to the basket of currencies.

The change in nominal exchange rate was associated with favorable external accounts as well as reduced depreciation expectations, which led economic agents to adjust their portfolios in favor of domestic currency denominated assets, in a context of reduced country risk and a depreciation of the dollar in the region.

The current account was almost zero, benefiting from a trade surplus of US\$ 2,793 million, three times greater than the previous year's surplus, based largely on a significant increase in exports. Furthermore, during the year there was an important inflow of cash from Peruvians living abroad, which amounted to US\$ 1,123 million, 31 percent more than the figure for the previous year.

The downward trend in the exchange rate affected depreciation expectations, as can be seen from the rate of implicit depreciation in forward contracts

## GRAPH 10

FOREIGN EXCHANGE RATE EXPECTATIONS: DECEMBER 2004


Source: BCRP Expectations Survey.

(the differential between interest rates in different currencies), which fell from 1.9 percent in July 2004 to 1.5 percent at the close of the year. Similarly, exchange rate forecasts were continually revised downwards over the same period.

Reduced expectation of depreciation also affected future (forward) foreign currency operations by the public with banks, which was reflected in a fall in annual average net sales by banks from US\$ 713 million in 2003 to US\$ 583 million in 2004.

In this context, economic agents adjusted their portfolios in favor of assets denominated in domestic currency (deposits and loans). The dollarization coefficient of the banking system fell from 62 to 55 percent (between December 2003 and December 2004), while the dollarization coefficient of loans to the private sector fell from 77 to 74 percent over the same period. Similarly, pension funds (AFPs) stopped increasing their dollar-denominated portfolios in the second half of the year.


It should be mentioned that this favorable external environment also affected regional risk, which was reflected not only in a reduction in spreads on sovereign bonds but also in a more or less generalized appreciation of the region's currencies. In Peru's case, lower country risk was also associated with improved ratings by Standard \& Poor's and Fitch for the country's foreign debt. The EMBI+ Peru risk indicator fell from 312 basis points at the end of December 2003 to 220 at the end of December 2004, having fallen to a minimum of 214 basis points on the 27 th of December. It should be mentioned that this was affected temporarily in mid-year by uncertainty created by the beginning of a cycle of interest rate rises in the

United States. This raised spreads to around 500 basis points in May.

In order to reduce exchange rate volatility and accumulate international reserves, the BCRP purchased US\$ 2,340 million over the year, most of these purchases being made between August and December, the period in which the downward pressure on the nuevo sol was strongest. Part of these purchases was used to meet a demand for dollars from the public sector amounting to US\$ 487 million, making the Bank's net purchases US\$ 1,855 million. With these acquisitions, the BCRP increased its international reserves, which amounted to US\$ 12,631 million at the close of 2004.


[^0]:    1/ Includes price variations of items in the basket of consumer goods that are most affected, either directly or indirectly, by international prices and the exchange rate.
    2/ Estimated from the Central Reserve Bank of Peru's monthly macroeconomic expectations surveys of economic agents (financial and nonfinancial companies and economic analysts).

