## V.

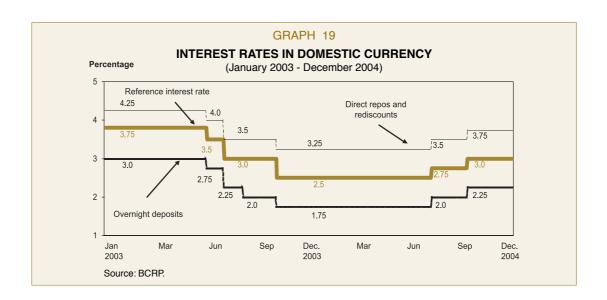
## Money and credit

Inflation in 2004 was on the upper limit of the BCRP target range (3.5 percent), after the economy was affected by successive inflationary supply shocks. Given the transitory nature of these shocks the Central Bank did not change its monetary policy stance during the first half of the year. Nevertheless, given the magnitude and persistence of the inflation deviation with respect to the target, the BCRP raised its reference interest rates twice to prevent supply shocks from affecting the rest of the components of the basket of consumer goods and raising inflation expectations. This decision was also compatible with a gradual reduction in monetary stimulus. In addition, financial dollarization fell for the fourth consecutive year.

## 1. Monetary policy measures

The BCRP kept its monetary policy stance unchanged between January and July 2004, with a reference interest rate of 2.5 percent. In June the annual inflation rate rose above 3.5 percent. This had already been anticipated as a transitory increase in the January and May Inflation Reports, so it was not considered necessary to alter monetary policy during this period.

The persistence of the supply shocks, particularly the rise in world oil prices, caused annual inflation to accelerate, reaching 4.6 percent in July. In this context, the BCRP raised its reference interest rate in August and October (by 25 basis points each time), lifting the interbank rate from 2.5 percent in July to 3.0 percent in October. In this way, the BCRP sought to prevent the supply shocks from affecting the rest of the components of the basket of consumer goods and inflation



expectations and at the same time monetary stimulus was gradually reduced.

Due to this monetary policy, partial reversal of the supply shocks, and a downward trend in the exchange rate, inflation at the close of the year was 3.48 percent, within the BCRP's target range.

In 2004 the BCRP modified the reserve requirement rules for foreign currency in order to reduce the risk to the economy associated with dollarization. Firstly, in April 2004 the increase in external indebtedness was included as an obligation for financial institutions subject to the reserve requirement. This measure standardized the treatment of the financial system's foreign currency-denominated domestic and external obligations. The regulation thus recognizes that both domestic financial dollarization (dollar-denominated obligations to residents) and

external dollarization (dollar-denominated obligations to non-residents) constitute risks to the economy, which should be internalized and for those who is needed liquid assets.

Thereafter, an increase from 20 to 30 percent in the marginal reserve requirement rate in dollars was introduced in November 2004. This was aimed at strengthening the financial system's ability to respond to temporary shortages of liquidity in foreign currency. In October 2004 the BCRP also modified the remuneration earned by dollar-denominated reserves, increasing the spread with respect to the LIBOR rate by 1/8th of a percentage point. Thus the reserve remuneration rate rose from LIBOR - 1/8 to LIBOR - 1/4. This modification was intended to create an incentive for financial intermediation in domestic currency.

## BOX 8

### **RISK OF INDEBTEDNESS IN FOREIGN CURRENCY**

At present a significant part of loans to businesses and families is denominated in dollars. At the close of 2004 around 74 percent of bank loans were denominated in dollars. If we also include private sector loans from other financial intermediaries (municipal savings and loan institutions, Edpymes, etc.), and institutional investors (pension funds, mutual funds, and others) the coefficient of dollarization falls to 71 percent.

This dollarization of loans creates a monetary imbalance for families and businesses given that most of them earn income in domestic currency, or their incomes are linked to the health of the domestic market (the "balance sheet" effect). This currency imbalance implies an exchange rate risk: if the price of the dollar rises, the value of dollar-denominated obligations rises in domestic currency terms, but the same does not occur with incomes 1/.

In recent years significant financial dedollarization has taken place: both public deposits with the financial system and loans granted by the latter to the private sector are being gradually reverting to domestic currency.

Nevertheless, the increase in soldenominated bank deposits has been higher than bank loans in the same currency. Thus bank loans in domestic currency have risen by around S/. 0.7 billion during 2004 (from S/. 9.5 billion to S/. 10.2 billion), while soldenominated liabilities to the private sector rose by more than double this amount (from S/. 11.3 billion to S/. 13

#### FINANCIAL DOLLARIZATION INDICATORS

(In percentage of the total monetary aggregate)

| Year | Banking system total broad money | Banking system<br>credit to the<br>private sector | Financial system credit 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  |

billion). In other words, only part of the banks' greater funding in domestic currency in 2004 has been channeled into sol-denominated loans to the private sector.

A possible explanation for the lower rate of lending in soles despite increased funding in that currency is the fact that economic agents (financial intermediaries and debtors) may not adequately understand the exchange rate risks associated with holding debt in foreign currency. This inclination to borrow in foreign currency may be particularly strong when the local currency is expected to continue to appreciate in the short term.

Thus, for example, bank mortgage loans in foreign currency rose by US\$ 235 million, while those in domestic currency only increased by S/. 10 million in 2004. A significant part of this behavior is explained by loans from the MiVivienda fund, which increased US\$ 156 million in foreign currency and only S/. 8 million in domestic currency during 2004. There has equally been significant growth in dollar-denominated lending to the private sector by microfinance institutions (30 percent in 2004 compared to growth in soles of 18 percent) and by institutional investors (22 percent in dollars compared to 6 percent in soles).

In this context measures are necessary to reduce the vulnerability of Peru's economy to the balance sheet effect. The following measures can be considered as appropriate:

- \* Measures to encourage economic agents (financial intermediaries and clients) to internalize the risks associated with taking a position in dollars, by increasing the relative cost of intermediation in that currency. Modification of the LIBOR rate differential used to determine the earnings on the foreign currency cash reserve (in October the rate change from LIBOR -1/8 to LIBOR -1/4) was a measure of this type.
- \* Measures aimed at minimizing the exchange rate risk associated with a position in dollars. For this, priority should be given to develop the market of forward contracts in dollars.
- \* Measures aimed at increasing the supply of financial instruments in soles. The recent development of a market for domestic public debt has provided a reference for issues of sol-denominated securities with ever longer maturities, thus strengthening monetary policy and encouraging the dedollarization of private sector portfolios.
- 1/ The "balance sheet" effect in the domestic economy has recently been analyzed in papers such as that published by Loveday, Molina and Rivas-Llosa, "Mecanismos de transmisión de la política monetaria y el impacto de una devaluación en el nivel de las firmas", Estudios Económicos Nº 12, BCRP, 2004; and by Carranza, Cayo y Galdón-Sánchez, "Exchange rate volatility and economic performance in Peru: A firm level analysis", Working Paper No. 12, Universidad de Navarra 2003.

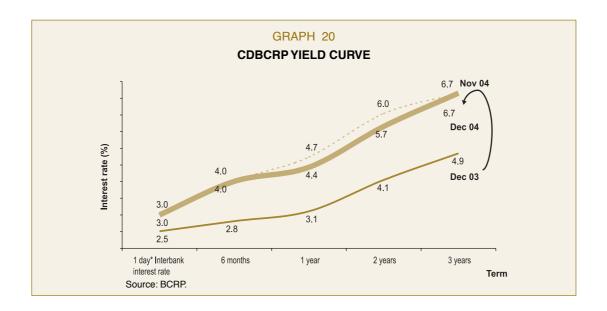
#### 2. Interest rates

Monetary control of the interbank interest rate in soles further reduced its volatility measured as its average standard deviation, from 9 basis points in 2003 to 7 basis points in 2004. This in turn has contributed to making monetary policy more predictable and has strengthened the mechanism whereby changes in the interbank interest rate are transmitted to other interest rates in soles.

Domestic interest rates can be influenced by changes in foreign interest rates and by the expectation that they will vary, as well as by Peru's level of country risk. During the first half of the year, the yield curve for sol-denominated instruments (CDBCRP and Peruvian treasury bonds) trended upwards, associated with the expectation that the United States Federal Reserve (FED) would increase its interest rate, as well as with a regional increase in country risk levels, which also affected Peru.

In subsequent months, interest rates on soldenominated securities fell because the FED increased rates by less than expected, country risk fell and public expectations of inflation fell into line with the BCRP inflation target after two increases in the reference interest rate.

|               | TABLE 39 INTERBANK INTEREST RA (In percentage poi | TE                 |
|---------------|---|--------------------|
| Year          | Average   | Standard deviation |
| 1998          | 18.7  | 6.45               |
| 1999          | 15.0  | 4.72               |
| 2000          | 12.6  | 2.67               |
| 2001          | 9.0   | 0.91               |
| 2002          | 3.2   | 0.48               |
| 2003          | 3.4   | 0.09               |
| 2004          | 2.7   | 0.07               |
| Source: BCRP. |   |                    |

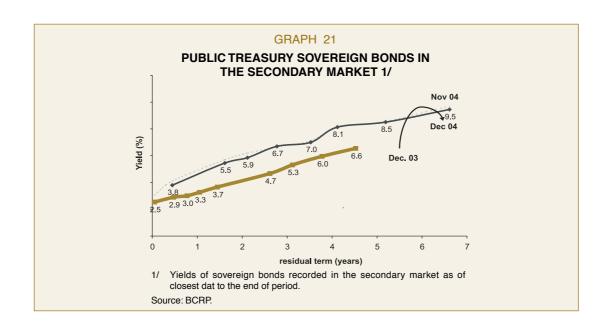


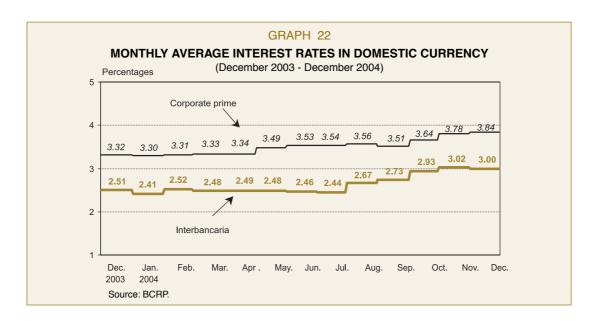
The upward pressure on interest rates in soles seen in the first half of the year also affected the interest rate for 90 day loans to low risk clients (corporate clients), which was also affected by the increase in interbank interest rates induced by the Central Bank. Thus, between December 2003 and December 2004 this rate rose from 3.3 to 3.8 percent.

Interest rates for sol-denominated personal loans and loans to microbusinesses fell from 40.9 percent

at the end of 2003 to 37.4 percent at the close of 2004, and from 52.2 to 48.1 percent, respectively in the same period. This was associated with lower risk premiums, increased competition in the market, and a reduction in bank arrears. The average interest rate for commercial loans remained relatively stable during the year, rising from 8.9 to 9.3 percent.

Similarly, the average bank lending interest rate (constant structure) in soles continued





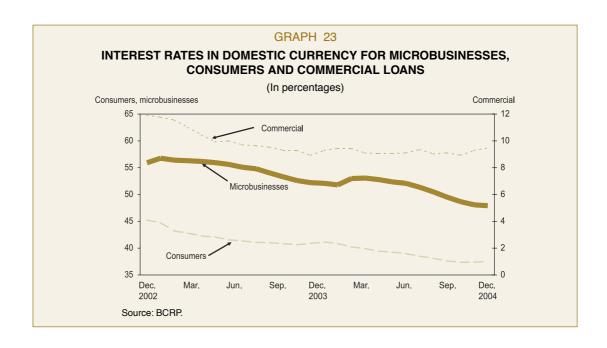
the downward trend seen in previous years, falling from 19.0 percent at the close of 2003 to 18.2 percent at the end of 2004.

The behavior of interest rates in foreign currency was associated mainly with the upward trend in rates abroad. The 3 month-LIBOR rate rose from 1.2 percent in December 2003 to 2.5 percent in December 2004.

## 3. Monetary aggregates

## 3.1. Broad money in the banking system

During 2004 average broad money in domestic currency continued to grow as it has in recent years, rising from 8.8 percent of nominal GDP in 2003 to 9.2 percent in 2004. In the same period total average broad money fell from 24.6 percent of GDP in 2003 to 23.0 percent in 2004.



# TABLE 40 INTEREST RATES IN DOMESTIC CURRENCY (In percentages)

|   | 2002  | 2003 | 2004 |
|---|-------|------|------|
| 1. Interbank                            | 3.8   | 2.5  | 3.0  |
| 2. Term deposits between 31 to 180 days | 5.3   | 3.0  | 3.2  |
| 3. Term deposits between 181 to 360 day | s 5.1 | 4.2  | 4.4  |
| 4. Prime lending                        | 5.1   | 3.3  | 3.8  |
| 5. Average lending rate up to 360 days  | 14.8  | 14.0 | 14.7 |
| 6. Fix-weighed average lending rate     | 22.3  | 19.0 | 18.2 |
| 7. CDBCRP (Balance)                     | 4.7   | 3.9  | 4.5  |
| Source: SBS and BCRP.                   |       |      |      |

# TABLE 41 INTEREST RATES IN FOREIGN CURRENCY (In percentage)

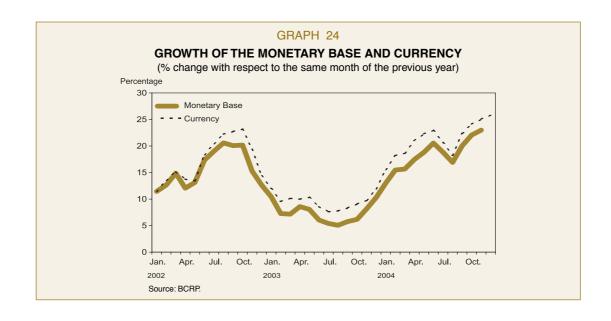
|   | 2002  | 2003 | 2004 |
|---|-------|------|------|
| 1. Interbank                            | 2.2   | 1.1  | 2.2  |
| 2. Term deposits between 31 to 180 days | 1.8   | 1.2  | 1.7  |
| 3. Term deposits between 181 to 360 day | s 2.2 | 1.6  | 1.8  |
| 4. Prime lending                        | 2.4   | 1.7  | 2.6  |
| 5. Average lending rate up to 360 days  | 8.1   | 7.2  | 7.7  |
| 6. Fix-weighed average lending rate     | 10.2  | 9.4  | 9.4  |
| 7. LIBOR                                | 1.4   | 1.2  | 2.5  |
| 8. Reserve requirement remuneration     | 1.3   | 1.0  | 2.3  |
| Source: SBS and BCRP.                   |       |      |      |

## 3.2. Monetary base and currency

The preference on the part of economic agents for domestic currency - as the nuevo sol appreciated - and increased economic activity, resulted in the monetary base and particularly currency, expanding at a higher rate during 2004. The annual growth rate of the monetary base rose from 10.1 percent in December 2003 to 25.3 percent in December 2004; while that of currency rose from 13.5 to 26.1 percent over the same period. The growth in currency is also likely to have been affected by the financial transaction

tax (ITF), which creates a higher demand for currency.

On average, the monetary base expanded 18.8 percent, associated with growth in nominal GDP (10.8 percent), a fall in the velocity of circulation of money and in the bank multiplier of 4.7 percent and 2.2 percent respectively. The reduction in the velocity of circulation of money was in response to the increased real demand for domestic currency, while the reduction in the bank multiplier was the result of a greater preference for cash.



## TABLE 42 AVERAGE LIQUIDITY IN NUEVOS SOLES OF THE BANKING SYSTEM

(Average annual percentage change)

| GDP          |          | GDP growth |         | Local Velocity currency of | •     | Money supply components |            |
|--------------|----------|------------|---------|----------------------------|-------|-------------------------|------------|
|              | Deflator | Real       | Nominal | liquidity                  | money | Monetary base           | Multiplier |
| 2002         | 0.6      | 4.9        | 5.6     | 17.0                       | -9.7  | 15.8                    | 1.1        |
| 2003         | 2.3      | 4.0        | 6.3     | 10.7                       | -3.9  | 7.4                     | 3.1        |
| 2004         | 5.7      | 4.8        | 10.8    | 16.2                       | -4.7  | 18.8                    | -2.2       |
| Source: BCRP |          |            |         |                            |       |                         |            |

#### BOX 9

#### THE RELATIONSHIP BETWEEN MONEY AND INFLATION

The recent growth in the monetary base and currency in the Peruvian economy (1994-2004) shows that these monetary aggregates have not been closely related to inflation. In particular, it can be seen that a higher rate of growth of the monetary base has not resulted in higher inflation in recent years.

Working at an empirical level, a paper by De Gregorio<sup>1/</sup> shows that there is a weak relationship between monetary growth and inflation, particularly in economies with low inflation. This relationship is weakened even further by the process of dedollarization in a partially dollarized economy.

The analysis of the relationship between money and inflation at an international level took into account the relationship between the growth rates of two monetary aggregates (the monetary base and currency) and the rate of inflation in Argentina, Australia, Brazil, Chile, Colombia, the European Union, Japan, Mexico, and the United States, using information from 2004. The results suggest that in the short term there is no one-to-one relationship between the growth rate of monetary aggregates and the rate of inflation. In other words, an increase in the growth of the monetary base (or of the currency) does not necessarily translate into a similar increase in the rate of inflation in the short term.

## RELATIONSHIP BETWEEN MONETARY BASE, CURRENCY AND INFLATION IN PERU 1994 - 2004 1/

(Percentage change year over year)

| Year | Monetary base | Currency | Inflation |
|------|---------------|----------|-----------|
| 1994 | 48.2          | 49.9     | 15.4      |
| 1995 | 36.9          | 27.6     | 10.2      |
| 1996 | 9.2           | 6.6      | 11.8      |
| 1997 | 19.1          | 17.9     | 6.5       |
| 1998 | 5.5           | 3.2      | 6.0       |
| 1999 | 17.0          | 17.2     | 3.7       |
| 2000 | -4.0          | -2.0     | 3.7       |
| 2001 | 7.9           | 9.0      | -0.1      |
| 2002 | 11.0          | 13.5     | 1.5       |
| 2003 | 10.1          | 13.5     | 2.5       |
| 2004 | 25.3          | 26.1     | 3.5       |

<sup>1/</sup> End of period data.

## RELATIONSHIP BETWEEN MONETARY BASE, CURRENCY AND INFLATION: INTERNATIONAL EVIDENCE

(Percentage change year over year)

|                | Monetary base | Currency | Inflation |
|----------------|---------------|----------|-----------|
| Argentina      | 13.1          | 27.1     | 6.1       |
| Australia      | 3.3           | 4.2      | 2.6       |
| Brazil         | 21.2          | 20.8     | 7.6       |
| Chile          | 13.9          | 16.1     | 2.4       |
| Colombia       | 17.1          | 14.4     | 5.5       |
| European Union | 11.9          | 13.2     | 2.4       |
| Japan          | 4.2           | 1.2      | 0.2       |
| Mexico         | 12.0          | 14.3     | 5.2       |
| USA            | 5.2           | 4.6      | 3.3       |

Source: IMF and central banks. Information as of December 2004.

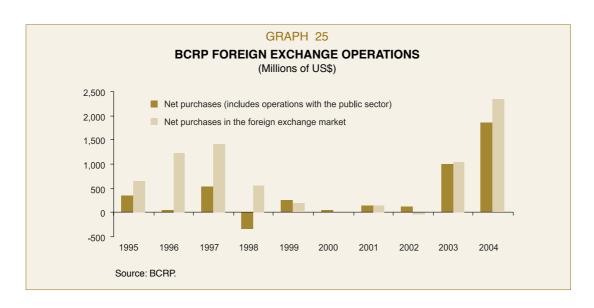
<sup>1/</sup> De Gregorio, José. "Rapid Growth of Monetary Aggregates and Inflation: The International Evidence". Working Paper No. 256, Central Bank of Chile, 2004.

| TABLE 43                               |
|--|
| SOURCES OF CHANGE OF THE MONETARY BASE |
| (Millions of nuevos soles)             |

|   | 2002  | 2003   | 2004   |
|---|-------|--------|--------|
| I. FOREIGN EXCHANGE OPERATIONS                        | 436   | 3,465  | 6,239  |
| (Millions of US\$)                                    | 128   | 998    | 1,854  |
| Over-the-counter net purchases                        | - 133 | 3,645  | 7,896  |
| 2. Public sector                                      | 558   | - 177  | -1,663 |
| 3. Oher net purchases                                 | 11    | - 3    | 6      |
| II. MONETARY OPERATIONS                               | 236   | -2,783 | -4,353 |
| 1. Non-financial public sector and Banco de la Nación | - 81  | - 921  | - 721  |
| 2. Financial system                                   | 170   | -170   | 0      |
| 3. Central Bank Certificates (CDBCRP)                 | - 114 | -2,143 | -4,158 |
| 4. Other monetary operations                          | 261   | 450    | 526    |
| III. TOTAL  | 672   | 682    | 1,886  |
| End-of-period percentage change                       | 11.0  | 10.1   | 25.3   |
| Average percentage change                             | 15.8  | 7.4    | 18.8   |
| Note:   |       |        |        |
| END-OF-YEAR BALANCES                                  |       |        |        |
| Central Bank Certificates                             | 1,944 | 4,097  | 8,255  |
| Credits of monetary regulation (rediscounts)          | 170   | 0      | 0      |
| Deposits of the Public Sector and Banco de la Nación  | 275   | 1,196  | 1,918  |
| Monetary base   | 6,759 | 7,441  | 9,327  |

The monetary base at the close of 2004 was S/. 9,327 million, S/. 1,886 million higher than in December 2003. The sources of variation were over-the-counter foreign currency purchases amounting to US\$ 2,340 million (equivalent to S/. 7,896 million), partially offset by net sales of dollars to the public sector of US\$ 487 million (S/. 1,663 million).

Interventions by the BCRP in the foreign exchange market strengthened Peru's international reserve position, encouraged the restructuring of private portfolios into domestic currency-denominated assets and smoothed out fluctuations in the exchange rate which was under pressure from foreign currency inflows associated with the good performance of the country's external accounts.



In order to sterilize the excess liquidity generated by its interventions in the foreign exchange market, the BCRP issued CDBCRPs, increasing the balance of these instruments from S/. 4,097 million in December 2003 to S/. 8,255 million in December 2004. The CDBCRPs issued had different maturities to facilitate monetary management and to provide reference interest rates for the yield curve in soles. Nevertheless, during the first half of the year, and faced with upward pressure on longer maturities interest rates, the BCRP decided to reduce the average maturity of these certificates. In the final months of the year, the reversal of this pressure enabled the BCRP to place new issues with longer maturities. Thus the average maturity of the CDBCRPs issued rose from 260 days in December 2003 to 282 days at the close of 2004.

As a consequence of low international interest rates and the cost of monetary sterilization associated with the precautionary accumulation of international reserves, the BCRP recorded a loss of S/. 63 million in 2004 (at constant value). In accordance with article 93\_of the BCRP Charter Act, losses made by the Central Bank are covered by a reserve

## TABLE 44 CDBCRP BALANCE BY MATURITY (Millions of nuevos soles)

|                        | Dec. 2002 | Dec. 2003 | Dec. 2004 |
|------------------------|-----------|-----------|-----------|
| Up to 3 months         | 130       | 32        | 155       |
| 5 and 6 months         | 565       | 790       | 495       |
| 7 and 9 months         | 560       | 180       | 1,870     |
| 1 year and 18 months   | 380       | 2,280     | 3,985     |
| 2 and 3 years          | 0         | 815       | 1,750     |
| Total                  | 1,635     | 4,097     | 8,255     |
| Memo:                  |           |           |           |
| Average term of        |           |           |           |
| the CDBCRP balance (da | ays) 162  | 260       | 282       |
| Average CDBCRP balance | ce        |           |           |
| interest rate          | 4.7%      | 3.9%      | 4.5%      |
| Source: BCRP.          |           |           |           |

maintained by the institution specifically for such an eventuality (S/. 107 million as of the 31st of December 2004).

Financial income in 2004 was S/. 162 million lower than in 2003, which is explained by a fall in the "other financial income" item (S/. 125 million) as well as by lower interest on investments in foreign securities (S/. 78,663 million). As far as "other

## TABLE 45 BCRP STATEMENT OF INCOME 1/ (Millions of nuevos soles)

|   | 2002 | 2003 | 2004 |
|---|------|------|------|
| I. INCOME   | 975  | 868  | 716  |
| Financial income  | 972  | 860  | 698  |
| Interest from deposits in foreign banks                 | 297  | 145  | 186  |
| Intereses from securities in international institutions | 554  | 546  | 468  |
| Other financial income                                  | 121  | 169  | 44   |
| Non-financial income                                    | 3    | 8    | 18   |
| II. EXPENSES  | 858  | 686  | 773  |
| Financial expenses                                      | 529  | 476  | 591  |
| Interest on deposits                                    | 401  | 307  | 332  |
| Interest on CDBCRP                                      | 101  | 139  | 231  |
| Other financial expenses                                | 27   | 30   | 28   |
| Operative expenses and monetary issuance costs          | 330  | 210  | 182  |
| III. RESULT FOR EXPOSURE TO INFLATION                   | -2   | -5   | -6   |
| IV. NET INCOME FOR THE YEAR (=I-II+III)                 | 114  | 177  | -63  |

1/ Corresponds to the inflation adjusted revenues and expenditures at the end of each period. Source: BCRP. financial income" is concerned, it should be mentioned that in 2003 the BCRP obtained extraordinary income amounting to S/. 87 million from the elimination of provisions based on Supreme Decree No 103-2003-EF. Also in fiscal year 2003, it obtained income of S/. 13 million after redemption of re-adjustable deposit certificates (CDRBCRP).

Financial expenditure in 2004 was S/. 115 million higher than in 2003, mainly due to an increase in interest paid on CDBCRP deposit certificates (S/. 92,663 million). The higher sterilization balance in 2004 was the counterpart to the increase in international reserves through intervention in the foreign exchange market. The BCRP's operating expenditure in fiscal year 2004 was S/. 28 million lower than in 2003.

### 3.3. Net international reserves

At the close of 2004 net international reserves (NIR) amounted to US\$ 12,631 million, having risen for the fourth consecutive year. This figure,

US\$ 2,437 million higher than the previous year, puts the Peruvian economy in a good position to weather any turbulence in the exchange rate and financial markets. This level of NIR is 2.5 times the country's yearly debts and is equivalent to 15 months' imports, 4 times the monetary base and 72 percent of the banking system's total monetary aggregate.

The accumulation of international reserves derives principally from foreign exchange operations (US\$ 1 854 million), as well as an increase in public sector deposits (US\$ 359 million).

Interventions in the foreign exchange market, together with other operations, mainly net financial income in foreign currency, enabled the BCRP to increase its foreign exchange position from US\$ 2,056 million during 2004, to US\$ 6 639 million at the close of the year. This means that the foreign exchange position has increased its share of international reserves, rising from 45 percent of NIR at the end of 2003 to 53 percent at the close of 2004.

| TABLE 46  NET INTERNATIONAL RESERVES SOURCES OF CHANGE  (Millions of US\$) |      |       |       |  |  |
|--|------|-------|-------|--|--|
|  | 2002 | 2003  | 2004  |  |  |
| I. Foreign exchange operations   | 128  | 998   | 1,854 |  |  |
| Over-the-counter net purchases   | - 32 | 1,050 | 2,340 |  |  |
| - Purchases  | 95   | 1,050 | 2,340 |  |  |
| - Sales  | -127 | 0     | 0     |  |  |
| 2. Public sector   | 157  | - 51  | -487  |  |  |
| 3. Otheir foreign exchange operations                                      | 3    | - 1   | 2     |  |  |
| II. Financial system and private sector deposits                           | 185  | - 488 | 23    |  |  |
| 1. Commercial banks  | 103  | - 361 | 124   |  |  |
| 2. Banco de la Nación  | 73   | - 137 | - 108 |  |  |
| 3. Otheir financial institutions   | 10   | 9     | 7     |  |  |
| III. Public sector   | 364  | - 139 | 359   |  |  |
| IV. Other NIR sources of variation   | 308  | 226   | 201   |  |  |
| V. TOTAL NIR CHANGE  | 985  | 596   | 2,437 |  |  |
| Source: BCRP.  |      |       |       |  |  |

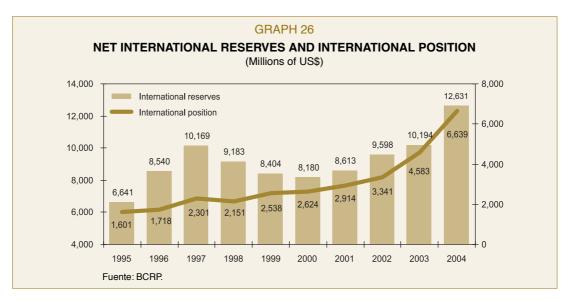
## 3.4. Managing international reserves

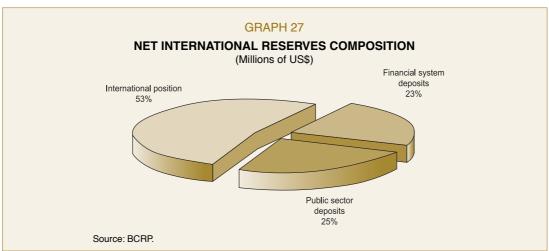
At the end of 2004, gross international reserves (GIR) amounted to US\$ 12,649 million, a figure US\$ 2,443 million higher than at the end of 2003. In the second half of the year the FED began a period of reference interest rate increases, reflected in a recovery of yields from fixed income securities denominated in US dollars, the currency in which most such investments are denominated.

By the end of 2004, rather more than 59 percent of gross international reserves or assets consisted of

high quality liquid securities with 34 percent deposited in first class foreign banks. The securities portfolio is made up of bonds issued by the United States Treasury and other agencies, the Bank for international Settlements, international organizations and other governments and government agencies having credit ratings of not less than AA. It also includes investments in deposit certificates issued by authorized banks.

International liquid reserves <sup>1/</sup> (at book value) at the close of 2004 amounted to US\$ 12,039 million. The income<sup>2/</sup>, from such assets was US\$ 191 million.





<sup>1/</sup> GIR minus subscribed capital in FLAR, international agreements (ALADI) and gold, principally.

<sup>2/</sup> Consists of interest accrued, profit on the sale of securities and premium repayments or discounts for holding securities.

This figure was affected by relatively low international interest rates. As far as its currency structure was concerned, investments denominated in currencies other than the US dollar increased their share while dollar-denominated investments and gold took a smaller share. Liquid foreign assets denominated in US dollars fell from 95 to 88 percent of the total. If dollar-denominated investments made using public sector and financial system deposits are discounted, the dollar's share of the total fell from 87 to 77 percent between 2003 and 2004. Investments with maturities of 3 to 12 months and those rated AAA also increased. The average duration of the investment portfolio was 0.6 years, similar to the figure at the close of 2003.

### 3.5. Financial system credits

During 2004, financial system lending to the private sector, which includes financing for private companies and individuals in the form of loans and fixed income securities, expanded by 1.9 percent

## TABLE 47 GROSS INTERNATIONAL RESERVES (Millions of US\$)

|                  | 31.12. | .2003 | 31.12.2004 |       |  |
|------------------|--------|-------|------------|-------|--|
| Rubro            | Amount | %     | Amount     | %     |  |
| Foreign deposits | 3,503  | 34.3  | 4,305      | 34.0  |  |
| Securities       | 5,884  | 57.7  | 7,488      | 59.2  |  |
| Gold             | 463    | 4.5   | 489        | 3.9   |  |
| Others 1/        | 356    | 3.5   | 368        | 2.9   |  |
| Total            | 10.206 | 100.0 | 12,649     | 100.0 |  |

Includes contributions to the FLAR and balances from international agreements.

Source: BCRP.

in nominal terms. Loans in soles continued the expansion, which started in 2000, rising 11 percent while foreign currency-denominated loans reversed the contraction seen over the last 5 years and increased 3.9 percent in 2004. This meant that the dollarization coefficient of bank lending to the

## TABLE 48 FINANCIAL SYSTEM'S CREDIT TO THE PRIVATE SECTOR IN DOMESTIC CURRENCY

|                                 | Millions of nuevos soles |        |        | Percentag         | je change         |
|---------------------------------|--------------------------|--------|--------|-------------------|-------------------|
|                                 | Dec.02                   | Dec.03 | Dec.04 | Dec.03/<br>Dec.02 | Dec.04/<br>Dec.03 |
| 1. Commercial banks 1/          | 7,841                    | 8,221  | 8,464  | 4.9               | 3.0               |
| 2. Banco de la Nación           | 434                      | 511    | 1,051  | 17.6              | 105.9             |
| 3. Microfinance institutions    | 2,926                    | 3,666  | 4,329  | 25.3              | 18.1              |
| Banks (microfinance credits)    | 593                      | 730    | 1,120  | 23.0              | 53.4              |
| Local government S&Ls           | 848                      | 1,083  | 1,376  | 27.7              | 27.1              |
| Rural S&L                       | 135                      | 181    | 253    | 33.9              | 40.0              |
| Saving and credit cooperatives  | 381                      | 459    | 511    | 20.7              | 11.2              |
| EDPYMES                         | 130                      | 172    | 229    | 31.8              | 33.6              |
| Financial companies             | 840                      | 1,042  | 840    | 24.1              | -19.4             |
| 4. Institutional investors 2/   | 1,653                    | 2,180  | 2,307  | 31.9              | 5.8               |
| Pension funds                   | 1,102                    | 1,449  | 1,337  | 31.5              | -7.7              |
| Insurance companies             | 493                      | 568    | 812    | 15.1              | 42.9              |
| Mutual funds                    | 58                       | 163    | 158    | 182.5             | -2.9              |
| 5. Leasing companies and others | 393                      | 247    | 306    | -37.2             | 23.9              |
| Total financial system          | 13,248                   | 14,824 | 16,457 | 11.9              | 11.0              |

<sup>1/</sup> Excludes micro finance credits.

Source: SBS and BCRP.

<sup>2/</sup> Mainly securities issued by the private sector.

private sector fell once more, from 73 percent in 2003 to 71 percent in 2004.

Credit in soles increased by S/. 1,633 million (11.0 percent), led by growth in the microfinance segment (S/. 663 million or 18.1 percent), as well as lending by the Banco de la Nación (S/. 540 million or 106 percent) and, to a lesser extent, by bank lending (S/. 243 million or 3.0 percent).

**Dollar-denominated credit**, which had been contracting since 1999, grew by US\$ 454 million in 2004. The microfinance segment continued to expand (30.2 percent this year compared to 24.5 percent in 2003) and bank credit recovered (0.6 percent this year compared to -5.6 percent in 2003), basically because of increased mortgage lending (largely financed by the MiVivienda fund) and foreign trade operations. An increase in loans by institutional investors was also significant, though it was explained by a single issue: that of

Transportadora de Gas del Perú (TGP), which in August issued bonds valued at US\$ 200 million were acquired by pension funds and mutual funds.

### 4. Banks

Banks in 2004 saw their financial position strengthen thanks to a continued improvement in their solvency and profitability indicators. Dedollarization, particularly of bank deposits, also increased in the period. The significant increase in private sector deposits in soles - S/. 1,689 million - had its counterpart on the asset side in the form of higher holdings of CDBCRPs (S/. 2,235 million) and, to a lesser extent, an increase in soldenominated direct loans (S/. 918,663 million). Growth in foreign currency was lower, with direct loans (including those made to financial institutions other than banks) rising by US\$ 322 million, while private sector deposits grew by US\$ 120 million and those of the non-financial

TABLE 49
FINANCIAL SYSTEM'S CREDIT TO THE
PRIVATE SECTOR IN FOREIGN CURRENCY

|                                 | Millions of US\$ |        |        | Percentag         | e change          |
|---------------------------------|------------------|--------|--------|-------------------|-------------------|
|                                 | Dec.02           | Dec.03 | Dec.04 | Dec.03/<br>Dec.02 | Dec.04/<br>Dec.03 |
| 1. Commercial banks 1/          | 9,971            | 9,409  | 9,465  | -5.6              | 0.6               |
| 2. Banco de la Nación           | 36               | 22     | 22     | -38.1             | -1.2              |
| 3. Micro finance institutions   | 410              | 511    | 665    | 24.5              | 30.2              |
| Banks (micro finance credits)   | 78               | 87     | 126    | 11.4              | 45.8              |
| Local government S&Ls           | 111              | 186    | 250    | 66.9              | 34.6              |
| Rural S&Ls                      | 44               | 48     | 55     | 8.8               | 16.1              |
| Saving and credit cooperatives  | 101              | 116    | 154    | 15.4              | 31.9              |
| EDPYMES                         | 31               | 40     | 49     | 28.0              | 20.6              |
| Financial companies             | 45               | 34     | 32     | -24.2             | -7.7              |
| 4. Institutional investors 2/   | 800              | 1,091  | 1,333  | 36.2              | 22.2              |
| Pension funds                   | 445              | 517    | 729    | 16.2              | 41.1              |
| Insurance companies             | 37               | 60     | 89     | 59.7              | 49.8              |
| Mutual funds                    | 318              | 514    | 515    | 61.4              | 0.1               |
| 5. Leasing companies and others | 858              | 637    | 639    | -25.8             | 0.2               |
| Total financial system          | 12,077           | 11,670 | 12,124 | -3.4              | 3.9               |

<sup>1/</sup> Excludes micro finance credits.

Source: SBS and BCRP.

<sup>2/</sup> Mainly securities issued by the private sector.

| TABLE 50  COMMERCIAL BANK INDICATORS (In percentage points)                                | 1/    |       |       |
|--|-------|-------|-------|
|  | 2002  | 2003  | 2004  |
| Non-performing loans / Gross assets  | 7.6   | 5.8   | 3.7   |
| Provisions / Non-performing loans  | 133.2 | 141.0 | 176.5 |
| Return on equity   | 8.4   | 10.9  | 11.3  |
| 1/ Non-performing loans include late in payment and those in judicial action. Source: SBS. |       |       |       |

public sector grew by US\$ 123 million, including the MiVivienda fund.

In a context of increased domestic demand during 2004, banks continued to improve the quality of their lending, which was reflected in their main financial indicators. Thus banking system arrears (measured as the arrears portfolio divided by gross loans) fell from 5.8 percent in 2003 to 3.7 percent in 2004, its lowest level for 20 years.

Bank profits amounted to S/. 744 million in 2004, higher than the figure for 2003 (S/. 671 million), which was reflected by a rise in profitability. This result can be explained not only by improved asset quality, but also by further changes in the structure of lending to favor mortgages, personal loans and lending to microbusinesses. In a context of deeper penetration by banks in the personal and microbusiness lending market, the Banco de Crédito took over the operations, rights and obligations of

|                          |       |         | TABLE 51 |                 |          |          |            |  |
|--------------------------|-------|---------|----------|-----------------|----------|----------|------------|--|
| COMMERCIAL BANKS CREDITS |       |         |          |                 |          |          |            |  |
| DOMESTIC CURRENCY        |       |         |          |                 |          |          |            |  |
|                          |       |         | Millior  | s of nuevos     | soles    |          |            |  |
|                          |       | Balance |          | Varia           | tion     | Percenta | age change |  |
|                          | 2002  | 2003    | 2004     | 2003            | 2004     | 2003     | 2004       |  |
| Commercial               | 4,936 | 4,353   | 4,229    | -584            | -124     | -11.8%   | -2,9%      |  |
| Small business           | 593   | 730     | 1,120    | 137             | 390      | 23.0%    | 53.4%      |  |
| Consumer                 | 1,975 | 2,575   | 3,217    | 600             | 642      | 30.4%    | 24.9%      |  |
| Mortgage                 | 201   | 201     | 211      | 0               | 10       | 0.1%     | 5.0%       |  |
| Total                    | 7,706 | 7,859   | 8,777    | 154             | 918      | 2.0      | 11.7       |  |
|                          |       |         |          | EIGN CURRE      |          |          |            |  |
|                          |       |         | M        | illions of US\$ | <u> </u> |          |            |  |
|                          |       | Balance |          | Varia           | tion     | Percenta | age change |  |
|                          | 2002  | 2003    | 2004     | 2003            | 2004     | 2003     | 2004       |  |
| Commercial               | 6,967 | 6,214   | 6,214    | -754            | 0        | -10.8%   | 0,0%       |  |
| Small business           | 78    | 87      | 128      | 9               | 41       | 11.9%    | 46.9%      |  |
| Consumer                 | 453   | 453     | 499      | 0               | 46       | 0.0%     | 10.2%      |  |
| Mortgage                 | 1,093 | 1,264   | 1,498    | 171             | 235      | 15.6%    | 18.6%      |  |
| Total                    | 8,591 | 8,017   | 8,339    | -574            | 322      | -6.7%    | 4.0%       |  |
| Source: SBS.             |       |         |          |                 |          |          |            |  |

Solución Financiera de Credito S.A. at the end of February. With this move, Banco de Crédito increased its Peruvian currency-denominated gross lending by S/. 303 million, principally loans to microbusinesses.

## 5. Financial savings and capital market

During 2004 savings, which includes all financial system obligations to the private sector except for cash, represented 28.5 percent of GDP, slightly lower than in 2003 when it amounted to 28.6 percent.

This growth in savings was led by the Peruvian currency component (16 percent), thus offsetting a fall in the dollar component (-3.7 percent). As a percentage of GDP, savings in soles rose from 12.2 percent in 2003 to 13.6 percent in 2004 with a considerable increase in deposits in savings and loan institutions (53.2 percent) banks (23.3 percent) and pension funds (13.5 percent). These latter were responsible for 20.3 and 72.3 percent of savings in Peruvian currency, respectively. The recovery of savings deposits in banks after a contraction of 4.4 percent in 2003 is also worth emphasizing.

Savings in dollars fell in real terms by 3.7 percent, principally because of a reduction in obligations by banks (3.4 percent in real terms) and mutual funds (22.2 percent in real terms). Nevertheless, it should be mentioned that as far as the banks were

| TABLE 52 FINANCIAL SAVINGS (Percentage of GDP) |                   |       |  |  |  |
|--|-------------------|-------|--|--|--|
|  | Domestic currency | TOTAL |  |  |  |
| 1995   | 3.3               | 13.9  |  |  |  |
| 1996   | 4.4               | 17.5  |  |  |  |
| 1997   | 5.2               | 19.8  |  |  |  |
| 1998   | 6.3               | 22.2  |  |  |  |
| 1999   | 7.1               | 24.9  |  |  |  |
| 2000   | 8.0               | 25.6  |  |  |  |
| 2001   | 9.1               | 26.7  |  |  |  |
| 2002   | 10.6              | 27.5  |  |  |  |
| 2003   | 12.2              | 28.6  |  |  |  |
| 2004   | 13.6              | 28.5  |  |  |  |
| Source: BCRP.                                  |                   |       |  |  |  |

concerned, dollar savings rose US\$ 428 million and the reduction in real terms was caused by the effect of the appreciation of the nuevo sol. Savings with mutual funds fell by US\$ 42 million after rising significantly over the last 3 years.

## 6. Primary market

In 2004 the average of bonds placed in public offerings represented 6.8 percent of GDP, after a 16 percent increase in real terms. The increase was seen in both Treasury bonds (28.3 percent) and corporate bonds (20 percent) as well as securitizing and mortgage notes.

Long-term issues (5 years or more) continued to be the most dynamic (44.7 percent real growth). In March the government issued a 6-year bond for the first time and after cancelling two offerings in May after an abrupt rise in international interest rates, it issued a 7-year sol-denominated bond for the first time at an effective rate of interest initially of 12.63 percent, which gradually fell to 9.60 percent in December. There was also a greater preference for sol-denominated bonds, whose share of the total rose from 46.6 to 50.0 percent.

The largest placement of the year was that of Transportadora de Gas del Perú (TGP), which was valued at US\$ 270 million and was aimed at financing part of the Camisea project. This issue consisted of two different instruments: a dollar-denominated issue of US\$ 200 million and an inflation linked (constant purchasing power, CPP) issue of S/. 236 million, this being the issue with the longest maturity so far (25 years). The principal purchasers of the dollar bonds were the pension funds and those of the sol-denominated issue were insurance companies.

The government continued with its market makers scheme, which seeks to develop a secondary market to increase the liquidity of sovereign bonds. It made a total of 32 offerings of sol-denominated sovereign

bonds (S/. 1,906 million), as well as sovereign bond exchange operations (S/. 642 million) and amortizations amounting to S/.1,604 million.

The government also issued a significant number of CPP bonds, which were offered more often than before and at ever longer maturities. Thus, in April a sovereign CPP bond with a 12-year maturity was introduced, then a 15-year bond in July and a 20-year bond in October. These issues extended the average maturity of sovereign bonds. By December 2004, bonds maturing at 6 years or more represented 40 percent of the total compared to 6 percent in 2003.

## 7. Stock Market

In 2004 the Lima Stock Exchange (LSE) was the second most profitable in Latin America (after Bogota). The general index rose 52 percent and the blue chip index 54 percent. This significant rise was associated with increased dynamism among exporting companies - mainly in the mining sector - arising from higher mineral prices.

There was a 7 percent reduction in volumes traded, basically due to operations involving fixed income

securities, which contracted by 27.3 percent in real terms (because of the effect of interest rate increases). Nevertheless, trading in variable income instruments increased by 17.3 percent, as more individuals and small investors entered the market to take advantage of profit expectations.

Stock market capitalization increased by 14.7 percent in real terms, reaching 26.9 percent of GDP.

## 8. Private pensions system

By the close of 2004 the value of private pension funds had increased 17.4 percent to reach S/. 25.7 billion, equivalent to US\$ 7.8 billion or 10.9 percent of GDP.

The number of private pension system affiliates rose to 3.4 million workers (29.1 percent of the EAP), an increase of 6.4 percent compared to the previous year. Nevertheless, the percentage of paying affiliates (those whose employers actually pay the contributions) fell from 41.8 percent in 2003 to 38.7 percent in 2004.

Real profitability of the pension funds' portfolio was 5.6 percent in 2004 (versus 21 percent in 2003).

| ST   | TABLE 53<br>OCK MARKET |         |         |           |           |
|--|------------------------|---------|---------|-----------|-----------|
|  |                        |         |         | Percentag | je change |
|  | 2002                   | 2003    | 2004    | 2003      | 2004      |
| INDICES (end of period) (December 1991=100)                |                        |         |         |           |           |
| General Stock Index  | 1,392.0                | 2,435.0 | 3,710.4 | 74.9      | 52.4      |
| Blue Chip Index  | 2,202.3                | 3,993.9 | 6,159.6 | 81.4      | 54.2      |
| TRADING VOLUME (Millions of nuevos soles by December 2004) | 10,557                 | 8,109   | 7,725   | -23.2     | -4.7      |
| Stock-Exchange Session                                     | 5,212                  | 4,101   | 4,811   | -21.3     | 17.3      |
| Over-the-Counter   | 5,345                  | 4,008   | 2,914   | -25.0     | -27.3     |
| STOCK-MARKET CAPITALIZATION                                |                        |         |         |           |           |
| Millions of nuevos soles by December 2004                  | 46,776                 | 57,828  | 66,327  | 23.6      | 14.7      |
| Millions of US\$   | 12,593                 | 16,084  | 20,108  | 27.7      | 25.0      |
| As a percentage of GDP                                     | 20.7                   | 23.6    | 26.9    |           |           |

|         | IABLE 54       |               |
|---------|----------------|---------------|
| PRIVATE | <b>PENSION</b> | <b>SYSTEM</b> |

|                             | 2002   | 2003   | 2004   |
|-----------------------------|--------|--------|--------|
| Number of affiliates        |        |        |        |
| In thousand                 | 2,994  | 3,193  | 3,397  |
| Percentage change           | 9.6    | 6.7    | 6.4    |
| Fund Value                  |        |        |        |
| In millions of nuevos soles | 15,754 | 21,844 | 25,651 |
| Percentage change           | 27.6   | 38.7   | 17.4   |
| As a percentage of GDP      | 7.9    | 10.3   | 10.9   |
| Funds return                |        |        |        |
| Nominal                     | 12.9   | 24.2   | 9.3    |
| Real                        | 11.3   | 21.2   | 5.6    |
| Real net of fees 1/         | 2.6    | 4.4    | 4.8    |

<sup>1/</sup> Annualized historic yield. Since 2004 corresponds to the SBS publication.

Source: SBS.

This was because of lower profits earned by shares traded on the LSE and managed by the pension funds, known as the Derivatives Index. This index showed an increase of 12 percent in 2004 compared with 66 percent in 2003. Historic real net annualized profitability (discounting commission charged by the managers, one of the highest in the region) was 4.8 percent.

Furthermore, the ratio of dollarization of the private pensions system fell from 49 percent in 2003 to 44 percent this year, in line with the general performance of the financial system.

## 9. Mutual funds

At the close of 2004, mutual funds in the hands of the private sector were worth S/. 5,347 million (US\$ 1,630 million), 7 percent lower than at the end of 2003, as some large investors withdrew. Nevertheless, there was a significant increase in the number of participants (24 percent) as more individuals became interested in participating in this market.

|    | IAL | 3LE  | 55 |    |
|----|-----|------|----|----|
| MU | TUA | ۱L F | UN | DS |

|  | 2002               | 2003               | 2004               |
|--|--------------------|--------------------|--------------------|
| Number of participants Percentage change | <b>55,178</b> 34.6 | <b>66,655</b> 20.8 | <b>82,568</b> 23.9 |
| Funds value 1/                           |                    |                    |                    |
| In millions of nuevos soles              | 4,613              | 5,752              | 5,347              |
| Percentage change                        | 25.3               | 24.7               | -7.0               |
| As a percentage of GDP                   | 2.3                | 2.7                | 2.3                |
| Composition                              |                    |                    |                    |
| Mixed-income funds                       | 0.2                | 0.4                | 2.2                |
| Fixed-income funds                       | 99.8               | 99.6               | 97.8               |
| In nuevos soles                          | 8.0                | 12.0               | 10.7               |
| In US\$                                  | 91.8               | 87.6               | 87.1               |
| Funds yields                             |                    |                    |                    |
| Mixed-income funds (nominal)             | 0.7                | 33.8               | 6.5                |
| Mixed-income funds (real)                | - 0.8              | 30.1               | 2.9                |
| Fixed-income funds (nominal)             | 5.6                | 1.3                | - 2.4              |
| In nuevos soles                          | 4.8                | 3.9                | 2.1                |
| In US\$ 2/                               | 5.6                | 0.9                | - 3.0              |
| Fixed-income funds (real)                | 4.0                | - 1.5              | - 5.7              |
| In nuevos soles                          | 3.3                | 1.1                | - 1.3              |
| In US\$                                  | 4.0                | - 1.9              | - 6.3              |

- 1/ Numbers represent the shares of mutual funds held by households and non-financial private corporations.
- 2/ Yields in dollars plus the effect of the nuevo sol revaluation.

Source: Conasev and BCRP.

Profitability of mutual funds in Peruvian currency was 2.1 percent, while those denominated in foreign currency made a 3 percent loss because of the appreciation of the nuevo sol.

Broken down by type, fixed-income funds fell as a percentage of the total, from 99.6 percent in 2003 to 97.8 percent in 2004. The number of funds remained stable at 23. administered by 6 pension fund managers: Crédito (5 funds equivalent to 51.6 percent of total equity), Continental (5 funds equivalent to 23.4 percent of the total), Wiese (4 funds equivalent to 9.8 percent of the total), Interfondo (6 funds equivalent to 15.1 percent of the total), Promoinvest (2 funds) and Coril (1 fund).