

**A. External demand, production of tradable goods, and the real exchange rate**

The growth rates of Colombia's main trading partners are expected to speed up rapidly, from -0.6% in 2003 to 4.1% in 2004 in average especially the United States (4.4%) and Venezuela (6.4%), according to projections by Consensus Forecast. Growth in the euro-zone will also recover although to a lesser extent (from 1% in 2003 to 2.4% in 2004). The economic recovery in Latin America will have a positive effect on the inflow of external capital into the region.

In this context of stronger world growth, the terms of trade of emerging countries will continue to improve. According to the balance-of-payments projections, oil and gold prices should remain high, and the international prices of coal and coffee could rise substantially (about 9%), which means that the improvement in Colombia's terms of trade will continue.

On this basis, in 2004 the balance-of-payments model projects large increases in income from coal exports (22.9% in dollars) and coffee (11.2%), while non-traditional exports could grow 9.7%, amply offsetting the lower volume of oil exports (-6.6%) due to the fall in production. The projected growth of non-traditional exports is consistent with an expected average nominal revaluation of 2% in 2004 (4.9% in real terms) in view of the stronger growth of Colombia's trading partners. The real exchange rate remains at record high levels (9.3% above 2002); as a result, strong growth is forecast for the production of the export sectors and the tradable sectors in general.

Imports could grow 10.5% in dollar terms attributable to the higher growth of domestic demand.

In 2004, no substantial improvements are projected for foreign direct investment flows, while net external capital flows from the public sector total US\$1.22 billion, mainly the lower value of amortizations scheduled for this year. With respect to external private flows (not including foreign direct investment), net capital outflows fall by US\$500 million from 2003. In these conditions, and taking into account the accumulation of international reserves which are expected to overtake US\$700 million (given the Bank's intervention), the current-account deficit could increase 1.8% of GDP in 2003 to 2.7% in 2004 (Table 1). The lower income from oil exports projected for 2005 (due to the fall in export volumes and crude prices), combined with the government's intention to limit its external borrowing, suggest that the current revaluation trend will not be maintained in the medium term.

Another factor that could moderate the revaluation pressures is a probable adjustment of interest rates in the United States, given the scale of that country's imbalances on current account and the fiscal front. Analyses indicate, however, the rates would not be adjusted until the second half of the year. Even so, the current low level of real interest rates in the United States and the scale of the deficits could lead to an adjustment in Treasury bonds rates, and introduce a higher degree of uncertainty about the growth of the world economy in the medium term<sup>1</sup>.

In the short term, however, the trend to revaluation could continue or be even higher than predicted. First, the financing of the fiscal deficit can reinforce appreciation in two ways: directly, by financing most of the deficit from external funds<sup>2</sup>; and indirectly, by pressuring the domestic debt market, leading to relatively high interest rates that stimulate capital inflows. Also, factors such as the improved growth outlook for the Colombian and regional

TABLE 1  
CURRENT ACCOUNT  
(MILLIONS OF DOLLARS)

	2001	2002 (pr)	2003 (Proj.)	2004 (Proj.)
<b>Current-account balance</b>	(1,251)	(1,580)	(1,416)	(2,399)
As % of GDP	(1.5)	(2.0)	(1.8)	(2.7)
<b>Trade balance</b>	503	225	152	(786)
Exports	12,772	12,302	13,212	13,652
Imports	12,269	12,077	13,061	14,438
<b>Services</b>	(1,424)	(1,458)	(1,492)	(1,551)
<b>Income</b>	(2,593)	(2,820)	(2,999)	(3,037)
<b>Current transfers</b>	2,263	2,473	2,924	2,975

(pr) Preliminary.  
(Proj.) Projection.  
Source: DANE and Banco de la República.

economies, the increase in transfers from abroad, and the improvement in the country's terms of trade, produce an appreciation of the real equilibrium exchange rate.

It should be noted that the intervention by Banco de la República in the exchange market to buy US\$ 500 million in foreign exchange in December 2003 and early January 2004 did not reverse the trend in the exchange rate, in conditions of strong growth of base money (Figure 7). This indicates that the Bank could face restrictions on continued intervention in the exchange market.

## B. Domestic demand and production of tradable goods

As mentioned, domestic demand has been recovering since the second quarter of 2002, and is expected to continue growing in 2004 at rates above 4.0% (Table 2).

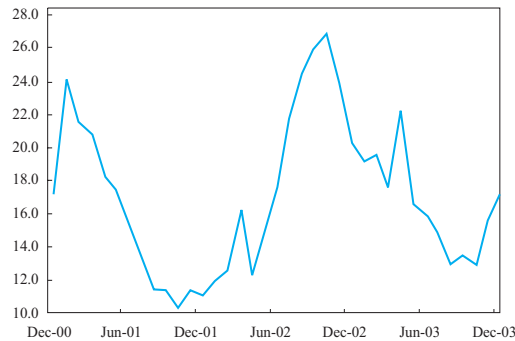
Private consumption should continue to improve thanks to growth of disposable household income, despite higher taxes associated with the recent tax reforms. This factor is likely to be more than offset by higher economic growth, the improved terms of trade, the high volume of transfers from abroad, and the growth of employment. Other factors that contribute to stronger consumption are the low level of real interest rates, buoyant consumer credit, and the recent systematic upswing in the consumer confidence indicators. Finally, the rise in asset prices has a positive wealth effect.

On the other side, private investment will continue to stimulate growth of domestic demand thanks to low interest rates, the expansionary monetary conditions in the economy (growth of M3 and credit), possible inflows of foreign capital, and expectations of higher future profits. In fact, company profits increased substantially last year (Table 3), which provides financing for higher levels of investment,

<sup>1</sup> The central banks of other countries, such as England and Australia, have recently raised their interest rates.

<sup>2</sup> The current schedule for financing the combined public-sector deficit shows that, of total net (deficit) financing of 6.1 trillion pesos, 5.1 trillion pesos would come from net external financing (83% of the total).

**FIGURE 7**  
**BASE MONEY (\*)**  
**(ANNUAL PERCENTAGE CHANGE)**



(\*) Monthly average.  
Source: Banco de la República.

**TABLE 2**  
**DISPOSABLE INCOME AND AGGREGATE DEMAND, 2001-2004**  
**(PERCENTAGE ANNUAL CHANGE)**

	2001	2002 (pr)	2003 (Proj.)	2004 (Proj.)
<b>Private disposable income</b>	0.3	1.9	3.0	3.6
<b>GDP</b>	1.4	1.8	3.5	3.8
Domestic demand	2.9	2.8	4.2	4.4
Exports of goods and services	2.7	(4.5)	3.6	3.0
Imports of goods and services	11.6	0.8	7.4	6.4

(pr) Preliminar.  
(Proj.) Proyección.  
Fuente: DANE y Banco de la República - SGEE.

coupled with the effect of the incentive for plowing back profits approved in the recent tax reform. Also, capacity utilization is now relatively high in several sectors, leading to the possibility of investment decisions possible in the short term. Finally the evident improvement in the climate of confidence and security seems likely to continue in the future.

In these conditions, economic growth in 2004 will be higher than in 2003, led by sectors such as construction (10.2%), transport (6.3%), commerce (5.3%), and industry (4.6%).

#### IV. INFLATION FORECASTS

The previous sections reveal that inflation in the tradable sectors should fall gradually over the next few months, except perhaps for some adjustments in the opposite direction associated with higher than expected hikes in fuel prices. This type of inflation could fall more rapidly if the current trend in the exchange rate continues. Buoyant domestic demand will result in the gradual reduction of spare capacity and put upward pressure on the prices of some non-tradable goods and services, with differences between products depending on the specific degree of capacity utilization in each sector.

## SUMMARY

**TABLE 3**  
**FINANCIAL RESULTS OF COMPANIES**  
**THAT REPORT TO THE SECURITIES SUPERINTENDENCY**  
**(SAMPLE OF 116 NON-FINANCIAL COMPANIES)**

	September		Growth	
	2002	2003	Nominal	Real
	(Millions of pesos)		(Percentage)	
Total assets	48,140,988	55,469,984	15.2	7.6
Total liabilities	19,484,376	21,363,941	9.6	2.4
Total equity	28,656,611	34,106,043	19.0	11.1
Operating income	15,577,918	18,020,435	15.7	8.0
Gross profit	5,216,540	6,042,285	15.8	8.1
Operating profit	1,355,867	1,658,292	22.3	14.2
Profit before tax	32,543	1,783,764		
Profit and loss	20,895	1,937,949		

Source: Securities Superintendency

This report presents forecasts for inflation and other variables with horizons of one, two and three years. These were obtained from the central model used by Banco de la República (transmission mechanisms model).

### A. Transmission mechanisms model (TMM)

Two scenarios were developed for this report: a) the basic scenario that maintains the policy rule active and therefore, offers path of interest rates that is compatible with the long-term inflation targets; and b) an alternative scenario that presents the inflation results under the assumption that CDT (Certificate of Deposit) rates are constant for two consecutive years<sup>3</sup>.

#### 1. Basic scenario

With flexible interest rates, the TMM suggests total projected inflation of 4.7% for 2004, below the target range, with non-food inflation of 5.0%. In 2005 total inflation of 4.8% is projected, within the target range, and non-food inflation also of 4.8%. The downward trend in inflation could continue in 2006 to 4.6% (Table 4)

The basic TMM scenario assumes an average appreciation of 0.5% in 2004, with a return to depreciation in 2005 and 2006 at rates similar to those in the balance-of-payments projection. This trend in the exchange rate is consistent with the adjustment in domestic interest rates resulting from the projection of the model, assuming an increase in the external interest rate of 60 bp in the second half of the year.

<sup>3</sup> This is a common methodological assumption used by central banks in the preparation of inflation forecasts. It is assumed that monetary policy posture does not change during the time horizon in which it is most effective, estimated from six to eight quarters.

With respect to the output gap, the basic scenario assumes an initial level of -1.83% in the fourth quarter of 2003, compatible with growth of 3.5% in 2003<sup>4</sup>. The forecasts indicate that the gap should gradually close throughout 2004 to end at -0.76%, with an additional 0.4 percentage points at the end of 2005. If potential GDP is assumed to grow at around 3%, the trend in the gap projected by the TMM would be equivalent to GDP growth of between 3.5% and 4.0% for 2004.

These forecasts are consistent with a rise of 100 bp in 90-day CDT rates in 2004 and an additional 90 bp in 2005. This increase would be partly due to the rise in external interest rates. The current 90-day CDT rate is around 8.0%.

**TABLE 4**  
**RESULTS OF CENTRAL MODEL (MMT)- BASIC SCENARIO**  
**(PERCENTAGE)**

End of	Inflation			Output Gap	CD (CDT)	Average annual devaluation
	Total	Non-food	Food			
<b>2003</b>	6.5	7.0	5.2	(1.8)	8.0	14.9
<b>2004</b>	4.7	5.0	4.2	(0.8)	9.0	(0.5)
<b>2005</b>	4.8	4.8	4.8	(0.4)	9.9	7.6
<b>2006</b>	4.6	4.6	4.6	(0.6)	10.9	5.1

Source: Banco de la República.

## 2. Alternative scenario

If the CDT rate remains constant at 8% nominal in 2004 and 2005, total inflation will be 4.8% in 2004 similar to the basic scenario, but rising to 5.1% in 2005 (vs. 4.8% in the basic scenario) and to 5.5% in 2006 (vs. 4.6% in the basic scenario) (Table 5). In this case the output gap would narrow by 1.4 percentage points in 2004 (against 1 percentage point in the basic scenario) which would generate a positive gap in 2005.

To achieve declining inflation targets below 5% from 2006 would require an increase of over 300 bp in the CDT rate from that year. This strategy would generate excessive volatility in the output gap, which would rapidly close in 2004, becoming positive in 2005 and returning to negative in 2006 and 2007. In this case, monetary policy would increase macroeconomic instability.

## B. Balance of risks

According to the analysis of the inflation situation presented in the first two sections of this chapter, the balance of risks should take into account the following factors:

<sup>4</sup> However, on the latest figures, higher growth cannot be expected in 2003.

## SUMMARY

**TABLE 5**  
**RESULTS OF THE CENTRAL MODEL (TMM)**  
**SCENARIO WITH CONSTANT INTEREST RATE**  
**(PERCENTAGE)**

End of	Inflation			Output Gap	CD (CDT)	Average annual devaluation
	Total	Non-food	Food			
<b>2003</b>	6.5	7.0	5.2	(1.8)	8.0	14.9
<b>2004</b>	4.8	5.0	4.2	(0.5)	8.0	(0.6)
<b>2005</b>	5.1	5.1	5.1	0.5	8.0	6.5
<b>2006</b>	5.5	5.5	5.5	(0.6)	13.5	4.8

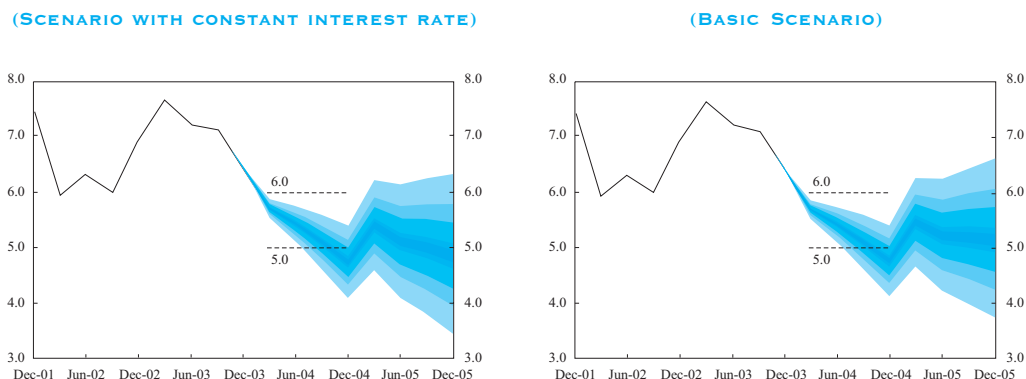
Source: Banco de la República

1. Increased uncertainty in the exchange market in 2004 and 2005.
2. Possibility of greater appreciation of the peso in 2004.
3. Possibility of a more rapid reduction in the output gap between 2004 and 2005.
4. Finally, a higher increase in international commodity prices in 2004.

These risks are included in the distribution of inflation probabilities (Figure 8) for the forecast in the basic scenario (with variable interest rates), and in the alternative scenario (with constant interest rates). Table 6 shows the probabilities associated with various inflation ranges in each scenario.

The results indicate a high probability that inflation will be below 6% in 2004, irrespective of any adjustments in the intervention rates. However, if the rates remain constant, the probability of inflation in 2005 in the announced range (3.5% to 5.5%) falls from 75% to 60%.

**FIGURE 8**  
**PROBABILITY DISTRIBUTION FOR TOTAL INFLATION**  
**(PERCENTAGE)**



Fuente: Banco de la República.

## SUMMARY

**TABLE 12**  
**INFLATION FORECASTS**  
**CONFIDENCE INTERVALS**

	Inflation ranges					
	[< 4.0%]	[4.0%-4.5%]	[4.5%-5.0%]	[5.0%-5.5%]	[5.5%-6.0%]	[6.0%-6.5%]
	<b>Basic scenario (probabilities)</b>					
Mar-04	0.0	0.0	0.0	2.1	97.8	0.1
Jun-04	0.0	0.0	1.6	64.3	33.9	0.2
Sep-04	0.0	2.1	35.0	54.4	8.4	0.1
Dec-04	3.1	24.5	47.6	22.3	2.5	0.1
Mar-05	0.2	3.2	17.6	37.5	30.7	9.6
Jun-05	3.6	12.6	27.0	30.6	18.7	6.3
Sep-05	8.6	16.0	24.9	24.8	16.2	7.0
Dec-05	15.8	17.8	22.4	20.3	13.6	6.7
	<b>Scenario with constant interest rate (probabilities)</b>					
Mar-04	0.0	0.0	0.0	2.1	97.8	0.1
Jun-04	0.0	0.0	1.6	64.3	33.9	0.2
Sep-04	0.0	2.0	34.1	55.0	8.8	0.1
Dec-04	2.6	22.5	47.6	24.3	2.9	0.1
Mar-05	0.1	2.3	14.8	35.8	33.3	11.9
Jun-05	2.2	9.4	23.7	31.4	22.5	8.7
Sep-05	5.0	11.8	22.0	26.2	20.3	10.3
Dec-05	8.8	13.3	20.4	22.4	17.9	10.6

Source: Banco de la República

### V. CONCLUSIONS

The inflation trend in 2004 and 2005 will depend mainly on two factors: i) the speed with which the output gap closes and its effect on non-tradables inflation; and ii) the size and duration of the appreciation and its effect on tradables inflation.

There is ample evidence that the output gap will narrow to around one point of GDP in 2004, although it could still be negative at the end of the year. In very favorable conditions for growth, the gap could close in 2005. This would occur, for example, if average growth in 2004 and 2005 were 4%, and potential product grew 3%<sup>5</sup>.

Projections of the exchange rate trend are much more uncertain. There are reasons for thinking that the current trend in the exchange rate cannot be sustained in the medium term, and that an upward correction could occur. In the short term, however, the revaluation trend is likely to remain at similar or even higher levels than those recorded during the year.

<sup>5</sup> Potential growth in 2004 and 2005 could be higher due to the momentum of investment in 2003 and 2004.

The results of the TMM balance of risks show a high probability of meeting the inflation target of 5% to 6% in 2004, irrespective of the monetary policy posture. However, the probability of inflation in 2005 in the range (3.5% to 5.5%) will be higher if rates are adjusted upwards around 100 bp during the year. The higher rates would be partly influenced by the rise in foreign interest rates, possibly in the second half of the year. On the other hand, if the intervention rate remain constant in the longer term, abrupt changes in interest rates will be necessary in the future, introducing an unnecessary and undesirable volatility into economic growth and the output gap. Moreover, there would be the risk that inflation could “anchor” at levels of 5% or more, incompatible with convergence to long-term inflation levels (around 3%).

In these conditions, an immediate rise in interest rates is unnecessary, but likewise there are no reasons for a cut. This policy would only be desirable if the exchange rate appreciated more than over a long period. On the other hand, an increase in the Bank’s intervention rates may be necessary during the year to increase the probability of achieving inflation in the range announced for 2005, and maintain the process of gradual convergence to long-term inflation levels.

Based on these considerations, the Board maintained the Bank’s intervention rates at the following levels: Lombard expansion 11%, minimum expansion 7.25%, Lombard contraction 5.25% and minimum contraction 6.25%.

Board of Directors  
Banco de la República