

## II.

### Inflation and Exchange Rate

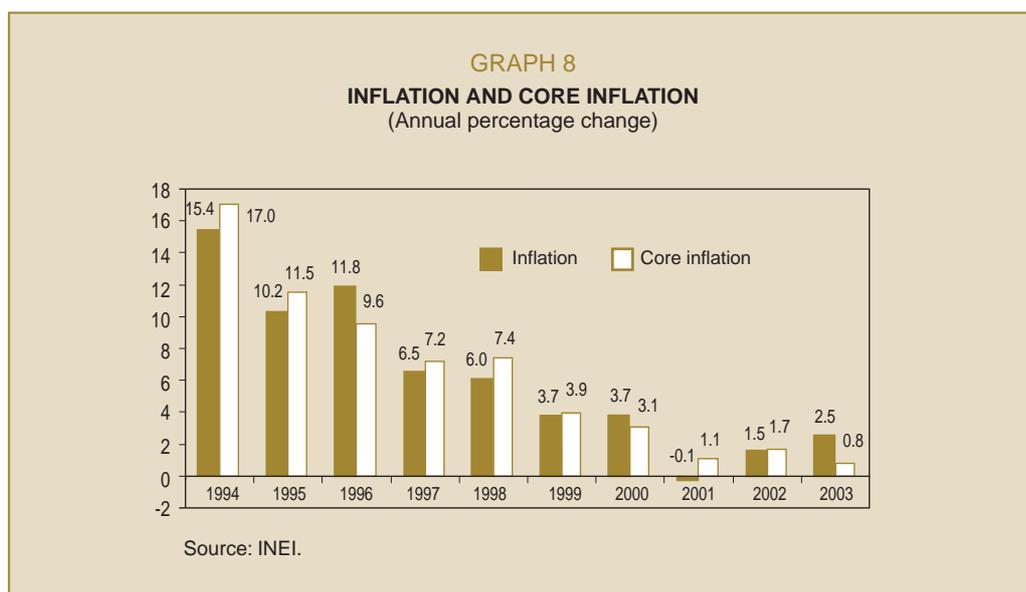
*Annual CPI inflation in 2003 was 2.5 percent, within the inflation target set by the Central Reserve Bank, while the exchange rate appreciation was 1.2 percent during 2003.*

#### 1. Evolution of the inflation rate

In 2003, the second year of the inflation targeting scheme, the consumer price index rose by 2.48 percent, above the 1.52 percent increase in 2002, as a result mainly of the increase in international oil prices, which affected domestic fuel and transportation prices, and the smaller agricultural supply that affected food prices such as the price of

potato. The increase of fuel, transportation and potato prices, explained 1.80 percentage points of annual inflation.

**Core inflation**, an inflation trend indicator that excludes the most volatile food prices (fuel and utility prices, and transport tariffs), rose by 0.77 percent in 2003, lower than the 1.69 increase of 2002.





Between January and October 2003, core inflation grew at a monthly average rate of 0.02 percent, in contrast to the 0.52 percent rise between November and December, mainly due to the increase of processed food prices (0.54 percent), especially rice and oil seeds prices, which rose by 8 and 5 percent respectively in this period.

The rice price increase during the last months of 2003 was due to the smaller sown areas as a result of water shortages in the north coast, mainly in Lambayeque.

The higher price of oil seeds reflected the increase in the international price of

soybean oil, which is the main input into the production process. Between August and December 2003 the international price of soybean oil rose from US\$ 445 to US\$ 642 per ton, due to the reduction of American soy stocks, poor harvests and a stronger demand from China.

**Non core inflation** rose 6.21 percent in 2003 (1.16 percent in 2002), reflecting the increase of public transportation tariffs, as well as food and fuel prices, that explained 2.9, 2.4 and 1.3 percentage points of the annual non core inflation. In contrast, utility prices fell mainly due to the reduction of electric tariffs, contributing to non core inflation with -0.3 percentage points.

TABLE 17  
INFLATION  
(Annual change)

	Weight	2001	2002	2003
<b>I. CORE INFLATION</b>	<b>68.3</b>	<b>1.06</b>	<b>1.69</b>	<b>0.77</b>
<b>Goods</b>	<b>41.8</b>	<b>0.66</b>	<b>1.76</b>	<b>0.29</b>
Food and beverages	20.7	-0.59	2.07	-0.08
Textiles and footwear	7.6	1.94	1.06	0.91
Electrical appliances	1.0	-0.19	3.42	-1.91
Other industrial goods	12.5	2.39	1.54	0.70
<b>Services</b>	<b>26.6</b>	<b>1.65</b>	<b>1.57</b>	<b>1.53</b>
Restaurants	12.0	1.29	1.28	1.25
Education	5.1	3.97	2.70	3.02
Health	1.3	3.02	3.31	2.19
Rent	2.3	-0.37	1.00	0.99
Other Services	5.9	2.14	1.02	0.85
<b>II. NON CORE INFLATION</b>	<b>31.7</b>	<b>-2.82</b>	<b>1.16</b>	<b>6.21</b>
Food	14.8	-1.16	-2.35	5.24
Fuel	3.9	-13.14	15.60	8.94
Transportation	8.4	-0.02	0.11	10.99
Utilities	4.6	-2.73	1.96	-1.98
<b>III. INFLATION</b>	<b>100.0</b>	<b>-0.13</b>	<b>1.52</b>	<b>2.48</b>

Source: INEI.

Food prices rose 5.2 percent. Noteworthy was the 43 percent rise in the price of potato, after having fallen 17 percent between 2001 and 2002. Low prices during those years affected the producers planting decisions, so that the sown area, which supplies Lima, fell 11 percent in the August 2002 – July 2003 season, compared to the previous season.

Fuel prices grew by 8.9 percent, reflecting the evolution of crude oil international prices. War in Iraq drove WTI oil price up from US\$ 26.3 per barrel in November 2002 to US\$ 35.8 per barrel in February 2003 (36 percent), thereafter falling to US\$ 28.1 in May (-22 percent), and picking up once again at the end of the year to US\$ 32.6 per barrel, as a result of the reduction of the OPEC production ceiling and the greater dynamism of the world economy. Consequently, domestic fuel prices rose 11.1 percent between

January and April, fell 5.6 percent between May and July and rose once again, this time 3.9 percent between August and December 2003. Domestic prices of kerosene, gasoline and natural gas grew by 13, 10 and 4 percent in 2003, respectively. Urban transportation fares rose 11.1 percent between January and April 2003, after having remained stable since September 2000.

Utility rates fell by 2.0 percent, reflecting the 4.6 percent reduction in electric tariffs. Telephone and water rates grew slightly by 0.3 and 0.9 percent. Electric tariffs fell mainly due to the application of the generation tariffs regulatory scheme corresponding to the May – October 2003 and November 2003 – April 2004 periods, as well as to June and July 2002 revisions after energy supply and demand projections were modified. In the case of water tariffs, the





recorded change is due to the one percentage point increase in the value added tax. Telephone rates rose for the same reason, in spite of the quarterly application of the productivity factor, according to the tariff readjustment scheme valid until August 2004.

Since December 2003, the National Institute of Statistics and Informatics reports an aggregate **national consumer price index** based on the price indexes of 25 cities. In 2003 this index rose 2.4 percent and 16 cities registered an inflation rate lower than the national average, while 9 cities registered a higher rate.

## 2. Exchange rate

The nominal exchange rate closed the year at S/. 3.472 per dollar, following an appreciation of 1.2 percent during 2003. In real terms this movement represented a depreciation of 7.5 percent. The exchange rate tended to appreciate in the first half of 2003 (with a sole interruption in May). In the second half of the year the exchange rate became more stable (except December<sup>1</sup>), showing a slight fluctuation between S/. 3.47 and 3.48 per dollar.

The real depreciation of 7.5 percent in 2003 resulted from the differential between the nominal exchange rate (1.2 percent); the internal inflation (2.5 percent); and the index of external

prices (11.6 percent). The latter reflects the currency appreciation of our main commercial partners against the dollar. In 2003, the dollar depreciated 12 and 17 percent against the yen and the euro, respectively. The dollar also depreciated against some Latin-American currencies: Brazilian Real (20 percent); Argentinean Peso (15 percent); Chilean Peso (15 percent) and Colombian Peso (1 percent).

The depreciation expectations fell in 2003, according to several surveys among financial institutions and economic analysts. Likewise, the implicit depreciation rate of 3-month forward operations fell from 3.2 to 1.8 percent between the end of December 2002 and 2003.

The trade balance registered a surplus for a second consecutive year, this time amounting to US\$ 731 million. This evolution was significant to the downward trend of depreciatory expectations, jointly with the positive situation affecting the region economies; and finally, the dollar depreciation against the rest of the hard currencies.

In Latin America the main economies benefited from favorable events in Brazil. The progress in the pension reform in that country allowed a significant reduction in its fiscal deficit, which contributed to lower the inflationary

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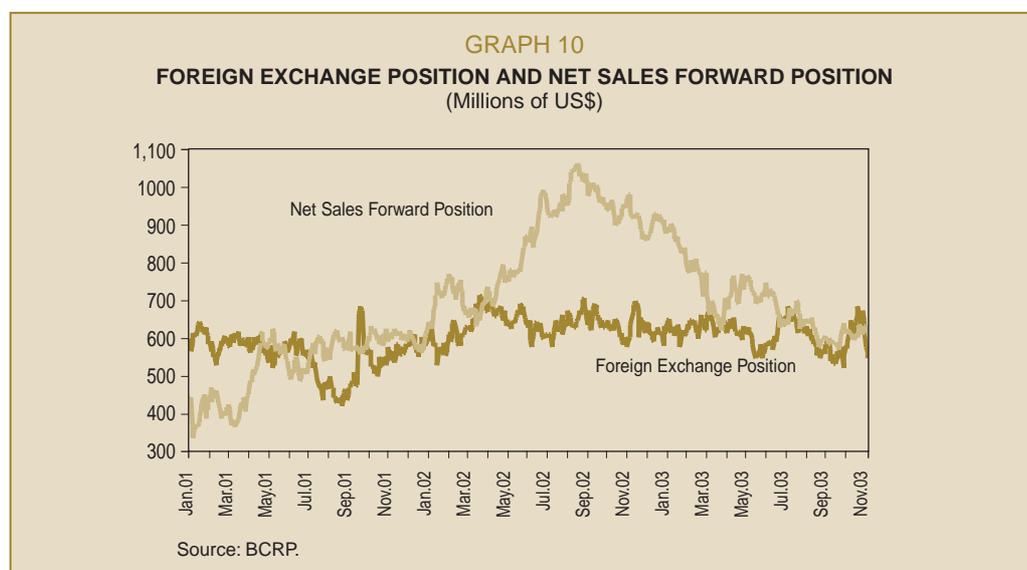
<sup>1</sup> April and December are affected by seasonal factors.

expectations and lessened the interest rates levels in the last quarter of 2003. Hence, there was a greater demand for emerging debt bonds and a capital inflow movement into the region, which contributed to a fall in the spreads. The EMBI+ spread of Peru fell below 300 bps in the last quarter 2003, while the Fitch rating agency changed its perspective from “negative” to “stable” and Standard & Poor’s held the country’s “BB-” rating. Finally, the government issued a 30-year global bond of US\$ 500 million.

The low depreciatory expectations promoted a greater preference for domestic currency assets such as Treasury bonds. At the end of 2003, the Treasury outstanding debt amounted to S/. 2,932 million. More than half of this

consisted of longer maturity bonds<sup>2</sup> (S/. 1,712 million), the remaining being short term bills. The low depreciatory expectations also influenced the modest forward operations, especially in sales operations (lesser flow of new operations and renewals)<sup>3</sup>. Between 2002 and 2003 (end of year) net forward sales decreased from US\$ 905 to US\$ 603 million.

In the same period, the banking foreign exchange position fell by US\$ 106 million, from US\$ 642 to US\$ 536 million. This outcome reflected the spot sales to the Central Bank (US\$ 1,050 million), the net forward sales agreed with private agents (US\$ 3,126 million) and the CDRs redemption (US\$ 87 million), which were partially offset by spot purchases from the public (US\$ 4,124 million) and Banco



<sup>2</sup> These issues were placed through the “Creadores de Mercado” program to develop longer term bonds in the domestic currency market.

<sup>3</sup> The outstanding balance of forward purchases fell slightly by US\$ 9 million, compared to the reduction of US\$ 307 million in forward sales.



de la Nación (US\$ 33 million). Sales reached US\$ 1,161 million, net of non delivery forward and swaps redemptions.

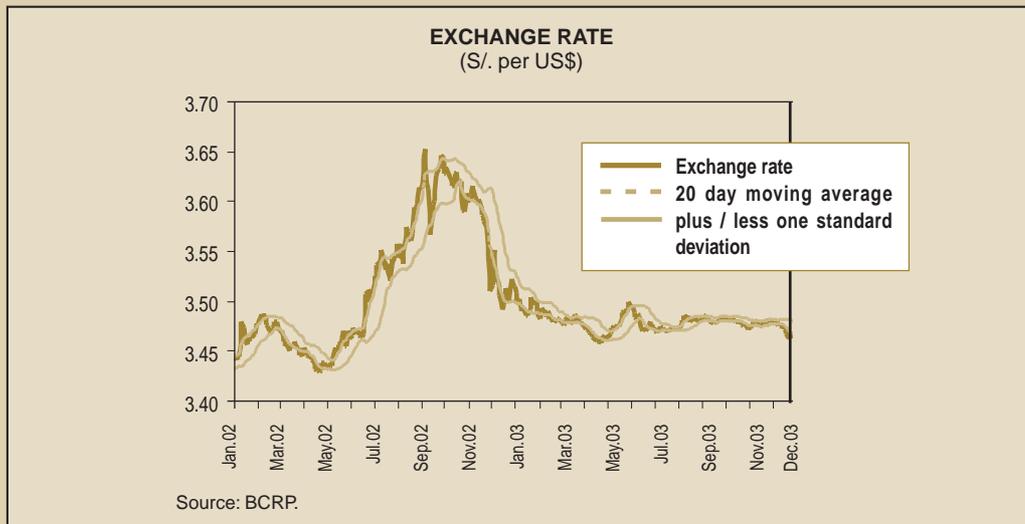
The Central Bank intervention in the exchange market counterbalanced the impact of appreciation pressures of the exchange rate on inflation (to avoid deflationary pressures) and restored the

International Reserves. The Central Bank bought US\$ 1,050 million during 2003, greater than the interventions of the last 6 years. The 2003 interventions concentrated in March, April, July, October and December, when appreciatory pressures increased because of temporal and seasonal factors as well as the greater demand of domestic currency to pay taxes and bonuses.

BOX 3

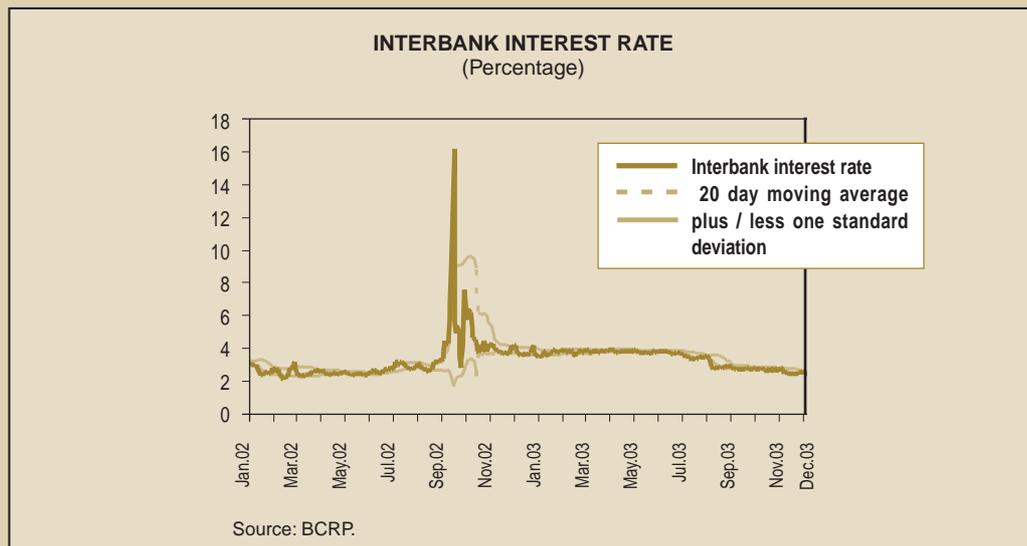
PERUVIAN EXCHANGE RATE REGIME

Since 1990 Peru has implemented a floating exchange rate regime, which means that the exchange rate is market determined (supply and demand conditions). The role of the exchange rate as an adjustment variable increases in the environment of free capital mobility and absence of restrictions in the exchange operations, which enables the Central Bank to use its monetary policy instruments with greater flexibility and independence.



In Peru, the floating exchange regime has allowed the Central Bank to improve its monetary management, giving greater independence to monetary policy. Monetary policy, which in the past was based in the management of monetary aggregates, since 2002 is administered following an inflation target scheme (used by developed economies and such countries in the region as Chile and Brazil). Within the framework of exchange rate flexibility, the Central Bank has used the interbank interest rate as a policy variable, allowing a substantial reduction in the level and volatility of the interbank interest rate during 2003.

The adoption of a floating exchange rate regime does not imply that the Central Bank stops intervening in the market exchange. As in other economies of the region, which have such a regime (such as Brazil, Chile and Colombia), the Central Bank has intervened through the dealing room under determined conditions and specific events. These interventions are part of the Central Bank's monetary instruments, which could be used to influence the exchange market.



#### Foreign currency monetary instruments

1. Reserve requirement rate of 20 percent for foreign currency deposits.
2. Short term currency swap operations between the Central Bank and financial entities.
3. Dollar denominated credits of monetary regulation (rediscount), with interest rate based in the 1-month LIBOR.
4. Overnight foreign currency deposits
5. Central Bank Deposit Certificates auctions linked to the dollar.
6. Purchases and sales of foreign exchange with the Treasury.
7. Foreign exchange spot sell/buy at the interbank market over-the-counter mechanism.

The Central Bank interventions soften temporal and abrupt exchange rate movements. These movements could be driven by sharp and temporal changes in capital flows and agents portfolio reallocations, among other factors. Central Bank Intervention helps to reverse an overshooting and to correct situations in which markets torn disorderly. Finally, as in 2003, the Central Bank also intervenes in the exchange rate market to avoid appreciations in the exchange rate, which could undermine its inflation target and even bring about deflationary pressures. These interventions consisted of foreign currency purchases in the spot market, which were carried out through the dealing room of the Central Bank.

The Peruvian exchange market is relatively thin by the region's standards. In 2003, the banking spot operations with the public and interbank transactions amounted approximately to US\$ 140 and US\$ 60 million (daily average), respectively.

The forward exchange market turnover amounts to a daily average of US\$ 30 million, including purchases and sales. The Central Bank interventions were relatively insignificant in relation with the spot market size (public and interbank). In 2003 total intervention amounted, in average, to less than 3 and 9 percent of total spot market volume transactions between the banks and the public and between the banks themselves, respectively, during the months of intervention.

#### Central Bank Intervention through the dealing room (Millions of US\$)

	1999	2000	2001	2002	2003
<b>Sales</b>	120	0	59	127	0
<b>Purchases</b>	316	3	203	95	1,050
<b>Number of interventions</b>	42	1	35	21	122
<b>Percentage from total spot transactions (non banking customers)</b>	2%	0%	1%	3%	3%
<b>Percentage from total spot transactions (interbank)</b>	3%	0%	5%	6%	9%

Source: BCRP.