

This chapter of the *Inflation Report* presents Copom's assessment of the behavior of the Brazilian economy since publication of the most recent *Report* in December 2006, together with an analysis of the inflation outlook through 2008 and GDP growth to end-2007. Inflation projections are presented in two main scenarios. The first, designated the benchmark scenario, assumes that the Selic rate will remain unaltered at 12.75% per year over the forecasting horizon, the level defined by Copom at its most recent meeting on March 6-7, and that the exchange rate will remain in the range registered in the days immediately prior to that meeting (R\$2.10 per United States dollar). The second scenario, known as the market scenario, utilizes the consensus interest and exchange rates expectations compiled in BCB's Investor Relations Group (Gerin) survey of private sector analysts in the days preceding the March Copom meeting. It should be stressed that these scenarios are mere tools used to provide information to the monetary policy decision-making process and their assumptions should not be understood as Copom's forecasts of future interest and exchange rates behavior.

The inflation and GDP growth forecasts included in this *Report* are not point estimates. These forecasts incorporate probability intervals that reflect the level of uncertainty present when the interest rate decision was made. Inflation forecasts do not depend exclusively on interest and exchange rates assumptions, but also involve assumptions on the behavior of specific exogenous variables. The set of hypotheses considered most probable by Copom is used to construct the scenarios to which it attributes greatest weight when taking interest rate decisions. On presenting these assumptions in this *Report*, Copom's objective is to enhance monetary policy transparency and improve its effectiveness in controlling inflation, which is its primary objective.

6.1 Determinants of inflation

The seasonally adjusted IBGE data series prior to adoption of the new National Accounts methodology indicates that, at market prices, GDP posted 1.1% quarter-to-quarter growth in the fourth quarter of the year (practically identical to the 1.2% growth rate registered in the first quarter of 2006), with 3.8% expansion compared to the same quarter of the preceding year. Consequently, 2006 GDP growth closed at 2.9%, 0.6 p.p. above the 2005 result. With the fourth quarter 2006 result, the Brazilian economy has expanded for 13 consecutive quarters compared to the same period of the previous year, for the first time since the fourth quarter of 1986. Though growth in 2006 was not significantly higher than the average for the last 25 years, the current cycle has been marked by unprecedented stability when compared to the Brazilian historical pattern. Thus, the Committee has ratified the scenario presented in recent *Inflation Reports*, indicating that the pace of Brazilian economic growth should accelerate in 2007. Such factors as price stability, strengthening of the labor market, expanding real income, increased investment intentions, a more ample credit supply, declining external vulnerability, less intense macroeconomic uncertainty, as well as the ongoing process of monetary policy easing should certainly be sufficient to further accelerate Brazilian economic growth in the coming quarters. Over the course of 2007, the PAC will also generate significant impacts, particularly on investments.

IPCA inflation in 2006 dropped for the fourth consecutive year and, for the first time since adoption of the inflation target system in June 1999, closed below the target center (4.50%) defined by the National Monetary Council (CMN). Inflation closed at 3.14%, 2.55 p.p. below the 2005 result, indicating consolidation of the benign consumer inflation scenario predicted repeatedly in previous *Reports* and Copom Minutes. To a great extent, this scenario, which is expected to continue through the coming quarters, reflects the intertemporal effects on inflation of the monetary policy adopted in recent years. By making it possible for economic agents to take decisions with a lesser degree of macroeconomic uncertainty, price stability allows them to extend these decisions over a longer temporal horizon, while gradually reducing risk premiums. Evidently, the major contribution that monetary policy can make to sustainable economic development is precisely the improved macroeconomic environment.

Despite recent pressures generated by rising fuel alcohol prices, IGP-DI inflation has apparently begun leveling off

following a period in the months leading up to November 2006 when it surpassed the level of consumer inflation. Two major factors seem to have contributed to the dynamics of wholesale prices: continued strengthening of the national currency and the apparent easing of the sharp rise in farm prices during the June-November 2006 period. Based on the IPA-DI, cumulative 12-month wholesale inflation dropped in January following eight consecutive months of steadily higher rates. Though this rate moved upward once again in February, it still remained below the December level. These numbers suggest that, particularly in the farm sector, the process of realignment of relative prices may well be coming to an end, as forecast in the previous *Inflation Report*. Despite these positive signs, 12-month wholesale farm price inflation has not eased yet, having risen from 6.92% in December 2006 to 7.38% in January and 9.39% in February 2007. As stressed in the Copom Minutes, the impact of wholesale farm and industrial prices on consumer inflation will depend on prospective demand conditions and the expectations of price-setters regarding the future inflation path.

As far as the external scenario is concerned, one can not ignore the possibility of a new interest rate spike in the United States, though the more probable scenario would seem to indicate that the process of monetary policy adjustment has ended and that easing of monetary policy could get under way before the end of 2007. On the other hand, there is growing concern that the US economy could turn sharply downward or, though this possibility is considered considerably more remote, plunge into a recession due mainly to the impact of current real estate market difficulties on consumer spending. It is important to recall that the increase in volatility observed in international financial markets in recent weeks, initially thought to be a consequence of events occurring in Asia (expectations of lesser capital market incentives in China and exiting of carry trade positions in Japan), has been precisely rising doubts with regard to the future trajectory of the United States economy. However, stronger than expected growth in the Japanese economy in the final quarter of last year, coupled with robust expansion in both the German and British economies, have managed to sustain the positive momentum of the world economy, while attenuating the impact of deceleration in the USA. On the other hand, mirroring geopolitical tensions, oil prices, a recurrent source of international uncertainty, not only remained volatile but even increased in recent weeks following the sharp falloffs that occurred earlier in the year. In summary, any attempt to forecast medium and long-term oil prices would surely be a highly uncertain endeavor.

In this framework, the first quarter of the year was marked by continuation of Copom's efforts to ease monetary policy begun in September 2005. After reducing the basic interest rate target 650 b.p. between the September 2005 and November 2006 meetings, the Committee cut an additional 25 b.p. from the Selic rate target at its January and March 2007 meetings, raising the total cutback to 700 b.p. In 2006 alone, the reduction came to a very significant 475 basis points, with 200 b.p. concentrated in the second half of the year. The Selic rate now stands at 12.75% per year, the lowest level since it was created in 1986.

IPCA evolution indicates that inflation dynamics in the early part of 2007 were clearly compatible with the target path or, in other words, fully aligned with the benign price scenario consolidated since last year. This is clear in the fact that the IPCA rose just 0.44% in both January and February. The January rate was the lowest for that month since the series was first calculated in 1980. Cumulative 12-month inflation dropped from 3.14% in December to 3.02% in February, reflecting a substantial 2.49 p.p. decline compared to the February 2006 figure of 5.51%. Using this basis of comparison, it is important to note that the January rate was the lowest since March 1999 (consequently, the lowest since the inflation target regime was adopted in June 1999). One should also stress the converging process that prices variations for the major types of goods included in the IPCA have been exhibiting. For example, the difference between the quarterly inflation average for regulated and contractually monitored goods and market goods has been negative for five consecutive months, for the first time since July 1995. Analysis of cumulative 12-month inflation in February shows that this difference dropped to its lowest level since October 2004. The process of convergence is also evident when one analyzes the dispersion of inflation rates among tradable goods, nontradables and regulated and contractually monitored goods, since the standard deviation among the three rates fell in February to its lowest level since October 2004.

Despite monthly highs in the core inflation by exclusion compared to December, the positive behavior of headline inflation in the early part of the year was also reflected in BCB core measures. As a matter of fact, the core by exclusion of monitored prices and household food prices increased from 0.34% in December to 0.41% in January and 0.52% in February, while the trimmed-means cores with and without smoothing of predefined items posted inflation of 0.39% and 0.35% in January and 0.24% and 0.22% in February, compared to 0.38% and 0.27% in December,

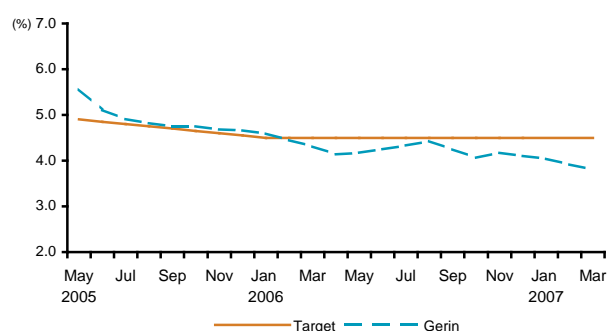
respectively. One should note, however, that cumulative 12-month inflation continued dropping in the early months of the year, independently of the considered core, with significant deflation compared to the same period of the previous year. The core by exclusion of monitored prices and household food prices dropped 2.75 p.p. in February, compared to the same month of the previous year, closing at 2.90%. The trimmed-means cores with and without smoothing dropped 2.45 p.p. and 3.02 p.p. to levels of 4.14% and 2.29%, respectively. Despite the larger inertial component of the smoothed core, one should observe that, for the first time since 2001, the January result was below the target center, followed by a February drop to the lowest point since September 1999.

On the other hand, it is important to highlight the fact that the historically low levels of cumulative 12-month inflation registered in recent months, including both headline inflation and cores, have been generated to a great extent by substitution of the relatively high levels registered in early 2006 with much more positive recent results. Consequently, these record lows should not be interpreted as reductions in cores or headline inflation in recent months. The impact of the process of statistical substitution is expected to run its course by the second quarter of 2007, when both 12-month core measures and headline inflation itself will more closely reflect the dynamics of inflation in recent months. This evaluation is backed by some factors, particularly the impact of fiscal impulses on aggregate demand and the lag with which the effects of the process of monetary policy easing dating to September 2005 have been felt.

Measured by the IGP-DI, inflation increased to 0.43% in January, compared to 0.26% in the previous month, and dropped to 0.23% in February. Cumulative 12-month growth through February reached 3.80%, the same level registered in December (3.79%). Before that, however, the 12-month cumulative rate registered in January marked the first month-to-month reduction since May 2006. Thus, recent numbers suggest that the broader concept of inflation, which had climbed to levels above consumer inflation, has begun converging to the latter levels. In the early part of the year, all IGP-DI components showed monthly dynamics quite similar to the aggregate index or, in other words, they rose in January and dropped in February, when compared month-to-month. The IPC rose 0.69% in January (0.63% in December) and 0.34% in February. The IPA-DI rose 0.32% in January (0.11% in December) and 0.19% in February. The INCC increased 0.45% in January (0.36% in December) and 0.21% in February. The cumulative 12-month IPA-DI

moved from 4.29% in December to 3.79% in January, the first fall-off in this comparison in the last eight months. In February, the rate increased to 4.12%, but remained below the December level. This behavior suggests that the process of relative price realignment evident in the final months of 2006 – led, above all, by farm prices – is petering out, as predicted in the most recent *Inflation Report*. Therefore, expectations are that, in the coming quarters, wholesale prices will aid in channeling inflation toward the target path. This contribution will depend on prospective demand conditions, together with the expectations of price-setters in relation to the future trajectory of inflation.

Figure 6.1 – Inflation target path and market expectations for twelve-month ahead inflation



As expected, the continued leveling off of inflation in early 2007 was reflected in inflation expectations for this and the coming year. As compiled by Gerin, the median of expectations regarding IPCA growth in 2007 dropped from 4.07% in the days leading up to the January Copom meeting to 3.88% just prior to the March meeting. In their turn, median expectation for 2008 remained anchored at 4.50% for approximately one year, before dropping sharply following publication of the most recent *Report*, pointing to a level of 4.0% in the days prior to the March Copom meeting. As highlighted in previous Copom documents, these developments heralded consolidation of an increasingly more favorable macroeconomic environment over longer-term horizons.

GDP data at market prices for 2006, as released recently by IBGE demonstrate that growth accelerated in the fourth quarter, based on either annual or quarterly comparisons. According to seasonally adjusted IBGE data, the Brazilian economy expanded 1.1% on a quarter-to-quarter basis, with 3.8% expansion over the same quarter of 2005 (0.6 p.p. above third quarter growth). Consequently, cumulative GDP growth closed 2006 at 2.9%, surpassing the 2005 figure of 2.3%. Though 2006 economic growth was below expectations at the start of the year, it is important to analyze the current cycle of Brazilian economic expansion in qualitative terms. Analysis of the historical data series shows that, for the first time since the fourth quarter of 1986, the economy has posted positive growth results for 13 consecutive quarters compared to the corresponding quarter of the previous year. Therefore, it is becoming increasingly evident that the erratic growth pattern so characteristic of the Brazilian economy for decades has apparently become a thing of the past. This new reality reinforces the perspective that the Brazilian economy may well have entered an unprecedented phase of sustained expansion that could certainly intensify in coming quarters. Among other factors, this evaluation is supported by declining inflation,

improved labor market indicators, expanding real income, growing investment rate as a proportion of GDP, coupled with investment intentions, lesser external vulnerability and reduced macroeconomic uncertainties.

On the supply side, crop/livestock production expanded 3.2% in 2006, while industrial output rose 3% and the service sector posted 2.4% growth. Following an unsatisfactory performance in 2005 (growth of 0.8%) and in the first half of 2006, the crop/livestock sector recovered sharply in the second half of the year, closing with a higher rate of growth than the other sectors of the economy. In the industrial sector, it is important to highlight the performance of mining activity (growth of 5.6% in the year), followed by construction (expansion of 4.5%). In the service sector, commerce registered the best result with 4.0%. Viewed under the prism of demand, the performance of gross fixed capital formation was highly encouraging, posting growth of 6.3% (the second best result in the last nine years). Household consumption (3.8% growth) also performed above average, due mostly to increased labor earnings and an expanding credit market. As expected, analysis of national accounts show that imports of goods and services increased sharply (18.1%) and, contrary to the rather pessimistic prognoses that marked early 2006, exports of goods and services expanded 5%.

As occurred in the early months of 2006, balance of trade results clearly frustrated less optimistic expectations. Despite the growing strength of the national currency in 2006, the trade balance opened 2007 with highly robust results, though a certain cooling of surpluses was perceptible at the margin. As forecast in previous *Reports* and Copom Minutes, the country's commercial transactions with the rest of the world showed the first signs of a shift into a new dynamics in the future. This change is welcome, since it reveals the existence of a natural and healthy process of adjustment in the nation's external accounts toward a situation of long-term equilibrium. This adjustment has been influenced as much by the price effect, evident in the evolution of nominal exchange rates, as by the income effect, based on increased expansion of aggregate demand. In fact, the trade balance surplus reached US\$5.4 billion in January and February, a level 4.5% below the result for the same two month period of the previous year. The cumulative 12-month balance, however, reached US\$45.8 billion in February, still somewhat higher than in the same month of the previous year (US\$45.4 billion).

Despite the fact that the volume of imports has expanded more rapidly than exports, the relative stability of the

country's trade surplus has been sustained by higher prices for exported goods or, in other words, by the positive dynamics of the terms of trade. Exported value has set successive new records, reaching the unprecedented 12-month level of US\$140.5 billion through February, 16.0% higher than in the same period of the previous year. Parallel to this, the value of imports has expanded at an even more rapid pace, closing the 12-month period through February at US\$94.7 billion, reflecting 25.0% growth over the February 2006 result. With this, Copom forecasts for 2007 indicate a trade surplus somewhat below the results of the last two years, but still quite high when viewed in terms of Brazil's historical results. In other words, there are no expectations of any significant turnaround in the trajectory of the enormous trade balance surpluses registered in the recent past. The current account balance posted surpluses of US\$325 million and US\$593 million in January and February, respectively, raising the 12-month cumulative result through February to US\$14.1 billion, equivalent to 1.5% of GDP.

According to BCB seasonally adjusted CNI data, Installed Capacity Utilization Level (UCI) in the manufacturing sector was rather erratic in the final quarter of last year, falling in October to 81.9%, before increasing to 82.1% in November and dropping back once again to 81.9% in December. The December result (0.2 p.p. below the December 2005 level) interrupted a series of five consecutive months of positive growth compared to the same month of the previous year. In 2006, average utilization of installed output capacity closed 0.14 p.p. below the 2005 average. However, it is important to stress that this ratio changed dramatically between the first and second halves of the year. More specifically, compared to the average for the same periods of 2005, the first half of the year closed with -0.82 p.p., shifting to 0.54 in the second half. Despite growth in manufacturing activity, relative stability in the average level of installed capacity utilization in 2006 partly reflects expansion in the economy's productive capacity. More recent data on production and absorption of capital goods suggest growth in the volume of investments. For example, capital goods absorption increased 6.8% in the final quarter of 2006, compared to the previous quarter, resulting in significant 8.9% cumulative expansion in 2006. This result was decisively impacted by 24.0% growth in the volume of capital goods imports in 2006 and, to a lesser extent, by 5.7% expansion in capital goods output. With these results, despite expectations of continued growth in aggregate demand in 2007, there are no expectations of any significant lags in relation to aggregate supply over the coming quarters. As stressed in the Minutes of Copom meetings, there is a very close relation between inflation

trends and current and prospective developments regarding expansion in the supply of goods and services required to meet growing demand.

According to seasonally adjusted IBGE data, after some ups and downs in industrial output in the first three quarters of 2006, the final three months of the year were marked by steady expansion, with clear signs of an increase in the pace of industrial activity. In the manufacturing sector, performance in the final quarter of 2006 was quite similar to that of industry as a whole, registering output growth for three consecutive months for the first time since October 2004. It is important to note that the falloff in industrial output in January 2007 (0.3%) was a passing phenomenon, impacted by technical stoppages in the petroleum industry. On the one hand, recent dynamics suggest that the lag between industrial output and sales is dwindling while, on the other hand, the pace of economic activity has gained momentum. In 2006, industrial output expanded 2.8%, while manufacturing and mining grew at respective rates of 2.6% and 7.4%. As far as industry in general is concerned, one should highlight 5.7% and 5.8% growth in the output of capital goods and consumer durables, though each segment registered its own specific dynamics. While growth in capital goods output was concentrated in the second half of the year, the production upturn under consumer durables occurred exclusively in the first quarter of 2006. In more specific terms, growth in the output of consumer durables basically reflects rising employment and real income and an expanding credit supply, while growth in capital goods output reveals a positive outlook for overall economic expansion, backed mainly by domestic demand. Note should also be taken of expanded production of “Office Machinery and Computer Equipment”, with 51.6% in 2006. This result could well be a consequence of enhanced economic efficiency.

The accelerated pace of activity in the fourth quarter of 2006 had positive repercussions on the job market. According to the PME, unemployment hit 10.7% in July (the highest level of the year), before dropping steadily to a level of 8.4% in December. As expected, seasonal factors typical of the early part of the year pushed the unemployment rate to 9.3% in January 2007, 0.1 p.p. above the level for the same period of the previous year, albeit 0.9 p.p. below the January 2005 level. The average unemployment rate for 2006 as a whole closed 0.15 p.p. above the 2005 mark, but 1.49 p.p. below the 2004 result. In 2006, both the overall labor force and the number of persons employed expanded 2.6%. To some extent, growth in the overall labor force reflects greater optimism among workers regarding the

probability of finding jobs, a phenomenon that is typical of periods of economic expansion. As stated in the *December Report*, once the initial impact of the newfound optimism has passed, the unemployment rate is expected to fall even more sharply.

According to CNI statistics, seasonally adjusted by BCB, the level of employment in the manufacturing sector expanded for six consecutive months from July to December 2006. Strictly speaking, the only decline in all of 2006 occurred in July (just -0.01%), as industrial employment expanded 2.2% in the year. Also, compared to the same month of the preceding year, industrial employment in December posted the 35th consecutive positive result. As far as formal employment is concerned, data released by the Ministry of Labor and Employment indicates strong 2006 expansion, repeating the results of previous years. More specifically, 1.23 million jobs were created in 2006, compared to 1.25 million in 2005. It can be presumed that these results will diminish in the coming years, with the potential decline in the number of workers available in the informal sector of the economy. Growth in employment levels coupled with declining inflation generated gains in the purchasing power of workers. In 2006, average real earnings habitually received by workers increased 4.1%. In January 2007, purchasing power increased 4.7% compared to the same period of 2006. Real wages earned by the working population, in turn, posted strong 6.7% growth in 2006, closing January 2007 at 7.4% above the results for the same month of the previous year.

In 2006, seasonally adjusted IBGE data show that retail sales expanded 6.2%. Following reductions in June and July, retail sales recovered sharply, posting four consecutive months of positive growth: 2.5% in August, 1.8% in September, 0.4% in October and 0.5% in November. In the month of December, sales dropped 0.5%, to some extent reflecting anticipated payment of the 13th annual wage to retirees and pensioners in the month of September, since this payment is normally effected in early December. The purely temporary nature of the December falloff was corroborated by 1.8% growth in the month of January, the 38th consecutive month of positive growth in retail sales compared to the same month of the previous year. Cumulative 12-month sales expanded 6.31% in January, marking not only the fifth consecutive month of sales growth, but also the highest growth figures since September 2005. The highlights of the retail trade sector in 2006 were 10.3% expansion in sales of furniture and home appliances and 7.6% in the sales of hypermarkets, supermarkets and food products. In negative terms, the most important result was the 8.0% drop in fuel and lubricant

sales in the year, mainly reflecting higher fuel prices and the pursuit of such alternative energy sources as natural gas for vehicle use. Viewed from a different angle, one should note that the positive sales performance was not limited to income and employment sensitive items, but extended also to goods that are more sensitive to credit. For the coming quarters, expectations point to continued growth in retail sales, driven by steady growth in employment and income, a more ample volume of credit and the gradual easing of monetary policy, coupled with recovery in consumer confidence.

6.2 Benchmark scenario: assumptions and risks

Copom projections are based on a set of assumptions regarding the behavior of the major macroeconomic variables. These assumptions and their associated risks form the benchmark scenario underlying the Committee's decision-making process.

In general, the risks to the prospective dynamics of inflation remain quite similar to those identified in the December *Report*, but with greater uncertainty regarding the external scenario and alteration in the array of risks associated to the domestic scenario. Externally, doubts persist regarding United States monetary policy and economic activity, together with some degree of deterioration in the outlook for oil prices. Though markets generally believe that the process of monetary policy adjustment in the United States has run its course, one cannot completely disregard the possibility of additional increases in that country's interest rates. On the other hand, investor sensitivity to data that could indicate a sharper drop in US economic activity seems to have increased. This was the central point responsible for alterations in confidence levels and for the increase in volatility that characterized international financial centers in recent weeks, though uncertainties regarding Asian economies and markets persisted. More specifically, concern has been rising regarding the possible adoption of economic restraints in China and the extent of carry trade positions financed in yen. As far as the internal scenario is concerned, the farm price high has begun leveling off at the wholesale level. One should also note that 2007 will be marked by a review of energy prices in important electricity concessions, a procedure that will generate impacts on inflation projections (potentially benign) will be concentrated within this year. On the other hand, as stated by Copom in previous *Reports*, the extent of the process of monetary easing implemented

since September 2005 and the lag with which the monetary policy transmission mechanism operates imply increased uncertainty regarding the future dynamics of inflation. Effects of the fiscal impulses registered in 2006 and those expected for the current year must be added to these factors.

As far as the external scenario is concerned, an important alteration in relation to the December *Report* was the increase in international financial market volatility, though potentially transitory, triggered by the Shanghai stock market collapse, but concentrated in growing uncertainties regarding United States economic performance and, to a significant degree, in the magnitude of risk asset positions financed in yen. In the United States, negative growth in household investments for three consecutive quarters, a sharp increase in subprime real estate mortgage defaults and an increasingly tighter real estate credit market have increased the probability of a much sharper adjustment in this sector, while raising the specter of an even more significant economic downturn. This scenario has generated market expectations of an easing of United States monetary policy in the second half of 2007. On the other hand, persistent inflation at levels above the presumed comfort zone of the American Federal Reserve could inhibit the capacity of monetary authorities to respond adequately to a substantial downturn in economic activity. Nonetheless, continued recovery in Japan and Europe, marked also by monetary contraction, coupled with strong growth in important emerging economies, still point to a positive outlook for the world economy as a whole, albeit with considerably less optimism than in 2006.

It is important to highlight that, by improving its economic fundamentals, especially external solvency indicators, the Brazilian economy has demonstrated the success achieved in creating greater resistance to the impact of international financial market turbulence, at the same time in which it is still considered an attractive target not only for portfolio investments, but also for growing volumes of direct investment. This assessment is backed, for example, by still very low levels of country risk premium recently observed, compared to historical standards. In more specific terms, Brazil's average country risk premium measured by the Embi has dropped steadily from 542 b.p. in 2004 to 399 b.p. in 2005, 235 b.p. in 2006 and approximately 180 b.p. before the recent rise in volatility levels. One should also highlight the ongoing reduction of the difference between the country risk premium and the average risk premium of other emerging countries. Parallel to this, the rise in the country risk premium was no more than a relatively small increase of 20 b.p. during the recent period of turbulence, fully reversed by mid-March.

Emphasis should also be given to the fact that the increase in Brazil's risk premium was smaller than the average for other emerging economies. This trajectory suggests consolidation of a lower level of sovereign risk, reflecting the fact that the country has become more resistant to shocks and better able to attract a sustained flow of external investments. In this context, Copom has reaffirmed that steadily declining inflation, large and persistent trade surpluses, generation of adequate primary surpluses, rebuilding of the international reserve position, improvements in the internal public debt profile and repurchases of sovereign bonds on international markets have made the country increasingly more resilient to external shocks. Above all else, the country's increased resistance is reflected in the fact that the domestic economy has continued growing during the long process of interest rate adjustments in major world economies. As a result, Copom has attributed low probability to a scenario of international financial market deterioration sufficient to jeopardize private sector financing conditions.

Oil prices have been a systematic source of international uncertainties in recent years. Financial market turbulence impacted oil prices, interrupting the downward trend evident since August 2006. Despite this increase, prices remain quite close to those in effect in the final quarter of last year. However, in nominal terms, oil prices are still high and sharply volatile by historical standards, reflecting such factors as climate and geopolitical tensions, among others. Prices remained well above those in effect in 2001-2003. To some extent, current price levels may reflect structural imbalances in the oil market and suggest not only changes in the price plateau, but also that these prices may well remain higher than expected for a considerably longer period of time. In summary, the scenario for international oil prices is less favorable than at the end of 2006.

With regard to the internal scenario, it is Copom's understanding that economic activity data suggest low probability of any significant short-term inflationary pressures. Expanding imports are an important element in this process, since they complement domestic output and aid in limiting expectations of inflationary impacts generated by sustained growth in aggregate demand. Parallel to this, inflation expectations remain well anchored for both 2007 and 2008. On the other hand, one must recognize that fiscal impulses in 2006 and those expected for 2007 are factors that will further stimulate aggregate demand. More importantly, in keeping with Copom's evaluations published in previous *Reports*, uncertainties have grown with respect to the future dynamics of inflation as a result of the intensity and lags

with which the monetary policy transmission mechanism operates, particularly in the context of the cumulative easing of monetary policy since September 2005. It is important to stress that the risks associated to these uncertainties are important to monetary policy implementation, even when one considers the impact on domestic prices of recent growth in imports.

Farm prices are still a source of inflationary pressures. Farm products prices contributed to the inflation decline in 2005, when they dropped 6,32%, and in the first half of 2006, as evident in the cumulative 13.20% reduction in the 12-month period ended last March. Since June 2006, however, prices have risen in most months, posting cumulative 12-month expansion of 9.38% through February. For 2007, even when one considers that the larger share of agricultural output to be targeted to energy production could result in some cutbacks in areas now used for food production, the outlook is for a very successful harvest, evidently the best way of dampening the above-mentioned pressures. Though a certain reduction in farm price pressures at the margin can be noted (compared to the September-November period, wholesale farm prices grew at a lesser pace in the December-February period), the impact on consumer prices will still be felt over the very short-term.

Copom understands that rising consumer inflation at the end of 2006 and start of 2007 has been caused to a great extent by the expected reversal of the favorable dynamics of food prices in recent months, by significant fare increases in urban transportation systems and by seasonally higher school tuitions. The Committee considers that these pressures will be transitory and will dwindle in importance over time, without necessarily contaminating indices over a longer time horizon. Nonetheless, Copom will continue acting to ensure that the gains obtained in recent years in combating inflation are preserved. To do this, it will closely monitor the evolution of inflation and its various core measures in coming months, discriminating between temporary increases and persistent or generalized price hikes, so as to be able to readily adjust its monetary policy posture to the circumstances of the moment.

As stated in previous *Reports*, much of the prospective dynamics of the price formation process involves possible imbalances between aggregate demand and supply. The December *Report* pointed to intensification of the pace of economic growth in the final months of 2006, raising annual GDP growth 0.6 p.p. above the 2.3% result posted in 2005. Data on gross fixed capital formation have evolved positively, expanding 6.3% in 2006, well above product growth. This

result suggests a steady process of expansion in the economy's output capacity. Over the same time span, the average rate of utilization of output capacity was 0.14 p.p. below the 2005 level, according to CNI data. Considered together with an analysis of recent data on capital goods production and absorption and with statistics on production of inputs for the building industry, the dynamics of this process indicate continuity in projects involving expanded output capacity. As a matter of fact, capital goods absorption increased 8.9% in 2006. In general, economic activity data suggest low probability of significant short-term pressures on inflation.

Inflation expectations for 2007 and 2008 show a decline compared to the levels in effect in the final quarter of last year. Despite some degree of volatility, the median of inflation expectations for 2007 dropped from 4.0% at the end of December to 3.9% at the end of February. As regards 2008, median expectation slipped from 4.1% to 4.0%. Consequently, due to Copom's unequivocal commitment to the target path, the expected scenario continues to be one in which short-term inflationary pressures are held in check, at the same time in which the positive outlook over longer-term horizons solidifies.

As already mentioned, the Wholesale Price Index (IPA-DI) has been pressured by farm prices. Parallel to this performance, industrial prices have remained relatively steady, with a cumulative 12-month increase of just 2.48% through February. Consequently, there is no expectation of consumer price pressures generated by pass-through of higher industrial prices at the wholesale level. In any case, the impact of changes in wholesale prices on consumer prices will depend on prospective supply and demand conditions and the expectations of price-setters in relation to the future inflation path.

Copom has taken the position that the monetary policy stance adopted in recent quarters has contributed importantly to consolidating an increasingly more favorable macroeconomic environment over longer-term horizons, with a benign scenario as regards inflation. In this context, the major monetary policy challenge is to guarantee that the positive developments expected in the future will be effectively achieved. Inflation rates consistent with the target trajectory and the resulting solidification of a scenario of lasting macroeconomic stability will contribute to consolidating the process of gradual reduction of macroeconomic risk perceptions that has occurred in recent years, with highly positive impacts on sustained economic expansion. The space for lower real rates of interest in the future will be created naturally, as a consequence of improved perceptions.

Once again, Copom has insisted that important lags exist between monetary policy implementation and its effects on activity levels and inflation. Since September 2005 when the process of monetary policy easing began, 700 b.p. have been chopped off the basic rate of interest, mostly during the course of 2006 (475 b.p.). Therefore, the tendency over time will be for the impact of interest rate reductions in 2006 overlaps with the initial impacts of more recent reductions. Though the pace of activity has certainly picked up since the third quarter of last year, a significant share of the effects of interest rate cutbacks on activity levels has yet to be felt, in the same way that the impact of activity on inflation has not yet fully materialized. Consequently, evaluation of alternative monetary policy decisions must necessarily concentrate on an analysis of the prospective scenario for inflation and its associated risks, instead of prioritizing current values registered by this variable.

Growth in employment and income, coupled with a more ample credit supply, will continue driving aggregate demand in the coming quarters. At the same time, one must add to these factors the impacts of larger government spending and transfers, as well as other fiscal impulses that occurred in 2006 and are expected in 2007. Consequently, the effects of the interest rate cutback on aggregate demand will be added to other factors considered important drivers of demand growth. These considerations become even more relevant when one takes into account signs of continued growth in demand, short-term pressures on inflation and the fact that the impacts of monetary policy decisions will be felt in the second half of 2007 and, to a progressively greater degree, in 2008. Based on these considerations, Copom decided to attenuate the process of monetary policy easing by reducing the Selic rate target by 0.25 p.p. at its January and March meetings.

The Committee will continue to keep a close eye on both the internal and external scenarios, together with the positive and negative facets of the risks associated to inflation projections, all with the objective of ensuring that inflation will converge toward the target path.

Considering already existent incentives to growing aggregate demand, the uncertainties surrounding monetary policy transmission mechanisms, the lesser gap between the current basic interest rate, expected medium-term interest rates and the reductions implemented since September 2005, it is Copom's understanding that further easing of monetary policy must be done in a parsimonious fashion in order to preserve the success already achieved in combating inflation and ensuring economic growth with rising employment and real income.

The projection for contractually regulated and monitored prices in 2007 was revised downward from 4.8% in the December 2006 *Inflation Report* to 4.5%. This projection is based on the assumption of null cumulative growth in the prices of gasoline and bottled gas in 2007, with 3.3% growth in the average prices of electricity and 3.9% in fixed telephone rates. The projection for contractually regulated and monitored prices for 2008 was maintained at 5.6%, the same projection made in December 2006. The items for which a larger volume of information is available were projected individually, while projections for other items were based on the endogenous determination model of regulated prices, which considers seasonal components, exchange rate variations, market price inflation and inflation measured by the General Price Index (IGP).

Based on traditionally adopted procedures, the benchmark scenario assumes a constant rate of exchange over the forecasting horizon at R\$2.10, quite close to the rate in effect in the period prior to the March Copom meeting, and a Selic rate of 12.75%, set at that time. This information reflects expected paths for 180-day swap pre-DI rates with spreads of 49 b.p. and 72 b.p. in relation to the Selic rate in the final quarter of 2007 and 2008, respectively.

Exchange rate expectations gathered by Gerin among private-sector analysts decreased when compared to the figures released in the December 2006 *Inflation Report*. Expectations for the final quarter of 2007 shifted from R\$2.25 to R\$2.14 and from R\$2.36 to R\$2.21 in the final quarter of 2008. The outlook for the Selic rate also indicated downward movement. For the final quarter of 2007, projections dropped from 11.92% to 11.55%, with a reduction from 11.09% to 10.57% for the final quarter of 2008. This trajectory is consistent with spreads of -12 b.p. for six month pre-DI swaps in the final quarter of 2007 and -103 b.p. in the final quarter of 2008. Reflecting the impact of stronger exchange rate depreciation than in the benchmark scenario, projections indicate growth of 4.6% and 6.1% in regulated prices in the 2007 and 2008 market scenario, respectively.

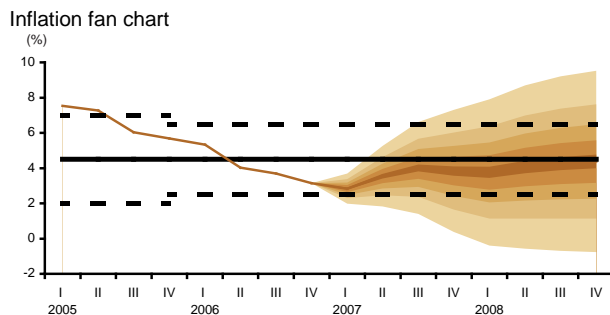
With regard to fiscal policy, the projections presented in this *Report* assume compliance with the 4.25% of GDP primary surplus target in 2007 and 2008, with the possibility of this percentage being reduced by as much as 0.5 p.p. as a consequence of implementation of the Pilot Investment Program.

6.3 Inflation forecast

Based on the assumptions and associated risks discussed above as assessed by Copom, together with the available information set, projections were developed for four-quarter cumulative IPCA growth compatible with the interest and exchange rate paths specified in the benchmark and market scenarios. The benchmark scenario assumes that the Selic rate will remain at 12.75%, the rate defined at the March Copom meeting, and that the rate of exchange will remain constant at R\$2.10 per US dollar over the forecasting horizon. Based on data gathered by Gerin from among a significant number of institutions, the expected interest rate path in the market scenario indicates an average Selic rate of 12.95% per year in the first quarter of 2007, dropping to 11.55% per year in the final quarter of 2007 and 10.57% per year in the final quarter of 2008. The exchange rate path starts at an average of R\$2.11 in the first quarter of 2007, shifting to R\$2.14 and R\$2.21 in the final quarters of 2007 and 2008, respectively.

As far as the benchmark scenario is concerned, the forecast indicates 3.8% inflation in 2007, below the 4.50% central forecast defined by the CMN as the target. In a manner quite similar to what is stated in the most recent *Inflation Report*, Figure 6.2 shows a tendency for 12-month IPCA cumulative inflation to converge to the central forecast of the inflation target over the forecasting horizon. Basically, this reflects the impacts consequent upon Selic rate reductions. Table 6.1 indicates that 12-month cumulative inflation drops to its lowest level (2.8%) in the first quarter of 2007, before turning upward in the second and third quarters, reaching 3.5% and 4.0%, respectively. This movement reflects higher projections for both regulated prices and market prices in the second and third quarters of 2007, compared to the amounts registered in the same period of 2006. On the other hand, the data included in Table 6.1 indicate a reduction in 12-month cumulative inflation in the final quarter of 2007 (0.2 p.p. compared to the previous quarter). This drop was caused by the fact that the projection for market price inflation in the fourth quarter of 2007 closed below observed inflation in the same period of 2006, with just the contrary occurring under regulated prices. According to the benchmark scenario, the estimated probability of inflation rising beyond the upper limit of the tolerance interval in 2007 stands at 10%, compared to 15% in December. Furthermore, one should stress that the forecast for 12-month cumulative inflation reaches 4.4% in the final quarter of 2008 and, despite acceleration in the projection for the same period of 2007 (3.8%), remains below the central target of 4.50%.

Figure 6.2 – Forecasted IPCA-inflation with interest rate constant at 12.75% p.a. (Benchmark scenario)



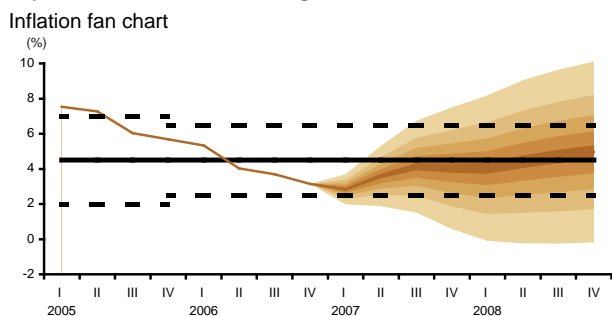
Note: Accumulated inflation in 12 months (% p.a.).

Table 6.1 – IPCA-inflation with interest rate constant at 12.75% p.a. (Benchmark scenario)

| Year | Q | Confidence interval | | | | | Central projection | |
|------|---|---------------------|-----|-----|-----|-----|--------------------|-----|
| | | 50% | 30% | 10% | 50% | 30% | | |
| 2007 | 1 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 | 3.2 | 2.8 |
| 2007 | 2 | 2.8 | 3.1 | 3.4 | 3.7 | 4.0 | 4.3 | 3.5 |
| 2007 | 3 | 2.9 | 3.4 | 3.8 | 4.2 | 4.6 | 5.1 | 4.0 |
| 2007 | 4 | 2.4 | 3.0 | 3.6 | 4.1 | 4.6 | 5.3 | 3.8 |
| 2008 | 1 | 2.1 | 2.8 | 3.4 | 4.1 | 4.7 | 5.5 | 3.8 |
| 2008 | 2 | 2.2 | 3.0 | 3.7 | 4.4 | 5.1 | 6.0 | 4.1 |
| 2008 | 3 | 2.2 | 3.1 | 3.9 | 4.6 | 5.4 | 6.3 | 4.3 |
| 2008 | 4 | 2.3 | 3.2 | 4.0 | 4.8 | 5.6 | 6.5 | 4.4 |

Note: accumulated inflation in 12 months (% p.a.).

Figure 6.3 – Forecasted IPCA-inflation with market expected interest and exchange rates



Note: Accumulated inflation in 12 months (% p.a.).

Table 6.2 – IPCA-inflation with market expected interest and exchange rates ¹

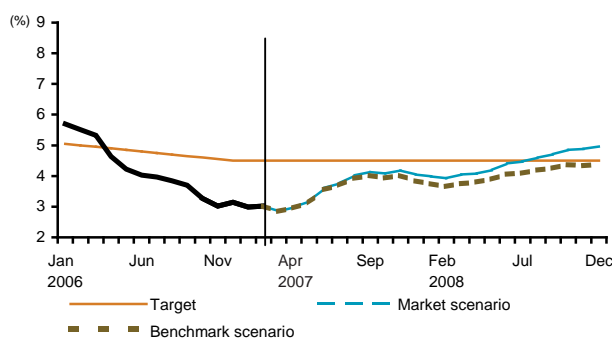
| Year | Q | Confidence interval | | | | | Central projection | |
|------|---|---------------------|------|------|------|------|--------------------|-----|
| | | 2.5% | 3.0% | 3.5% | 4.0% | 4.5% | | |
| 2007 | 1 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 | 3.2 | 2.8 |
| 2007 | 2 | 2.9 | 3.2 | 3.5 | 3.7 | 4.0 | 4.3 | 3.6 |
| 2007 | 3 | 3.0 | 3.5 | 3.9 | 4.3 | 4.7 | 5.2 | 4.1 |
| 2007 | 4 | 2.6 | 3.2 | 3.8 | 4.3 | 4.8 | 5.5 | 4.0 |
| 2008 | 1 | 2.3 | 3.1 | 3.7 | 4.4 | 5.0 | 5.7 | 4.0 |
| 2008 | 2 | 2.5 | 3.3 | 4.1 | 4.8 | 5.5 | 6.3 | 4.4 |
| 2008 | 3 | 2.7 | 3.5 | 4.3 | 5.1 | 5.9 | 6.7 | 4.7 |
| 2008 | 4 | 2.8 | 3.8 | 4.6 | 5.4 | 6.2 | 7.1 | 5.0 |

Note: accumulated inflation in 12 months (% p.a.).
1/ According to Gerin.

Table 6.3 – December 2006 Inflation Report forecasts

| Period | Benchmark scenario | Market scenario |
|----------|--------------------|-----------------|
| 2006 IV | 3.1 | 3.1 |
| 2007 I | 2.7 | 2.7 |
| 2007 II | 3.5 | 3.6 |
| 2007 III | 4.0 | 4.3 |
| 2007 IV | 3.9 | 4.3 |
| 2008 I | 4.1 | 4.6 |
| 2008 II | 4.4 | 5.0 |
| 2008 III | 4.5 | 5.3 |
| 2008 IV | 4.5 | 5.4 |

Figure 6.4 – Forecasts and target path for twelve-month cumulative inflation



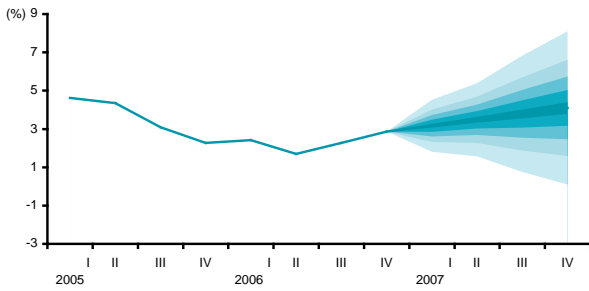
In the market scenario, the forecast for 12-month cumulative inflation in 2007 closes just 0.2 p.p. above the forecast for the reference scenario (4.0% compared to 3.8%), still well below the central target value of 4.50%. Just as in the benchmark scenario, the forecasts for 12-month cumulative inflation presented in Table 6.2 and illustrated in Figure 6.3 indicate acceleration in the second and third quarters of 2007, with deceleration in the latter period. Compared to the benchmark scenario, the slightly higher forecasts for inflation in the last three quarters of 2007 result from analysts' expectations of a Selic rate reduction and exchange depreciation over the forecasting horizon. According to the market scenario, the probability of inflation surpassing the upper limit of the tolerance interval for 2007 is 12%, compared to 19% in the December Report. At the same time, one should note that the projection for cumulative four-quarter inflation is an increase to 5.0% over the course of 2008.

Table 6.3 shows the central inflation values forecast presented in the December 2006 Inflation Report. Comparing these forecasts with current forecasts, the benchmark scenario shows a slight reduction (0.1 p.p.) in inflation estimates for both 2007 and 2008. Despite the reduction of 50 b.p. in the Selic rate since the release of the most recent Report, this movement was, to a great extent, due to the decrease in inflation expectations for 2007 (from 4.1% to 3.8%) and for 2008 (from 4.3% to 4.0%), and to revision of forecasts for 2007 variation in regulated prices (from 4.8% to 4.5%) and exchange appreciation (R\$2.10, against R\$2.15, considered in the December Report). In the market scenario, the falloff in inflation projections was more accentuated than in the benchmark scenario, 0.30 p.p. for 2007 and 0.40 p.p. for 2008. Aside from reflecting the factors stated above, this reduction also mirrors declining expectations of nominal exchange depreciation over the forecasting horizon.

Figure 6.4 shows the evolution of the forecast for 12-month cumulative inflation in both the benchmark and market scenarios, together with the target path through the fourth quarter of 2008. As diagnosed in previous Reports, the tendency toward decline in forecasts of 12-month cumulative inflation through the first quarter of 2007 is maintained, rising further on over the forecasting horizon. Nonetheless, a slight reduction in the forecast for 12-month cumulative inflation is noted in both scenarios in the final quarter of 2007 and first quarter of 2008. One should also note that the forecasts in both scenarios are below the central value of the target path through the second quarter of 2008. Starting in the third quarter of that year, benchmark scenario inflation forecasts remained below the central value of the target path

Figure 6.5 – GDP growth with interest rate constant at 12.75% p.a. (Benchmark scenario)

Output fan chart



over the entire horizon considered. However, in the case of the market scenario, inflation forecasts closed above the central value of the target path as of the third quarter of 2008.

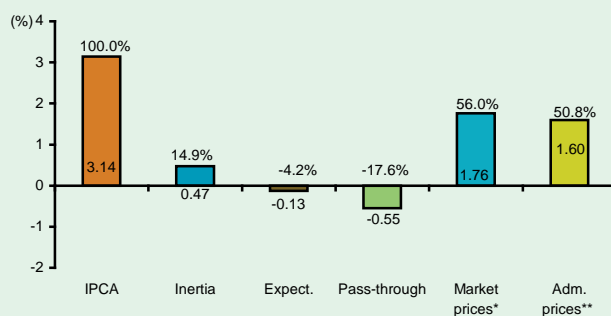
Figure 6.5 shows the output growth possibilities based on the assumptions of the benchmark scenario. Considering that the model that generates forecasts utilizes two components that are not directly observable – potential output and output gap – one should stress that forecasting errors for GDP growth are considerably greater than in the case of inflation projections. According to this scenario, the GDP growth forecast for 2007 is 4.1%, 0.3 p.p. above that projected in the December 2006 *Inflation Report*.

Inflation Decomposition – 2006

This box examines the behavior of 2006 inflation, based on estimates of the contribution of the major factors that explain its dynamics. The procedure¹ consists in decomposing changes in the Broad National Consumer Price Index (IPCA) for the calendar year in the following components: (i) exchange rate changes; (ii) inertia from the difference between previous year's target and actual inflation; (iii) the difference between inflation expectations of the agents and the inflation target; (iv) market prices inflation, excluding the impacts of the three previous items; and (v) inflation of contractually administered and regulated prices, purged from the impacts of items (i) and (ii). It should be stressed that these estimates are approximations based on models and, therefore, are subject to the uncertainties inherent to the process.

Inflation closed 2006 at 3.14%, declining for the fourth consecutive year. Considering the two large groupings of prices utilized in the IPCA, market prices inflation closed at 2.57% and regulated prices at 4.27%. Just as occurred in 2004 and 2005 (Table 1), excluding the combined impact of pass-through, inertia and expectations, the major contribution to IPCA's inflation was due to the behavior of market and regulated prices. As a matter of fact, when the exclusions above are considered, market prices contributed 1.76 p.p. of 2006's inflation, while the contribution of regulated prices was 1.60 p.p. In relative terms, the impact of market and regulated prices on inflation reached 56.0% and 50.8%, respectively (Figure 1).

Figure 1 – Inflation decomposition: 2006



* Excluding the effects of the pass-through, inertia and expectations.

** Excluding the effects of the pass-through and inertia.

1/ The procedure utilized is described in Freitas, Minella and Riella (2002), "Metodologia de Cálculo da Inércia Inflacionária e dos Efeitos do Choque dos Preços Administrados", Banco Central do Brasil, Technical Note, no. 22.

Table 1 – Inflation decomposition: 2002 – 2006 (p.p.)

| Component | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------------------|-------|-------|-------|-------|-------|
| IPCA inflation (variation %) | 12.50 | 9.30 | 7.60 | 5.69 | 3.14 |
| Inertia | 0.93 | 5.90 | 0.28 | 0.77 | 0.47 |
| Expectations | 1.65 | 1.70 | 0.37 | 0.27 | -0.13 |
| Pass-through | 5.82 | -1.10 | -0.34 | -2.06 | -0.55 |
| Market prices inflation* | 2.28 | 1.10 | 4.35 | 3.41 | 1.76 |
| Administered prices inflation** | 1.85 | 1.70 | 2.93 | 3.31 | 1.60 |

* Excluding the effects of the pass-through, inertia and expectations.

** Excluding the effects of the pass-through and inertia.

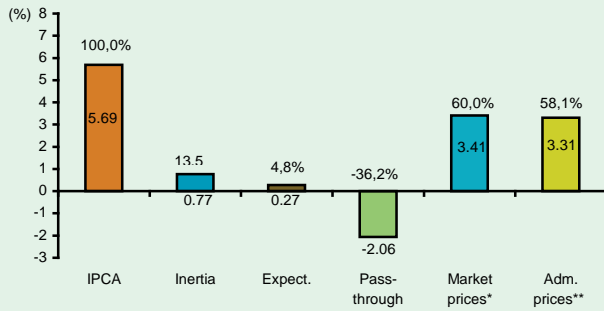
It is estimated that the combined impact of the inertia from the difference between actual inflation and the target for 2005, in the difference between inflation expectations of the agents and the target and the pass-through resulted in the 0.21 p.p. reduction in the IPCA.

It is important to note that, since 2003, variations in the exchange rate have systematically contributed to inflation reductions and that this contribution in 2006 came to approximately one fourth of that observed in the previous year. In the strict sense, in 2006, the change in the exchange rate accounted for -0.55 p.p. of growth in the IPCA, equivalent to 17.6% of the total in relative terms. Of these -0.55 p.p., -0.14 p.p. were due to the impact of exchange rate changes on market prices and -0.41 p.p. on regulated prices. Consequently, this stands as a demonstration of the role played by the exchange rate as an important, albeit not dominant, element of the monetary policy transmission mechanism. In this regard, the contribution of a varied set of factors was important to the behavior of the exchange rate. More specifically, one should cite strong balance of trade surpluses, the positive scenario on international financial markets, the effects of economic policy measures on risk perceptions when these measures strengthen the Brazilian economy's capacity to withstand shocks.

With regard to the impact of the difference between agent expectations and the target on total IPCA growth in 2006, one should note that the contribution of this factor has been gradually decreasing in importance in recent years, becoming negative for the first time since 2002. In an algebraic perspective, this result simply reflects the convergence of inflation expectations to the target trajectory observed in the recent past. Viewed in terms of the efficacy of the

macroeconomic policy implemented in the period under analysis, the result strengthens the evaluation that the policy in question has been successful in the sense of consolidating the creation of a stable macroeconomic scenario that is gradually becoming more favorable to an accelerated and sustained process of economic growth as now envisioned for the Brazilian economy.

Figure 2 – Inflation decomposition: 2005



* Excluding the effects of the pass-through, inertia and expectations.
 ** Excluding the effects of the pass-through and inertia.

As demonstrated in Figures 1 and 2, inflationary inertia – calculated on the basis of the share of inflation of the previous year that exceeded the targets for that year – made a lesser contribution to inflation in 2006 in absolute terms than in the previous year. This result is a natural consequence of the coming together of observed inflation with the target trajectory. Furthermore, it is worth mentioning that 58% of total inertia estimated for 2006 corresponds to the inertia of market prices.

In summary, inflation dropped 2.55 p.p. between 2005 and 2006. Excluding the effects of inertia, expectations and pass-through, the major determining factors underlying this movement were the reduction in market and regulated prices variation, reflecting positive supply shocks, particularly the reduction in food prices, as well as the effects of the monetary policy implemented in recent years.

Determinants of Interest Rate Maturity Risk Premium

In the September 2006 *Inflation Report*, the box “Informational Content of Interest Rate Spreads” presents evidence that the forecasting power of interest rate spreads increased and that risk premiums for maturity implicit in long-term interest rates diminished in recent years.

In this box, the determinant factors of the risk premium are examined. As a first step, a space-state model is specified and estimated in order to measure risk premium. In an algebraic perspective or in other words, $f_{t,j}$ is the forward interest rate negotiated in period t with maturity in $t+j$, which can be broken down as follows:

$$f_{t,j} = E_t [r_{t+j}] + t_{t,j}, \quad (1)$$

in which $E_t [r_{t+j}]$ represents the expectations of agents for the spot rate j periods ahead, given the information available at moment t , and $t_{t,j}$, the maturity premium. If we subtract the spot rate of interest j periods ahead from both sides of the equation (1), we obtain the excess return associated to the forward rate of interest ($x_{t+j,j} = f_{t,j} - r_{t+j}$), as shown below:

$$x_{t+j,j} = t_{t,j} + u_{t+j}, \quad (2)$$

in which $u_{t+j} = E_t [r_{t+j}] - r_{t+j}$ is the agents’ forecasting error.

Considering that the premium is a non-observed variable, it will be estimated through the Kalman Filter, requiring the following structure:

$$t_{t,j} = t_{t-1,j} + v_t, \quad (3)$$

in which v_t is a component error, which is independent,

identically and normally distributed with zero average and σ_v^2 variance.

In the forward interest rate estimation procedures, monthly end-of-period data for six-month and one year spot interest rates in the Brazilian forward structure were used, covering the period extending from January 1995 to September 2006. On the other hand, considering that both the risk aversion indicator and the debt profile are available only as of January 2000, the interval January-2000/September-2006 was considered in the analysis of the determinants of the risk premium.

In the explanation of the process that generates the risk premium, indicators of global liquidity were utilized, together with variables that reflect the evolution of the fundamentals of the domestic economy. The index of global risk aversion constructed by Merrill Lynch was used as proxy for international liquidity. With regard to domestic fundamentals, indicators of the liquidity of the economy (international reserves), composition of the internal public debt, inflation, economic activity, capital flows and the exchange rate were utilized.

Table 1 – Interest Rate Risk Premium Determinants

| Variable | coefficient |
|---------------------------------------|-------------------------|
| Constant | -0.0040 (0.0033) |
| Risk Aversion [t] | 0.0028 *** (0.0011) |
| Inflation [t] | 0.0072* (0.0026) |
| Price-Indexed Bonds Participation [t] | -0.0834 *** (0.0439) |
| Exchange Rate Variation | 0.2085 * (0.0357) |
| Risk Premium [t-1] | 0.8999 * (0.0500) |
| R ² | 81.28% |
| F-Statistic | 60.07 |
| p-value | 0.0000 |

Standard errors are provided between parentheses

*,** and *** stand for statistical significance at the 1, 5 and 10% levels, respectively.

Table 1 presents the results of the estimation of equation (2), according to the method of Ordinary Least Squares, with the Newey-West correction for serial correlation and heteroscedasticity. Among the different specifications evaluated, an option was made for the model that showed the most significant parameters from the statistical point of view and the best explanatory power.

On the basis of Table 1, it is possible to infer that international liquidity (global risk aversion) has a fundamental role in explaining the risk premium implicit in domestic interest rates. It is clear that different domestic indicators also have an important role in determining risk premium. The results of the economic exercise offer evidence that the reduction of inflation and variations in exchange rates seen in the recent past, as well as changes in the public debt profile, contributed to reductions in risk premiums implicit in domestic interest rates.